

THE TRUE PRICE OF PALM OIL

How global finance and household brands are fuelling deforestation, violence and human rights abuses in Papua New Guinea

October 2021



CONTENTS

KEY FINDINGS	4
INTRODUCTION: AN INDUSTRY UNCHECKED	6
A growing threat.....	6
New kids on the block.....	7
Tobar’s Laughing Villain.....	7
Political connections.....	9
EAST NEW BRITAIN RESOURCES GROUP	10
‘Unofficial fees’	10
Child labour	12
Women threatened at gunpoint	12
Admissions of tax evasion.....	13
Watch the tax gap	13
Tracking the tankers.....	14
No paper trail.....	14
‘Impossible’ to sell	14
Car chase and attempted murder	15
➤ Box: Roundtable on Sustainable Palm Oil.....	16
Environmental cost	16
International financing	17
‘Severe assault’, hundreds evicted	19
➤ Box: Special Agriculture and Business Leases: a toxic legacy	20
RIMBUNAN HIJAU GROUP	21
Permanent injuries.....	22
Father-and-son tragedy	22
Amputations, chemical accidents	23
Unreported tragedies.....	23
‘Inhuman’ treatment.....	23
Police terror	24
➤ Box: Unequal burdens	25
Following the money	25

BEWANI OIL PALM PLANTATIONS LIMITED.....	28
‘Lost everything’	28
Will the real owners please stand up?	29
The great switcheroo	30
It takes two to Tago	30
GLOBAL BUYERS.....	32
Sticks in the throat	33
‘Journey of no deforestation’	33
➤ Table 1. Global brands that have sourced from palm oil producers East New Britain Resources Group, Rimbunan Hijau, and/or Bewani Oil Palm Plantations Ltd in Papua New Guinea, and their responses to Global Witness’s requests for comment.	34
➤ Box: Crowd-sourcing due diligence	37
Heavy industry	38
CONCLUSIONS	39
Recommendations.....	40
APPENDIX 1	42
APPENDIX 2	54
REFERENCES	57

KEY FINDINGS



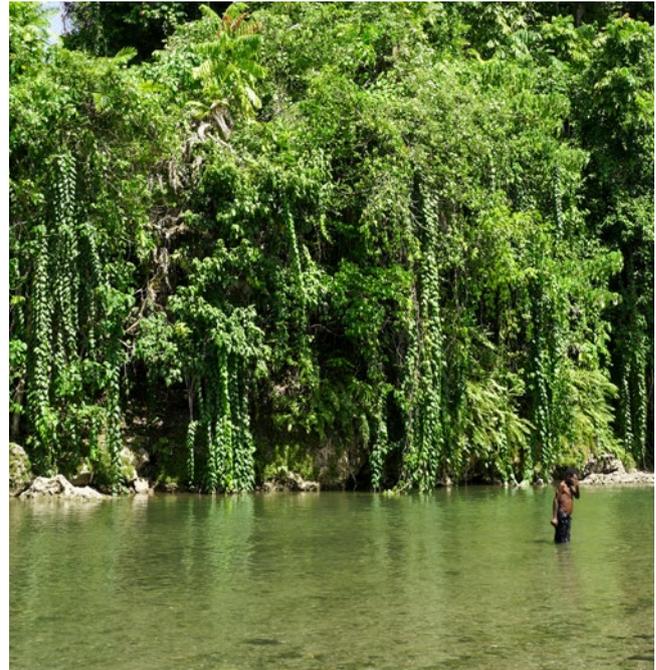
Agribusiness, including the palm oil industry, is a key driver of tropical deforestation. © Global Witness

The climate crisis is no longer projection, but reality. Forests play a key role in regulating the global climate and are critical to preventing runaway global heating. They are also a treasure trove of biological diversity, and home to many indigenous peoples and forest communities. Yet forests continue to be burned and destroyed at an alarming rate. The primary driver of deforestation is agribusiness, with palm oil a chief culprit.

Global Witness went undercover to investigate the growing threat facing Papua New Guinea's (PNG) communities and tropical forests from palm oil companies driving widespread deforestation and human rights abuses. This investigation now exposes that three of PNG's newest palm oil producers appear to be implicated in serious criminality and other harms. For the first time, we show how this tainted product is being sourced by world-famous brands and their business financed by iconic banks and investors:

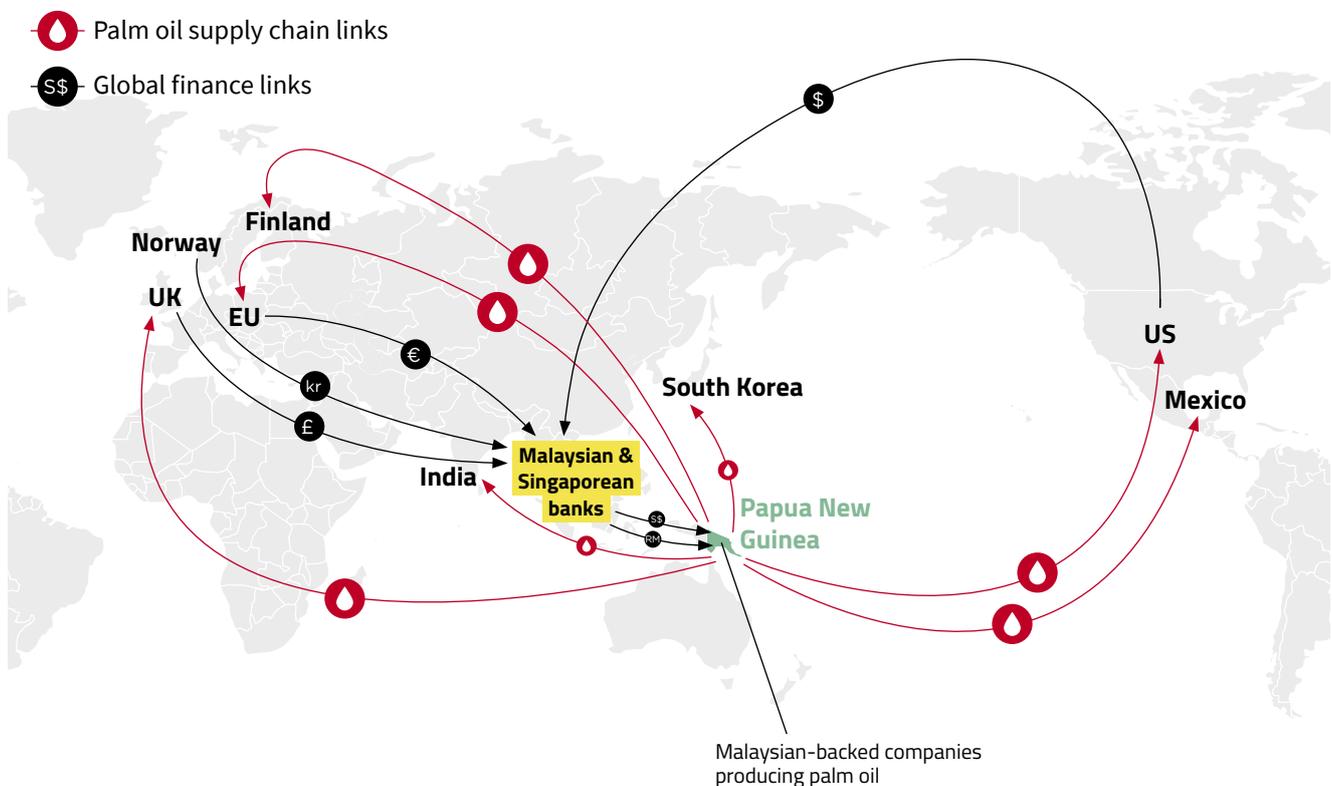
- Palm oil executives and senior employees tell undercover Global Witness investigators they bribed officials including a Papua New Guinean government minister; paid police to brutalize villagers; used child labour; and participated in an apparent tax evasion scheme.
- The Malaysian-backed firms clear-felled tens of thousands of hectares of Papua New Guinean rainforest, which supports rural communities and is among the most biodiverse in the world.
- Tainted palm oil and its derivatives from Papua New Guinea plantations were sold on to well-known big brands including Kellogg's, Nestlé, Colgate, Danone, Hershey, and PZ Cussons and Reckitt Benckiser, the parent companies of Imperial Leather and Strepsils.
- One palm oil firm, Rimbunan Hijau, negligently ignored repeated and avoidable worker deaths and injuries on palm oil plantations.
- Global financiers such as BlackRock, the world's largest asset manager, are indirectly profiting from these human rights and environmental abuses through investing in banks notorious for financing harmful palm oil firms.

A pattern of coercion and violence right across PNG has denied local people the traditional use of forests integral to their culture and livelihoods. Huge areas of tropical forests have been deforested, and much more remains at risk unless action is taken. Global Witness is calling for companies named in this report to be held to account for causing, contributing to, or profiting from harms linked to their global operations. International financiers ought not to be bankrolling these companies - and governments need to regulate to stop bankers enabling this industry's excesses.



Papua New Guinea's forest communities have managed their environment for generations. © Global Witness

Money in, palm oil out: global finance funds the production of deforestation palm oil in Papua New Guinea



The production of palm oil in Papua New Guinea by Malaysian-backed companies is enabled by global finance. Palm oil from these plantations has been sold around the world. This illustration depicts some of the flows of money and palm oil examined in this investigation.

INTRODUCTION: AN INDUSTRY UNCHECKED

“When the boys woke up, they were at gunpoint. They tied their hands at the back and blindfolded their faces so they could not see.”

– Resident of Watwat village

It is late at night in July 2019, and a pair of off-road vehicles wind their way through the rainforests of New Britain, a crescent-shaped island off the north-east coast of Papua New Guinea (PNG). The transport has been paid for by a palm oil company. On board are police armed with guns and metal bars who have received an ‘allowance’ from the company. In effect, this is a private army.

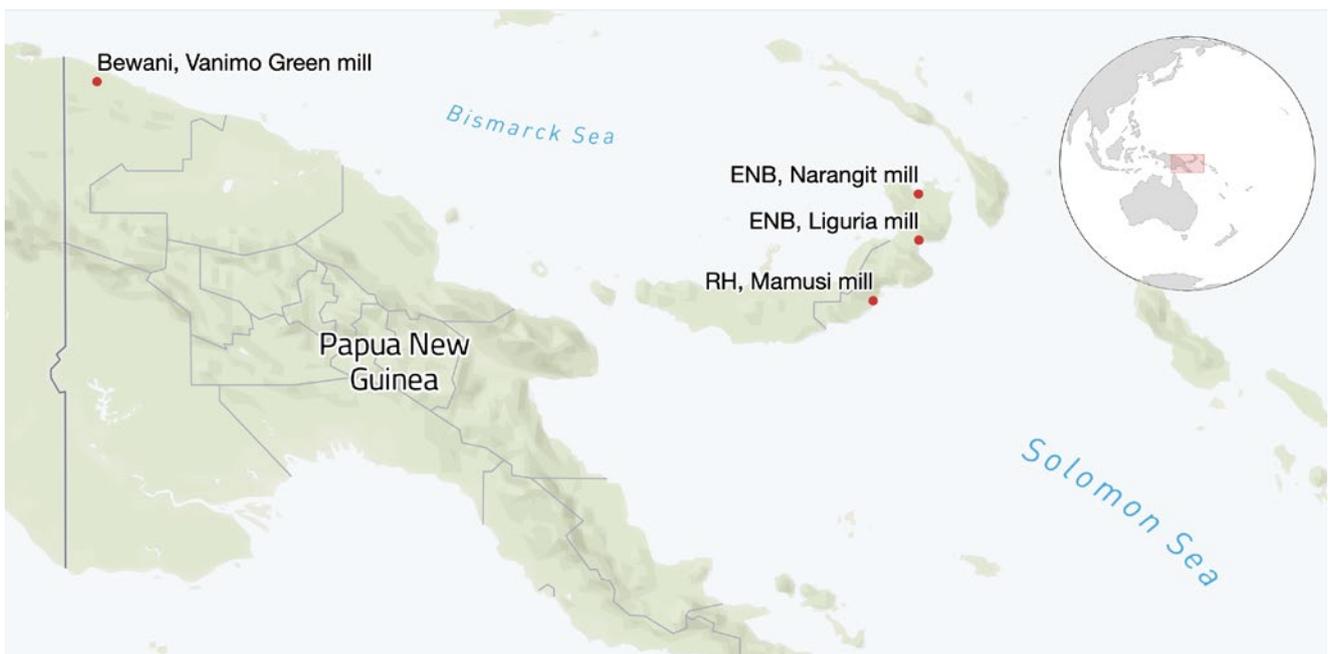
On arrival at the village of Watwat—where nearby oil palm trees have been vandalised by persons unknown—the armed officers dismount, intent on retribution. They then launch a violent raid on the village. Men and boys as young as 16 are dragged from their beds, beaten with metal bars, and thrust down into the mud at gunpoint, lying prone as tropical rain lashes from the sky. They will

be blindfolded and arrested, then held for weeks, only to be released on payment of bail that the villagers can scarcely afford.

Welcome to Papua New Guinea’s palm oil industry, where such brutality is commonplace. Global Witness now tells the story of communities across the country harmed, terrorised, and impoverished in pursuit of a liquid gold foodstuff that has found its way into the supply chain of global brands including Kellogg’s, Nestlé, Danone, and Hershey. And a Global Witness undercover investigation helps unpick a web of apparent tax evasion and corruption, tracing money flows from financiers in the US, UK, and EU to this troubled new frontier of the global palm oil industry.

A growing threat

Chances are you have consumed some palm oil already today. Despite growing awareness of its association with deforestation, it is the most common vegetable oil in the world, appearing in everything from baked goods to instant noodles to shampoo and baby formula.^{1 2 3 4} And in PNG, palm oil is an industry poised to explode. By 2030, the PNG government aims to have 1.5m hectares (ha)



under oil palm cultivation, compared to about 150,000 ha in 2016 – a ten-fold increase.⁵ Yet, there is no national policy guiding this expansion and creating safeguards to ensure communities are protected from acquisitive corporations.⁶ Papua New Guinea’s history of land and forests mismanagement makes this an urgent issue.⁷

A South Pacific nation, PNG makes up half of the massive island of New Guinea, home to the world’s third-largest remaining rainforest.⁸ The country’s borders include hundreds of smaller islands, and it controls an area of ocean over ten times the size of the UK.^{9 10} It is home to at least five per cent of all species on Earth, many found nowhere else: forest dragons, tree kangaroos, resplendent birds of paradise, and the only known night-blooming orchid.^{11 12 13 14 15 16 17} Billions of metric tons of carbon are stored in the country’s towering trees.¹⁸ With a population likely above eight million, richly diverse cultures have developed in PNG, with more than 800 languages spoken.^{19 20}

Most of PNG’s people live in rural areas and rely on their land, seas, and forests for at least some of their livelihoods.²¹ In turn, communities have carefully managed the biodiversity of their local environment for generations.^{22 23} Papua New Guinea has strong laws to protect Indigenous peoples’ rights and its stunning biodiversity, but these are rarely enforced.²⁴ Civil society and even the PNG government itself have documented its egregious failure to uphold these laws.^{25 26 27} This failure is on stark display in the sectors now dominated by Malaysian-owned logging and agribusiness companies.

New kids on the block

At the turn of the millennium, Malaysia itself was losing its forests faster than any other nation on earth.²⁸ In just twelve years, it lost 14% of its rainforest, much of which was cleared to plant oil palm.²⁹ Before long, its logging companies sought new opportunities abroad.³⁰ They did not have to look far. In PNG, they came to dominate the logging industry, making it the world’s largest exporter of tropical timber by 2014.^{31 32} Some of these companies then planted oil palm on land they had cleared.³³

Global Witness has spent two years investigating three such companies that began exporting palm oil from PNG since 2014: the East New Britain Resources Group (“ENB”), the Rimbunan Hijau Group (“RH”), and Bewani Oil Palm Plantations Ltd (“Bewani”).^{34 35} Together, these companies have recently cleared tens of thousands of hectares of climate-critical rainforest in PNG. Despite the growing urgency of the climate crisis, global financiers have propped up these companies’ deforestation in the expectation of profit. Their palm oil has now reached



New Guinea has the highest plant diversity of any island on Earth, with the majority of its plants found nowhere else. © Global Witness

major consumer markets, via favourite brands like Hershey and Kellogg’s.

East New Britain Province is home to thousands of square kilometres of rainforest, and to operations of two of the oil palm producers that are the subject of this report.³⁶ In October 2019, a team of Global Witness reporters drove south through the province to Watwat, site of the police’s night-time attack on village boys. An elderly villager, Sharon, whose name has been changed to protect her safety, described how someone had vandalized palm trees there—destroying more than a thousand—and the Royal PNG Constabulary sought culprits. According to Sharon, they singled out five Watwat youths.

“The police were beating them and asking them who cut the oil palm tree,” she recalled to Global Witness reporters.

Police dragged the young men and boys out of bed, blindfolded them and tied their hands behind their backs, she said. Reporters were told officers beat the young people with metal bars and the flats of machetes, “jumping up and down on [a victim’s] back”.

The men and boys were then taken to Kokopo, where police allegedly hit their heads against posts to elicit confessions before they were charged with criminal damage. Global Witness has been unable to determine whether these charges led to convictions.

Sharon told Global Witness the car that police arrived in was owned by a company called Tobar Investment (“Tobar”).

“The company has a lot of money,” she said. “They are able to give it to the police. The police were working for Tzen Niugini [an ENB company closely linked to Tobar].”

Global Witness asked the residents of Watwat whether anything good had come to their community from palm oil development.

“Only destruction,” Sharon said.

To investigate these allegations, Global Witness went undercover. Drawing on fieldwork and satellite imagery and by following the money, Global Witness exposes in this report the growing threat facing PNG’s communities and forests from palm oil companies that have acted unaccountably, yet are financed by the world’s biggest banks and sold to global brands. Global Witness focused on three Malaysian-backed palm oil producers: the East New Britain Resources Group, the Rimbunan Hijau Group, and Bewani Oil Palm Plantations Ltd. Together they have deforested tens of thousands of hectares since 2010. Our investigation widened to include a PNG-owned company, Tobar Investment Ltd, as serious admissions of corruption and police violence were made to our reporters.

This report exposes instances of apparent tax avoidance, corruption and abuses of both local communities and their environment. We then reveal the financial actors profiting from these acts, as well as the global brands sourcing the companies’ product. The investigation concludes by recommending the changes urgently needed to safeguard PNG’s communities and environment and hold these corporations accountable.

Tobar’s Laughing Villain

Tobar Investment Ltd is a Papua New Guinean-owned agribusiness company with palm oil plantations around Watwat.^{37 38} It operates under a joint venture agreement with East New Britain Palm Oil Ltd (ENBPOL), part of the ENB Resources Group of companies. This group is one of two major palm oil producers, along with Rimbunan Hijau, that have deforested thousands of hectares in East New Britain Province since 2010.

One of Tobar’s founding directors is Edward Lamur, a jolly figure and the former deputy provincial administrator for East New Britain.^{39 40} In February 2021, a Global Witness investigator posed as a commodities trader facing resistance from communities at a fictional plantation in Thailand to ask how the police helped Tobar with the Watwat development.

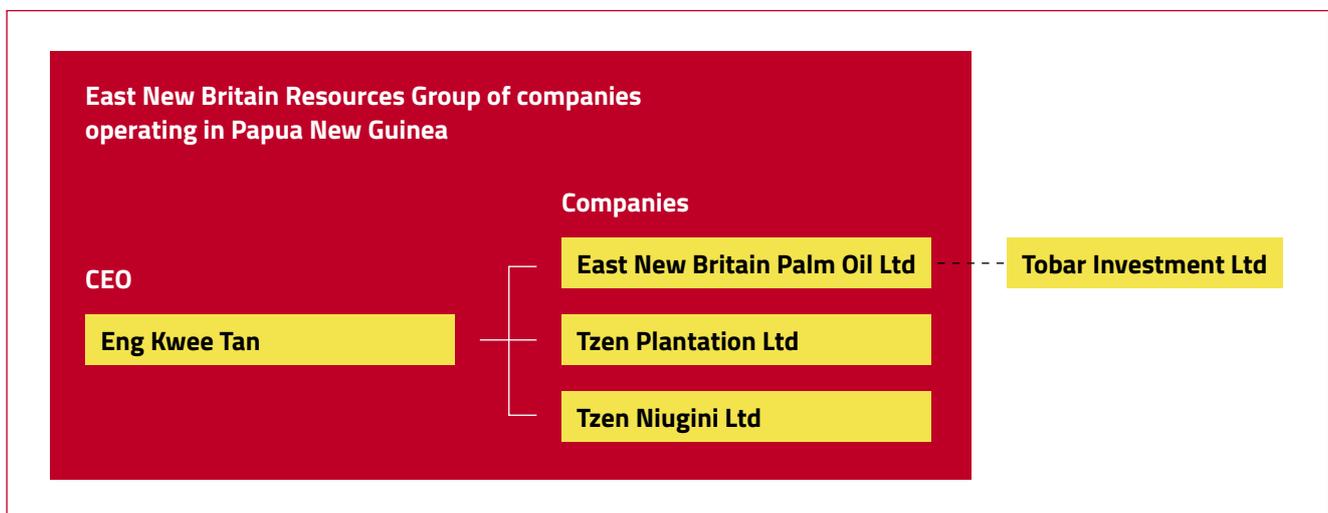
“We had some problems when we were planting, before we... when we were preparing the land to plant, some people wanted to disturb us,” Mr Lamur said. “So we got police... we sat down with them”.

[...] Mr Lamur chuckled and said, “They did some bashing up.” [...]

“Beating them?” the investigator asked.

“That’s correct,” replied the businessman. [...] “... Even at night those culprits... who you know did trouble and ran away to the hiding places [...] so we went after them in the night, got them, belted them up and locked them up at the station. [...]

“...I made sure those operations were done,” he added. [...] “They know we are owners now.”



The East New Britain Resources Group includes multiple companies in PNG directed by Malaysian nationals. Tobar Investment Ltd has a joint venture agreement with one of these companies, East New Britain Palm Oil Ltd. © Global Witness



East New Britain Province is a seismically active area and experiences frequent earthquakes. Active volcanoes lie just across a harbour from the provincial capital Kokopo. © Global Witness

Later confronted with his own admissions, Mr Lamur did not respond to multiple requests for comment from Global Witness.

Mr Lamur described the influence of both Tobar and ENB over the police.

Both companies “assisted with logistically paying for police, you know... fuel, cars”, he said.

[...] “When they [villagers] are aggressive, we naturally use a little bit of force on them. [...] So the story you know went around, oh police... you know these people are doing this and this. And police... So [...] we quietened things down. No more, no more unnecessary disturbance to our workers who were planting.”

On a later phone call, Mr Lamur doubled down on his claims of this cosy relationship with the constabulary. On questioning, he confirmed that a former member of Tobar’s staff had worked simultaneously as a police reservist. Then the businessman went further yet.

“There is a special operation police,” he said. “The boss is actually a very close friend, we work hand in hand with them [...] whenever we want assistance...”

Global Witness said, “So, whenever there is a problem, you can call this special operation police and they help you?”

[...] “Yeah, we’ve got the boss’s mobile number”, Lamur said. “We just call or text any time”.

Mr Lamur, the former deputy provincial administrator, has higher political aspirations. In 2017, he stood for the Kokopo Open seat in PNG’s Parliament. Will he run again?

The Royal PNG Constabulary did not respond to multiple requests for comment from Global Witness.

ENB said: “We generally deny all the allegations.” A spokesperson called Global Witness’s findings “baseless and untrue”.

They added: “Both Tobar and ENBRG deny any use of the Royal PNG Constabulary to cause any violence against any person or detain anyone illegally.”

Global Witness did not receive a separate reply from Tobar.

Political connections

Oil palm attracts powerful men. Another founding director of Tobar is Leo Dion, the ex-governor of East New Britain Province and a former Deputy Prime Minister of PNG.^{41 42 43} (Mr Dion is still listed as a director in company filings but, according to Mr Lamur, he is no longer in that position.)

Asked whether having a Deputy Prime Minister on the board of Tobar was useful, Mr Lamur told our undercover reporter: “Yes, he was very good for us and very good for Mr Tan [ENB’s CEO Eng Kwee Tan] and them too.”

“So he could secure some special deals, I guess, with the ministry, or not?” asked Global Witness.

“That’s correct, that’s correct,” replied the businessman.

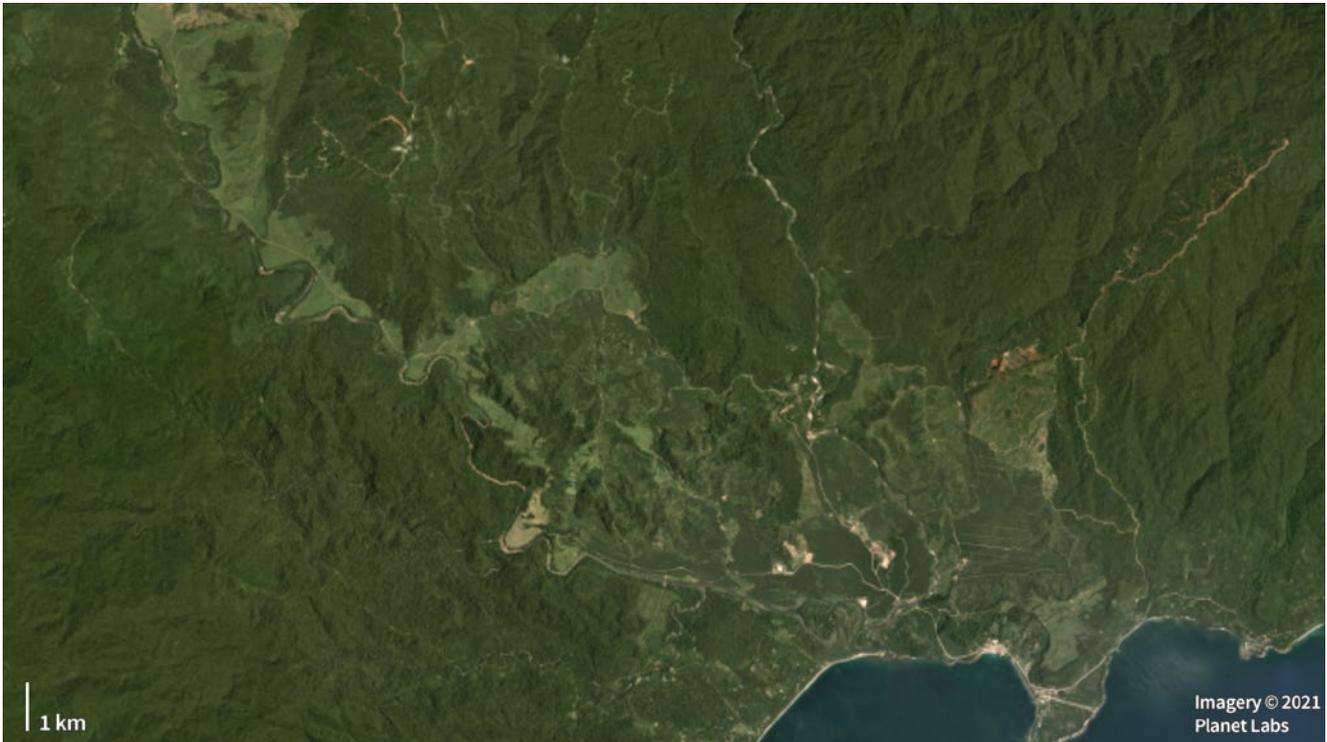
Contacted by Global Witness, Mr Dion said he “offered help in acquiring coconut plantations during the early years of the former chairman of Tobar Investment Ltd Joseph Lupin when I was the governor then helping our grassroot people [*sic* throughout] to take ownership of foreign own plantations here i[n] ENBP.”

He added, “Any other Tobar Investment businesses carried out after the death of Mr Joseph Lupin has nothing to do with me.

“I denied any participation in any way by words or actions to condone anything that is illegal and unlawful.”

Global Witness has found no evidence that improper deals did actually take place under Mr Dion’s auspices.

But as we shall hear, Mr Lamur’s partners at ENB are no strangers to ‘special deals’ themselves. Global Witness’s undercover operatives infiltrated the higher echelons of ENB itself, dining on separate occasions with both senior managers and with the chief executive. This yielded admissions of serious white-collar crime and human rights abuses – which allegedly go right to the upper echelons of Papua New Guinean politics.



Deforestation in plain sight: Forest clearance surrounds ENB's Liguria mill in this satellite imagery mosaic from 2017-2018.

In a palm-thatched Kokopo restaurant that overlooks a smoking volcano across the harbour, two senior ENB executives readily admitted that bribery to obtain logging permits and access to land is a regular cost of doing business. Tzen Niugini's Land Acquisitions Officer Bernard Lolot and public relations kingpin Michael Paisparea were in a boastful mood when they met Global Witness undercover reporters for a business dinner in October, 2019.^{44 45}

Asked whether a "special favour" had convinced government officials to approve projects, Mr Lolot said: "Of course [...] that's what a lot of the leaders, they want. [...] Some school fees and they ask for token and all this."

"What is a token? A nice Land Cruiser?" asked Global Witness.

"Yep, things like that," Mr Lolot replied.

[...] "Sometimes they're bringing all this stuff back to their own areas."

'Unofficial fees'

Mr Paisparea went further, acknowledging gifts to secure the renewal of a logging permit.

"...Giving something to the minister, to the secretary, to [National Forest] Board members..." he said.

Asked whether this constituted 'unofficial fees', he replied: "Yeah, that's right." [...]

He said: "Roughly, sometimes the minister need about a hundred thousand, fifty thousand [Papua New Guinean kina]." Fifty thousand kina was about £10,000 at the time of writing.

Asked if the chairman of the National Forest Board also needed paying, Mr Paisparea said: "Chairman as well."

Our reporter probed: "So [in total for one permit], you pay half a million?"

Mr Paisparea responded: "That's right. It's enough."

In addition to his work for ENB, Mr Paisparea serves on the East New Britain Provincial Forestry Management Committee (PFMC), which assesses new forestry projects and recommends to the national board to approve or reject them. This presents a serious conflict of interest. Although Mr Paisparea said he does not rule on his own projects, the position may nonetheless allow him influence over other members.

Asked about official fees, Mr Lolot said: “The official fee’s not so much [...] 200,000, 150 [thousand PGK, about £30,000].”

Explaining how to convince individuals to sign papers suggesting the company has rights over their land, Mr Paisparea said: “Request of the school fee, I come there and we help them.”...

[...] “Because these things are not in [the official] the agreement.”

Global Witness has been unable to discover what projects these claims may refer to. Nor can we rule out that they were groundless boasts. However, the comments suggest a detailed understanding of who needs to be bribed, such as the knowledge that the secretary and board members would need to be bribed in addition to a minister. Global Witness is not suggesting that any employee, minister, or member of the Board did in fact accept a bribe.

The PNG Forest Authority did not respond to repeated requests for comment, including a letter hand-delivered to its headquarters.

In its response, ENB denied bribery and corruption, writing, “We generally deny all the allegations” put to it by Global Witness. It added, “Most of your allegations are all hearsay with no accurate details”.

In an apparent reference to Mr Paisparea’s position on the PFMC, it said: “Renewal of existing and new forest projects are only approved by the PNG Forest Authority.”

While this is true, the PFMC provides recommendations to the Forest Authority.

Following the dinner, Mr Lolot supplied Global Witness with numerous maps and documents relating to several logging and agriculture projects, showing his intimate involvement with major deforestation plans.

Eight months later, in a follow-up telephone discussion, an undercover Global Witness reporter repeated Mr Paisparea’s bribery admissions back to him. He did not deny them, and conceded paying “allowances” to entice individual customary landowners whose forests Tzen Niugini coveted, although he said they did not offer Land Cruisers in that instance, which is why a rival company obtained access to the land.



An employee of the East New Britain Resources Group shared documents from numerous logging projects with an undercover Global Witness reporter. © Global Witness

Communities' traditional use of their land is protected by the country's laws and constitution, making virtually every Papua New Guinean a landowner.^{46 47} Most of the country is still under the legal control of such customary landowners, at least on paper.^{48 49 50} But these laws are poorly enforced, allowing companies like ENB to exploit rural communities and setting people against their neighbours.^{51 52 53}

Papua New Guinea scores dismally on Transparency International's corruption perceptions index, scoring a mere 27 points out of 100 in 2020. This puts it in 142nd place out of the 180 countries assessed.⁵⁴

Child labour

During the Kokopo dinner, Mr Lolot and Mr Paisparea also admitted the company used child labour, with schoolchildren as young as ten working on their plantations. Mr Lolot conceded this was against PNG law. He had added just before: "Sometimes we bend the rules just to make things happen."⁵⁵

Employing a person under 16 years of age in work that is likely to be injurious is an offence under the PNG Employment Act.⁵⁶ PNG is also a signatory to the Convention on the Worst Forms of Child Labour, which

defines this category to include work in an environment likely to harm the health or safety of children.⁵⁷

Children working on a palm oil plantation therefore constitutes an offence under both the PNG Employment Act and Convention. ENB said Global Witness's allegation that it used child labour was "absurd and denied", and it upheld PNG child labour laws.

Oil palm plantation workers carry out heavy labour. They are at risk of musculoskeletal injuries, infectious disorders including malaria, pesticide exposure, and sexual harassment and rape.^{58 59} As Global Witness's investigation reveals, deaths among workers are commonplace.

Women threatened at gunpoint

A mediation process in East New Britain Province in June 2018, which brought to light serious allegations by villagers against the ENB group, also implicated Mr Lolot and Mr Paisparea. Multiple witnesses said the ENB company Tzen Niugini "brought in" police officers to Pulpul in the East Pomio region to coerce community members, as landowners, into signing agreements for a logging project. In an incident with strong echoes of the Watwat village repression, police allegedly forced the men



East New Britain Palm Oil Ltd operates the Narangit palm oil mill in northern East New Britain Province. © Global Witness

into a shed at gunpoint and held them there for hours and threatened the women at gunpoint. Pulpul community members alleged police punched the village magistrate and beat him with a fan belt. The aim of this atrocity, according to members of the community, was to override objections they had already voiced to Mr Paisparea and Mr Lolot, when they had rejected the idea of this new development. Speaking to a local NGO, villagers claimed that this physical abuse had happened on Mr Lolot's land.⁶⁰

Mr Paisparea and Mr Lolot did not respond to Global Witness's subsequent requests for comment.

ENB said: "ENBRG has complied with all Forestry and Environmental laws in Papua New Guinea and denies participating in any illegal activity in connection to any Forest projects or planting of oil palms."

"ENBRG has and continues to comply with all land laws in Papua New Guinea to acquire and/or develop land".

During their dinner with Global Witness, Mr Lolot and Mr Paisparea revealed ENB was running two palm oil projects: one in Pomio District and the other in Gazelle District at the north end of the province.⁶¹ As we shall see, at the latter site, the company stands accused of brutally evicting smallholders and bulldozing their homes and cacao trees.

But the pair were not the only ones who made damaging admissions. Their Malaysian boss Eng Kwee Tan, chief executive of the ENB Group, also confessed to a tax evasion scheme on an international scale.⁶²

Admissions of tax evasion

"I would also be lying to you if [I said] there is no conflict," Mr Tan told a Global Witness undercover reporter over a dinner of red snapper. "We do have conflicts, but solvable conflicts."

"We have people, you know, that come and stop our work [...] and I think this is a common phenomenon."⁶³

Mr Tan was referring to local villagers. Land conflicts are a frequent by-product of palm oil plantations.

In a swanky hotel in the port town of Kokopo, the businessman bragged of owning no fewer than 20 German Shepherd dogs - and soon it became clear how he can fund such indulgences.

Halfway through the meal in October 2019, he made the unprompted remark that palm oil destined for India "has to come from Malaysia, otherwise they impose taxes".



Kokopo, the capital of East New Britain Province. © Global Witness

"So we have to make it show like it come from Malaysia," he continued. "It's always a bit technical."

The reporter replied: "Oh, so it goes on the paper to Malaysia. But directly to India."

Mr Tan said: "Yes, yes. So we make it that it comes from Malaysia."

He continued: "The vessel has to go to Malaysia, offload the PKO [palm kernel oil], and then offload the CPO [crude palm oil] in India."

This would appear to be an admission that the ENB Group has dishonestly evaded the imposition of import duty on its palm oil exports to India. Such a scheme could have benefitted the company by claiming preferential Indian tariffs for palm oil exports from Malaysia rather than from PNG.

Watch the tax gap

Between March 2018 and 27 November 2020,⁶⁴ India taxed crude palm oil imports from countries it did not have free trade agreements with—including PNG—at a base rate of 44%.⁶⁵ ⁶⁶ But Malaysian imports were not taxed as heavily. In 2019, when Mr Tan spoke to an undercover Global Witness researcher, the Malaysia-India Comprehensive Economic Cooperative Agreement (MICECA) established a duty on Malaysian palm oil of only 40%.⁶⁷

India also charges a Social Welfare Surcharge equal to 10% of the total duty on imports, in addition to the import duty itself.⁶⁸ In 2019, this resulted in a 4.4 percentage point difference between tariffs levied on PNG and Malaysian imports of palm oil to India. This tax gap appears to lie behind Mr Tan's scheme. And our research shows shipments were indeed made by ENB to India in the relevant period.



Global Witness tracked the oil tanker *Chem Peace* from East New Britain, Papua New Guinea, to Kolkata, India. © Mapbox, © OpenStreetMap

Tracking the tankers

Global Witness documented two voyages of the oil tanker *Chem Peace* travelling from PNG to India in 2019 (one arriving in January that year and the second in May). Social media posts, commercial shipping data and a Kolkata Port Traffic Control document illustrate the ship's travels. A Facebook photo posted on 21 December 2018 reveals the *Chem Peace* collected palm oil from ENB's "Liguria" palm oil mill in Pomio. From there, records show, it travelled to Singapore, then Malaysia - where Mr Tan told our undercover reporter his company sometimes unloads palm kernel oil - before arriving in India on 4 January 2019. There, Kolkata port records indicate it consigned 6,118 metric tonnes (mt) of crude palm oil to leading agribusiness Ruchi Soya Industries (Ruchi Soya).^{69 70} This quantity matches Mr Tan's estimates to our undercover reporter of his total monthly exports. A documented journey therefore supports Mr Tan's assertion that ENB exports palm oil from PNG to India. Yet the Kolkata Port document describing the *Chem Peace*'s palm oil delivery indicates only that the vessel had been in Pasir Gudang, Malaysia. It does not state that the palm oil originated from PNG. This would appear to be a smoking gun that in 2019 at least one ENB palm oil delivery to India was not accurately badged as coming from PNG.

No paper trail

There is further supporting evidence of this. In 2018, commercial shipping records show, an "ENB Trading Ltd" exported one shipment of palm oil from PNG to India. (An entity registered in Singapore, "ENB Trading & Shipping Pte Ltd", appears to be wholly owned by the British Virgin

Islands-registered company that also owns East New Britain Palm Oil Limited.^{71 72}) Yet for 2019, not a single shipment appears in these records as being exported from PNG to India by ENB Trading. This is despite the voyage plotted above.

Mr Tan told our undercover reporter that ENB exports approximately 5,000-6,000mt of crude palm oil per month. In 2019, palm oil prices averaged 2,248 Malaysian ringgit per ton (about £414, at December 2019 exchange rates).^{73 74} Global Witness calculates that if each of the two 2019 shipments we tracked carried an average of 6,000mt, they would have been worth about £4,970,400. That year, the 4.4 percentage point tax gap meant that if the full cargo was unloaded in India, the Indian government would have lost out on about £219,000 of public revenues compared to if it had been honestly labelled.

'Impossible' to sell

With Indian tariffs on PNG palm oil so high in 2019, selling legitimately to the country in this period appears to have been economically unattractive. According to UN Comtrade data, during 2019, India imported more than 6.6 million metric tons of crude palm oil, of which 1.7 million tons came from Malaysia. By comparison, a mere 11,346mt was declared as coming from Papua New Guinea, despite its burgeoning plantations.⁷⁵ This illustrates how rare legitimate palm oil sales between Papua New Guinea and India were during this period compared to those from Malaysia.

Global Witness spoke to two palm oil industry experts in India. One said it was "impossible" to import from PNG because of the significantly higher tariffs compared to Malaysian palm oil.

Paranjay Guha Thakurta, an investigative journalist, author, and the former editor of the academic journal *Economic and Political Weekly*,⁷⁶ said: “If the customs duty on oil from Papua New Guinea is higher than the oil imported from Malaysia, and given the fact that Papua New Guinea is geographically located further away from India than Malaysia, the landed price of oil from Papua New Guinea would be substantially higher than oil imported from Malaysia.”

“Since private businesspersons would like to maximise their profits, it is logical that they would not want to purchase oil at a higher price from Papua New Guinea.”

It would appear, therefore, that ENB found a dishonest route to marketing its product in India profitably.

Overall, then, Global Witness’s analysis found that palm oil shipments from PNG to India were indeed made in 2019, and there are serious grounds for believing this was undeclared. And this would likely have been of financial benefit to Mr Tan and ENB, by opening up their product to a market that tariffs rendered otherwise unprofitable.

ENB categorically denied any involvement in tax evasion and said it “has and continues to proudly market and sells all palm products it ships and sells as of Papua New Guinea origin”.

It added: “ENB Trading & Shipping Pte Ltd has been dormant since incorporation, without any business activities since day 1. Your allegations are entirely inaccurate.”

“ENBRG has always done business with integrity, and we hold ourselves to high ethical standards.”

There is no suggestion that Ruchi Soya, to whom the *Chem Peace* consigned the crude palm oil in January 2019, was complicit in this alleged scheme. But it should carry out due diligence and not allow palm oil tainted by



Rural communities in PNG often need roads to access health care, schools, and markets, but the roads built by extractive industry can be worse than nothing. © Global Witness

deforestation into its supply chain. Checking the origin of its purchases is a basic step. If Global Witness is able to find out this information, major companies could too. Ruchi Soya did not respond to multiple requests for comment.

It should be noted that commercial records show that in 2020, ENB Trading Ltd was again named on shipments of palm oil from PNG to India.^{77 78} If an illicit scheme was in operation in 2019, perhaps the ENB group had decided to bring it to an end. But Mr Tan’s admission to an undercover Global Witness reporter, married with clear evidence that ENB palm oil was shipped to India from PNG that year, with no trace of such deliveries on trade databases or port records, means there are clear grounds for Indian authorities to investigate a possible tax scam.

Not far from the hotel where Mr Tan made his admissions, meanwhile, the tensions seeded by the palm oil industry had exploded in an incident far more frightening than the relatively placid world of white-collar crime.

Car chase and attempted murder

In September 2019, Doug Tennent, a Catholic lay missionary from New Zealand, drove to Warangoi, south of Kokopo, to inspect disputed land.^{79 80 81} A legal officer for the Archdiocese of Rabaul, Mr Tennent spent years helping communities with land claims involving logging and oil palm development.⁸² Too often, predatory companies pursue a policy of ‘divide-and-conquer’ with local people to enable such projects.⁸³ Now the results of this policy would be turned on him.

After a local group had obtained a title over a parcel of land the Church claimed to have owned since the 1960s, Tzen Niugini planted more than 2,700 ha of oil palm there, according to Mr Tennent.^{84 85 86} And when the churchman arrived in his small Suzuki car, his presence provoked an angry response, he alleged. Mr Tennent tried to drive off, swerving around five men who tried to block his way. A car and a truck then gave pursuit in what had become a high-speed chase. When the truck rammed his Suzuki from behind, locking his steering, it sent the car careening down a steep slope, rolling six times, Mr Tennent said. He believes he was lucky to have survived the attack and described it to Global Witness as an attempted murder.

Contacted by Global Witness, the local police confirmed the near-deadly attack on Mr Tennent.⁸⁷

“They [Tzen Niugini] were not behind that”, said Mr Tennent. While there is no suggestion that this incident was directed by Tzen Niugini, it is symptomatic of the

conflicts the industry has provoked over time within and between communities.

“ENBRG has and continues to comply with all land laws in Papua New Guinea to acquire and/or develop land”, the company told Global Witness.

Environmental Cost

The ENB Resources Group is thus implicated in bribery, violence and tax evasion. But what of the environmental harms? Between 2002 and 2014, a greater proportion of forests on New Britain were clear-cut than in any other part of PNG.⁸⁸ Global Witness’s analysis now indicates ENB has cleared thousands of hectares of forest on the island.

New Britain is part of an ‘Endemic Bird Area,’ home to 14 species of bird found nowhere else on earth.⁸⁹ Some are highly dependent on lowland forest such as that found on the island, putting them at risk of extinction.⁹⁰

ENB operates two plantation sites in East New Britain. Part of one plantation, operated by ENBPOL in the Gazelle District, was cultivated by smallholders growing cacao and coffee – until ENB bulldozed their trees to plant oil palm (see p. 18). The other, operated by Tzen Niugini in the island’s Pomio District, was formerly rainforest. At that Pomio concession, Global Witness calculates some 18,900 ha of forest was destroyed between 2007 and 2019. (See Appendix 2.) ENB exported about 800,000m³ of valuable tropical timber from this project.⁹¹

Together, these findings paint a picture of a company that is willing to defy national and international law, and destroy highly biodiverse, culturally critical forested landscapes to produce its palm oil.

ENB told Global Witness it complied with all forestry, environmental, and land laws in PNG and denied participating in any illegal activity.

Roundtable on Sustainable Palm Oil

The Roundtable on Sustainable Palm Oil (RSPO), touted by supporters as a green credential, is a palm oil certification scheme that covers 19% of global production, according to its own estimate.⁹²⁻⁹³ The association says its objective is to advance the production and use of sustainable palm oil, in part via its eponymous certification programme.⁹⁴ Both oil palm growers and their customers can be certified under RSPO.⁹⁵ While the scheme has recently incorporated a no-deforestation requirement, it has repeatedly come under scrutiny for being ineffective due to poor implementation, lack of oversight, a sluggish grievance process and conflicts of interest.⁹⁶⁻⁹⁷⁻⁹⁸

Neither ENB nor RH companies in Papua New Guinea are RSPO-certified. However, many of their recent big-name clients are (see “Global buyers”, below). This results in ENB and RH palm oil finding its way into RSPO-certified supply chains, casting further doubt on the scheme’s validity. Under RSPO’s ‘Mass Balance’ system of certification, palm oil that violates RSPO’s own standards can still be sold as “certified”. This scheme means if a trader buys 5,000t of certified and 5,000t of non-certified palm oil from a plantation like ENB’s, it is allowed to mix the oils together and sell 5,000t of it onwards with Mass Balance certification, even if some of that oil is from an uncertified and harmful site.⁹⁹ This policy completely undermines the scheme and could mislead consumers. Consequently, buying some palm oil from plantations engaged in large-scale deforestation and with dangerous working conditions is not a violation of these companies’ commitments under their RSPO certification.¹⁰⁰ It should be.

An RSPO spokesperson said: “It is our mission to ensure the sustainable palm oil sector respects biodiversity, natural ecosystems, local communities, and workers’ rights and safety.”

“All RSPO members are required to make time-bound commitments to only purchase certified sustainable palm oil (CSPO).”

The organisation described the Mass Balance model as a way for companies to begin to do this. It pointed out that mills producing Mass Balance palm oil must check that the oil palm fruit they process has been grown legally.



PNG's forests provide innumerable ecosystem services to its people, including the provision of fresh water. © Global Witness

International financing

Large-scale industrial agriculture is a capital-intensive industry, and ready access to capital is thus a pinch-point on the ambitions of destructive corporations such as ENB.¹⁰¹ That is why Global Witness is campaigning for the UK, US and EU to compel its banks and investors to screen out companies engaging in deforestation from their client base.^{102 103} During this investigation, Global Witness obtained first-hand testimony as to how effective this would be. ENB chief executive Mr Tan told our undercover reporter when it came to funding, “that alone is a constraint to our expansion”. [...]

He continued: “...We are not able to expand, not because we are not, not because our appetite are [*sic*] small, just because we feel that ... financial resources are limited...”

Irregularities and abuses in land and forest-related industries in Papua New Guinea are extensively documented, routine, and severe. Despite this, Global Witness has discovered the Malaysian financial powerhouse Malayan Banking Berhad (Maybank) has chosen to bankroll ENB's activities.^{104 105} Maybank itself is owned in part by a host of well-known financial names in the UK, US, and EU. These institutions are thus enablers of the crimes and abuses detailed above.

Documents filed with the PNG Investment Promotion Authority reveal that in July 2015, Maybank Group subsidiary Maybank Islamic Berhad inked an agreement with ENBPOL to make as much as US\$40 million of

financing available to the company group.^{106 107} The documents refer to ENBPOL's revenues from “plantation land”.¹⁰⁸

This comes as no surprise. Maybank is one of the world's largest palm oil financiers, pouring US\$3.9 billion in loans and underwriting services into the sector between 2010 and 2016, according to an analysis published by Tuk Indonesia and Profundo.^{109 110} It has been previously criticized for financing clients involved in land grabbing, devastating vegetation-clearance fires in their concessions, development on peatlands, and lack of free, prior and informed consent (FPIC) in dealings with local and Indigenous communities.¹¹¹

Maybank's 2020 sustainability report refers to a framework for assessing risks of financing palm oil, but Global Witness has been unable to find it or the bank's overarching ESG (Environmental, Social and Governance) policy. This raises the question of how communities are meant to avail themselves of rights under a policy that they can't even see. According to Maybank, however, it requires its palm oil customers—in this case ENB—to comply with NDPE (No deforestation, development on peatland and exploitation of Indigenous and local people and workers) policies.¹¹² It is unclear how or if this policy is implemented.

Global Witness' investigation finds that by financing ENB, Maybank has enabled the company's abuses, from deforestation to the apparently corrupt acts described by its senior staffers. While we do not know how much money Maybank made on its deal with ENB, the bank certainly expected to profit, and entered into the deal despite the well-documented risks of illegality and serious harms endemic to the PNG land and forestry sectors.

“Maybank is fully cognisant of the environmental, social and governance impacts associated either directly or indirectly with the activities within the countries we finance and specifically [...] the issues associated with deforestation, improper governance, labour as well as human rights,” the bank said.

“We would like to stress that the Group is cautious in its approach when engaging or financing companies that may have a negative impact on the environment and communities.”

Maybank said it engaged clients to “ensure alignment with sustainable practices”, and high-risk companies were required to undergo additional assessment. Where clients fell short, business relationships are “re-considered”.

The bank went on: “Maybank is unable to confirm or discuss any alleged banking relationships we may have,



Both Rimbunan Hijau and ENB operate on East New Britain Province's South Coast. Jacquinot Bay is visible in this aerial view of the coastline.
© Global Witness

or have had with any organisation, owing to banking secrecy laws.

“We, do however, wish to reiterate that Maybank in 2015 had disposed of our banking subsidiary in Papua New Guinea.”

Maybank did not respond to Global Witness's allegations regarding ENB and Rimbunan Hijau (see p. 21) operating without community consent. The bank said that it intends to publish its NDPE commitments and an ESG policy soon.

“Maybank is committed to playing our role in helping countries and companies [...] to grow the economy in a sustainable manner, whilst remaining responsible to local communities and the environment,” it said.

International financiers

Maybank's shareholders include some of the globe's most powerful financiers. These include two subsidiaries of the world's largest asset manager BlackRock. Additional backers include the giant California Public Employees' Retirement System (CalPERS), and Norges Bank Investment Management (NBIM), the manager of Norway's oil fund, the world's largest sovereign wealth fund.^{113 114 115} The Vanguard Group, Inc. and Dimensional Fund Advisors, LP also appear among the top shareholders, as does the Netherlands-based Robeco Institutional Asset Management B.V.¹¹⁶ UK-based Pyrford International Limited is also a shareholder.¹¹⁷

By investing directly in Maybank, these funds and asset managers are partly responsible for the abuses carried out by the bank's customers that its financing has enabled.

“Pyrford International takes its ESG responsibilities very seriously,” the investment firm said, adding that it had been a signatory to the UN Principles on Responsible Investment (PRI) since 2014.

Pyrford said it was part of BMO Global Asset Management, which it called “an industry leader in terms of responsible investing”.

The fund said it had raised Global Witness's concerns with Maybank. Nevertheless, it declined to commit to pressing Maybank to investigate Global Witness's findings.

Dimensional Fund Advisors did not respond to repeated requests for comment.

Some of these financiers have developed policies or principles that should limit their investing in deforestation. CalPERS, for example, says that companies should disclose and manage environmental risks, including deforestation.¹¹⁸ Robeco boasts it is a signatory to over 60 sustainable investing memberships, statements, and principles.¹¹⁹ The asset manager states it will exclude palm oil producers that have less than 20% of their land certified by RSPO from its funds. But it does not exclude the financiers of palm oil – meaning the likes of Maybank can slip through the cracks.¹²⁰

CalPERS acknowledged holding millions of shares in Maybank, as well as in RHB Bank Berhad and Oversea-Chinese Banking Corporation (see p. 25). But, a spokesman said, “We don't have insight or comments about the material contained in [Global Witness's] letter,” adding that these investments were passively managed as part of an index fund.

Robeco said: “Regarding our engagement with Maybank, we are part of the PRI working group on palm oil and deforestation [...] that has actively engaged Maybank on strengthening their no deforestation, no peat, no exploitation policy since 2019 to reduce the negative impact on biodiversity they are exposed to as one of the largest financiers of the palm oil industry.”

The company claimed it actively addressed the risk of deforestation in its investments with an “active ownership strategy”.

“As a responsible investor, NBIM has focused on climate change and human rights issues for more than ten years,” the Norwegian sovereign wealth fund manager said. “We expect companies engaged in activities with a direct

or indirect impact on tropical forests to have a strategy for reducing deforestation from their own activities and from their supply chains”, and to conduct human rights due diligence.

“Since 2018, we have proactively engaged with banks in Southeast Asia regarding their policies for lending to companies that contribute to deforestation”, NBIM said. “We urge the banks to strengthen their due diligence and to report on climate and deforestation risks.”

NBIM said it did not provide information about its engagements with individual companies.

For their part, BlackRock and Vanguard have voted against almost every shareholder resolution to halt deforestation by the companies in their portfolios since 2012. These asset managers are facing growing pressure on their poor record on deforestation, land rights and Indigenous rights issues.^{121 122 123}

Approached for comment, BlackRock said: “Palm oil production is an example of a particularly complex investment stewardship issue.”

It pointed Global Witness to a 2021 publication that said BlackRock encourages companies to disclose their plans for sustainable use of natural resources.

“As an asset manager, BlackRock cannot substitute one company for another company or exclude any particular companies from the indices selected by our clients,” a spokesperson continued. “We focus on engaging with companies’ management teams and



Land cleared for oil palm plantations in the Bainings region of East New Britain Province, Papua New Guinea. © Global Witness

boards to understand how companies are managing sustainability risks.”

Vanguard said it took the concerns raised seriously and would incorporate them into its analysis and monitoring of companies with direct and indirect business exposures in the PNG region.

“We have engaged on this topic and associated matters such as deforestation,” it said, noting that it participated in the Net Zero Asset Managers initiative. “When a company’s products, services, or practices pose a risk to its employees, customers, and the communities where the company operates, it can manifest into material reputational, competitive, legal, and regulatory risks that can affect long-term shareholder value.”

The severity of the cases that Global Witness have uncovered raises disturbing questions of if, and how, laws or norms relating to due diligence required to avoid financing linked to companies engaged in illegal activities have been broken. They also reinforce the need for countries that import, use or finance forest-risk commodities such as palm oil to recognise that company self-regulation has failed. Clear requirements are needed for businesses, including finance, to undertake adequate due diligence on deforestation, the lack of FPIC, and related human rights abuses. Such laws are currently being proposed in the EU and UK, and potentially the US – and Global Witness is campaigning to ensure that the finance sector is not exempted from these provisions.

‘Severe assault’, hundreds evicted

There was more than enough evidence of problems to have steered Maybank away from financing the ENB group. A legal battle involving ENB in the Gazelle district of East New Britain Province [illustrates](#) Maybank’s disregard for palm oil’s impact on communities.¹²⁴ Landowners and settlers there told the PNG National Court they had not known about nor agreed to a 99-year agricultural lease granted over their land for oil palm development.¹²⁵ A local government official who objected to the project said he was “severely assaulted” by supporters of the project in retaliation.¹²⁶ The land had previously been included in a US\$50 million World Bank project to improve the livelihoods of smallholder coffee and cacao growers.^{127 128}

Global Witness has now seen unpublished documents indicating that 120 households that benefited from this scheme were forcibly evicted, with their homes, gardens, and equipment destroyed.¹²⁹ In 2017, a Global Witness team visited the area and interviewed some of those landowners objecting to the project, who alleged an entire village had been evicted, leaving people internally

displaced. Hundreds of families not supported by World Bank funds were also allegedly evicted, while dozens more families were affected by ENB's activities, with their water sources or gardens damaged. At an average family size of six, this would mean ENB's actions affected the lives of well over one thousand people.

In August 2016, the judge found for the plaintiffs, ruling that land was “hijacked from appropriate land owners” in breach of the Land Act and the Constitution.¹³⁰ Nevertheless, *during the trial*, in December 2015, ENB had already awarded a contract to build the group's Narangit palm oil mill in Gazelle District.^{131 132} This mill is now producing palm oil sold around the world, while the families who lost their land have reportedly received no compensation.

The case had been in progress since 2012, three years before the Maybank deal with ENB.¹³³ Proper due diligence by the bank on this case alone should have precluded it from lending to the group. The terms of its financing required ENBPOL to check and ascertain that no pending litigation against it might have a “material adverse effect” against the company's operations.¹³⁴ Global Witness asked both parties if ENBPOL disclosed the lawsuit to Maybank, but did not receive a reply.

Reached for comment, the World Bank said it had raised concerns with the PNG government when land incursions impacting farmers in its project area were reported in 2015. It said 95 cocoa blocks were destroyed, and the bank had communicated this to the government, which issued a stop work notice to ENB.

“Although the Productive Partnerships in Agriculture Project closed in May 2021, we remain concerned by the land incursions in East New Britain,” the bank said. “In preparing further PNG agriculture sector projects, the World Bank supported the Government of PNG to put



The Productive Partnerships in Agriculture Project supported smallholder coffee and cocoa farmers across Papua New Guinea. © Global Witness

in place strategies to help prevent similar issues from occurring again.”

ENB wrote: “Squatters can be evicted from State Land if they are residing there without the authority or the permission of the registered Lease holder.

“This is not unusual and both the District Court and National Court can issue eviction Orders [*sic*] where squatters refuse to move.

“Their only ‘right’ is the right to receive reasonable notice to vacate. To our knowledge, ENBRG has not participated in any forceful evictions as claimed by you.”

“All labourers of the previous cocoa and copra plantation and persons living near the plantation have been given employment opportunities to work at the oil palm estates,” the company also said.

As we shall see, this litany of offences has not barred the ENB Group's palm oil from making its way into a global array of goods, made by companies such as Colgate-Palmolive and Nestlé, whose products you likely have at home right now. But ENB is not the only malevolent actor in PNG's palm oil industry. Global Witness can also reveal that the activities of a far more influential company are resulting in an ongoing and avoidable human tragedy.

Special Agriculture and Business Leases: a toxic legacy

ENB, RH (Rimbunan Hijau Group) and Bewani (Bewani Oil Palm Plantations Ltd) all obtained access to land through Special Agriculture and Business Leases (SABLs).¹³⁵ This now-infamous system allowed the control of over 50,000 km² of PNG land to be wrested from Indigenous communities and transferred to foreign companies.^{136 137 138} The PNG Forest Authority issued forest clearance authorities (FCAs) alongside SABLs, allowing companies to flatten rainforests and export timber worth hundreds of millions of dollars.^{139 140} In 2013, a government commission into these leases found the vast majority of SABLs that it published findings for violated PNG law - typically by ignoring communities' constitutional land rights.¹⁴¹ Yet, for reasons that have never been made public, many leases the commission reviewed were not included in its final report, including all of those in East New Britain Province - which included the ENB Group and RH leases.¹⁴²

RIMBUNAN HIJAU GROUP

Total forest destroyed, 2011-2019:
24,600 ha



Rimbunan Hijau's deforestation is starkly visible in this satellite imagery mosaic from 2019.

Rimbunan Hijau Group (RH) - the name means 'Forever Green' - is a sprawling global business empire with interests in forestry, palm oil, plastics manufacturing, mining and the media.^{143 144 145} Its founder, Malaysian businessman Tiong Hiew King, is listed on Forbes' Richest 50 List for Malaysia, with an estimated net worth, in 2021, of US\$1.3 billion.^{146 147} In Papua New Guinea, RH owns one of PNG's airlines, *The National* newspaper, and a plush hotel in the capital Port Moresby. It is logging several areas throughout the country and operates palm oil plantations in Pomio, East New Britain Province.^{148 149 150 151} The logging and plantation projects have been the source of protests for many years from communities who say RH has exploited them and their forests.^{152 153} Global Witness has previously [reported](#) community landowners' allegations that its access to Pomio land was obtained through fraud and forgery. RH denied these claims.

Rimbunan Hijau did not respond to Global Witness's repeated requests for its comment for this report, including a request hand-delivered to its headquarters in Papua New Guinea.

RH subsidiary Gilford Ltd acquired FCAs for three leased areas in the Pomio District of East New Britain Province in 2010.¹⁵⁴ Since then, the company has devastated the coastal rainforest where it operates, clear-cutting tens of thousands of hectares that local communities had relied upon for sustenance. In 2017, Global Witness [revealed](#) RH had cleared almost 210 km² of rainforest and exported about 1.2 million cubic meters of timber—worth about US\$122m—from its leased areas in East New Britain Province.¹⁵⁵ We calculate that a further 30 km² has now been cleared and another 100,000 cubic meters of timber shipped out (see Appendix 2). Communities in the Pomio

i In its 2005 report [The Untouchables](#), Greenpeace described Rimbunan Hijau as "a conglomeration of many hundreds of companies . . . all owned and controlled by the Tiong family but which sometimes have no other official connection." We consider this definition accurate and apply it here. For instance, although Gilford Ltd is described as a subsidiary of Rimbunan Hijau (PNG) in [this article](#) by the RH-owned newspaper *The National*, in company filings its owner is listed as the Malaysian Prime Resources Corporation Limited. This latter company does not appear in the database of the Companies Commission of Malaysia.

district of East New Britain Province have calculated that over the lifetime of the leases, they will suffer more than US\$730 million in damages due to this destruction.¹⁵⁶ This calculation, made by 17 communities, includes among other items the loss of timber exported by RH, lost subsistence agriculture and market income, and the near-total destruction of the environmental goods and services provided by the forest.¹⁵⁷

Global Witness can now reveal new evidence of serious human rights abuses and negligence by RH on its oil palm plantations. These have led to a spate of serious injuries - some life-changing - and tragic and preventable workplace deaths. It is a human cost to RH's wealth and influence that should appal potential investors and business customers.

Permanent injuries

A 2019 study found that the over one million oil palm plantation workers globally are at risk of suffering from bone and muscle injuries, chemical exposure, infectious diseases including malaria, and depression and anxiety.¹⁵⁸ Workers, especially women and girls, are also subject to sexual assaults and violence.¹⁵⁹ By any measure, palm oil labour is stressful and often dangerous work. It is therefore especially important for plantations to maintain robust safety standards.

Global Witness began investigating worker safety on the RH plantations in East New Britain after being tipped off by two former employees that a catalogue of preventable deaths and serious injuries were taking place.



Pomio communities depend on their forests for their livelihoods and traditional ways of living. © Global Witness

“It’s very bad,” one employee said. “[Workers] live in a house with no lighting, no water. Compliance? Zero.”

Asked what safety equipment the company provided, he said: “They give them boots but then deduct it back from their pay.

“If you ask for it, you get it, but you have to pay for it.”

At least 12 people died on the RH plantations between 2012 and 2020. Eleven of these were RH employees, and one was an employee’s school-aged dependent. Over the same time span, a dozen more were involved in serious accidents, some life-altering. (See Appendix 2 for an explanation of our research methods. A full list of the deaths and injuries Global Witness has catalogued is in Appendix 1.) The deceased workers died from blunt-force injuries, falls or unknown and un-investigated causes. Many of the deaths and accidents stemmed from motor vehicle accidents on the plantation, where heavy trucks laden with fruit bunches or logs share the rough tracks constructed by RH with pickup trucks, motorbikes, and workers on foot. Global Witness believes it is the first organisation to publish these findings.

Papua New Guinean health and safety consultancy Niugini Environment Management Services (NgEMS) reviewed the findings for Global Witness. Principal Tony Aromo has over a decade’s experience in the palm oil sector in PNG and served as a technical expert on the working group developing nationally appropriate standards for RSPO.¹⁶⁰ Some readers may find the following examples upsetting.

Father-and-son tragedy

On the night of November 28th 2014, Leo Kaukau, a forklift operator at an RH subsidiary, cooked dinner for himself and his 11-year-old son Ronald using water from a container that had held chemicals used for killing grass in the plantation.^{161 162 163} Paraquat and glyphosate, herbicides used by the oil palm industry in PNG, are both toxic to humans.^{164 165 166} Just one sip of paraquat can kill, producing vomiting and kidney and respiratory failure.¹⁶⁷ Felix Tau, Leo’s brother, said the father and son began vomiting within ten minutes into their dinner. Leo Kaukau died on the way to a health clinic the next morning, while his son died shortly thereafter. No autopsy was performed, nor inquest held.¹⁶⁸

PNG’s Employment Act provides penalties for employers who fail to provide their housed workers with safe drinking water.¹⁶⁹ To avoid such deaths, hazardous chemical waste must also be properly disposed of. In its review of the evidence for Global Witness, NgEMS said that under guidelines established by the Food and



Logs harvested from Papua New Guinean forests can measure many meters long. © Global Witness

Agriculture Organization of the United Nations (FAO), used pesticide containers should have been triple-washed and then made unusable, to prevent exactly such a tragedy from occurring.^{170 171} The victims' family has reportedly received no compensation for their deaths.¹⁷²

Another fatality occurred on November 11, 2020. Father of four Anton Kelal, who had worked for RH subsidiary Sinar Tiasa since 2011, was a passenger in a dump truck on the plantation.¹⁷³ Five witnesses saw the truck speed up and Mr Kelal fall from the cab, hitting his head and dying instantly. His brother, Lawrence Lapuli, was among the witnesses.¹⁷⁴ Mr Kelal's death certificate indicates his brain was contused and both his lungs collapsed.¹⁷⁵ According to his brother, RH provided PGK5,000 (about £1,000) for burial costs, but has not otherwise compensated Mr Kelal's family. His children are being taken care of by extended family members.¹⁷⁶

Noting that there was evidently no motor vehicle accident report done, NgEMS' review of this case recommended a police investigation into the accident. Reckless driving may be a violation of the PNG Road Traffic Act. "Allowing employees to drive negligently without due care and attention for other and company property show[s] a total lack of duty of care", NgEMS wrote. "The ultimate responsibility and accountability [for] employees' negligence lies with the top management of the organisation."

Amputations, chemical accidents

Global Witness compared these tragedies with the safety record of two comparably-sized plantations operated by a different company in Papua New Guinea. In stark contrast to the lack of public reporting of incidents at Rimbunan Hijau operations, accidents at New Britain Palm Oil Ltd (NBPOL), one of the RSPO-certified palm oil companies operating in PNG, are **publicly reported**. Company reports show that between 2010 and 2020, one worker died at the company's Higaturu plantation, and three died at its Milne Bay plantation. Both of these sites employ roughly the same number of workers as RH's Pomio operation. (For more details, see Appendix 2). This suggests health and safety measures can be put in place to improve conditions on the RH plantation, which the company has failed to do.

Workers' injuries on the RH plantations include amputated fingers, broken bones, and the impacts of chemical exposures and vehicle accidents. Almost without exception, accident survivors also seem to have gone financially uncompensated.

Truck driver Charles Sai was 22 years old on 1 March 2013, when a log slipped from a pile and hit him on the neck.^{177 178} The logs loaded onto ships for export from PNG can measure over a meter in diameter and fifteen meters in length. This one caused ligament damage and fractured three vertebrae, including the C6 vertebra: a severe injury that risks paralysis and nerve injury.¹⁷⁹ A medical assessment concluded the use of Mr Sai's back had been reduced by 80%.

Records seen by Global Witness indicate he received no recompense – and even had to pay PGK250 (about £50) for a copy of his own workers' compensation report. Mr Sai said he had to pay for his own medical expenses as well, adding that he felt used by the company.

In its assessment of this case, NgEMS noted that East New Britain is a highly seismically active area, with frequent small earthquakes. Stockpiles of logs must therefore never be raised too high and must be appropriately barricaded and signposted for the safety of workers and passersby. According to NgEMS, there is no indication that such simple precautions were taken. If they had, Mr Sai would almost certainly never have been injured, NgEMS said.

Unreported tragedies

Only seven of the twelve deaths Global Witness documented seemed to be recorded in the governmental Office of Workers Compensation (OWC) database when this report was written. And only seven of the twelve serious injuries Global Witness documented appeared. Employers who fail to give notice of employees' injuries

or deaths are guilty of an offence under the PNG Workers' Compensation Act.¹⁸⁰

An official at the East New Britain Provincial Health Authority declined to discuss the incidents on the phone, saying they "might get into trouble".

RH did not respond to Global Witness's request for comment. It did not even issue a statement of regret for the loss of life on its plantations, nor sympathy for the bereaved families or those who have suffered life-changing injuries.

In addition to accidental death and injury on its plantations, RH is also linked to a particularly shocking case of human rights abuses.

'Inhuman' treatment

In October 2019, Global Witness met Anthony Salmang, a Pomio landowner who described the impact the RH operations have had on his community.

"We always get fresh fish from the water," he said. "In the bush, we hunt for animals like wild pigs. They are precious in our life. We live by the nature."

But this way of life has been obliterated by the company's activities.

"Now [the water] is full of chemical activities, fertilizer that flows down the river, and all the corals are killed," he said. "It really changed our life. We lost most of our traditional livelihoods, like sacred sites."

He added: "Empty, I can use that term, empty, because all those things are gone. We cannot bring them back."¹⁸¹

Allegations of RH's ruinous impact on communities' environments are nothing new. Local government official and outspoken Pomio landowner Paul Palosualrea Pavol, who won the Alexander Soros Award for his environmental activism in 2016, also told Global Witness the company's forest destruction has driven away wild animals.¹⁸²

¹⁸³ He said: "The concern is that our children do not know hunting skills and most of them don't know what cassowary looks like and how a wild pig reacts against a hunter.

Pavol said water in the area was "polluted" and fish had been caught that tasted of "oil and fuel".¹⁸⁴

But when Mr Salmang and other landowners tried to photograph RH's environmental devastation, armed police swooped. They allegedly forced him and sixty-four other people from villages in the Pomio area affected by RH's activities into a single metal shipping container that doubled as a holding cell at the plantation camp. There,

Mr Salmang said, they were held tightly packed for five to six hours, through the height of the tropical sun - without water or access to toilet facilities.¹⁸⁵

"We were crushed inside," he recalled. "There was no room for us to sit. You could not move. It was inhuman."

Elderly men were among those allegedly locked up, not accused of any offence at that point: the incident could easily have been fatal.

Mr Salmang's account has been corroborated by Sarawak Report, which interviewed another of the sixty-five men held in a 2020 [video report](#).¹⁸⁶

Although most were then released, nine remained in the container overnight, Mr Salmang recalled. The next day, they were brought by boat to Kokopo, many hours' voyage from their homes. There, they were finally arrested on charges of interfering with police duties and jailed for two nights in a holding cell with between 60 to 70 men, he said.¹⁸⁷

RH made no comment on this incident.

Police terror

Accusations that RH uses the police to intimidate and violently attack communities objecting to their activities date back years. In 2012, Mongabay [reported](#) RH-funded police "terrorized" communities in the Pomio area now developed for palm oil, beating people with sticks and fan belts and locking people in shipping containers for up to three nights.¹⁸⁸ These allegations from Pomio communities of police violence led to an independent fact-finding mission in 2013 organized by civil society and including members of the police and local government employees.¹⁸⁹ This found that police hired by RH subsidiary Gilford had forced landowners to sign logging consent forms under fear of death, and beat others with gun butts and tree branches. The report concluded these "acts of assault did amount to serious indictable criminal offences".¹⁹⁰ Previously, RH told Global Witness that a March 2017 police investigation found no evidence of malpractice at the sites and that local community members had "requested a larger police presence to maintain order as the area experienced strong economic growth".

Multiple PNG Police Commissioners have forbidden officers to be stationed in logging camps across the country.¹⁹¹ The fact that these edicts have been repeatedly issued points to their ineffectiveness. In September 2020, the then-Minister for Police, Bryan Kramer, released a statement condemning the lack of integrity of the Constabulary.



Women waiting for transportation in East New Britain Province, Papua New Guinea. © Global Witness

“The very organization that was tasked with fighting corruption had become the leading agency in acts of corruption,” he wrote, describing “a rampant culture of police ill-discipline and brutality.”¹⁹²

Global Witness repeatedly contacted the Royal PNG Constabulary for its comment on this report, but the police force did not comment.

These findings show that RH has committed grave human rights abuses and neglected the health and safety of its workers, leading to deaths and life-altering injuries.

RH did not respond directly to Global Witness, but it did send a response to one of its customers, the Mewah Group, regarding our allegations. The company said: “The Sigite Mukus Integrated Rural Development Project has the full approval of Government and has been operating since 2011.”

“Since project commencement, it already transformed [*sic* throughout] the lives of thousands of families in East New Britain. More than 4,000 people are directly employed by the project. Millions in royalties and development levies has been paid directly to landowner communities.”

It said the project had constructed “hundreds of kilometres of new roads” and new and rehabilitated airstrips.

“National business entrepreneurs have been able to capitalise on the increased economic activity and improved infrastructure to open their own businesses. We have seen new trade stores and public transport

vehicle businesses flourish. Families are now able to bring produce to market. Students can get to school more easily, and people seeking medical services can reach them without life-threatening delays.”

RH said it had dedicated “significant funds” to a PNG malaria eradication initiative and had signed an agreement with the East New Britain provincial administration to support local aid posts.

The company called Global Witness “a group of economic vandals who do not care about the lives they destroy”. It claimed that the specific allegations presented in this report were presented out of context and “without any real basis”.

RH said it abided by all relevant laws and regulations, recognized the socio-economic needs of forest communities, and took environmental obligations seriously.

Consumers may be shocked to learn products they are consuming – from brands such as Kellogg’s and Danone – are linked to the abuses this investigation has uncovered. But as we will see below, tracing the palm oil stream leads directly from RH’s dangerous and repressive operations to huge commodity traders and a multinational consumer goods company that claims to have its brands in more homes than any other company worldwide.¹⁹³

Unequal burdens

The impact of harmful palm oil companies is not felt uniformly – women feel the burden most. Land in East New Britain Province is inherited through matrilineal custom, from mother to daughter.¹⁹⁴ Despite this, women have increasingly been excluded from decision-making over their own land as logging and palm oil development have encroached on the province.¹⁹⁵ The loss of the forest itself has brought additional tribulations. PNG women typically do the lion’s share of gardening and produce most of the country’s crops, while also taking care of children and the family.¹⁹⁶ ¹⁹⁷ Access to clean drinking water is very poor, and women and girls in rural communities are often tasked with collecting water from springs and other waterways.^{198 199} The destruction of forests, where women manage their gardens and which provide clean freshwater, makes these already challenging tasks significantly harder.



Rimbunan Hijau has cleared approximately 240 km² of rainforest for its palm oil operations in Pomio, East New Britain Province. © Global Witness

Following the money

Much of this destruction might have been prevented if RH did not have access to big finance. Global Witness has now uncovered documents showing RH companies secured a loan for up to US\$300 million from a consortium of major Malaysian banks in 2012.²⁰⁰ A document filed with the Investment Promotion Authority names a consortium of banks including Maybank, Singapore's Oversea-Chinese Banking Corporation (OCBC Bank), and Malaysia's RHB Bank Berhad (RHB) entities as being behind the deal. The financing was provided to RH's subsidiary Gilford, which holds the clearance authorities for the plantation areas. The deal was struck as clear-felling there began to accelerate.²⁰¹

Maybank's lending to the palm oil industry is well-established (see its response to Global Witness in '[International Financing](#)'). In 2015, Maybank (PNG) Ltd, one of the banks in the \$300m deal, was acquired by Kina Bank, an arm of Kina Securities Ltd.²⁰² The bank, whose red, white, and orange logo is a familiar sight in PNG's capital, is listed on both the national and Australian stock exchanges.²⁰³

Kina Bank said that it had no financing arrangements with RH. It said the Asian Development Bank, as a major shareholder, had conducted a detailed ESG audit of all the issues Global Witness had raised with Kina, "to ensure

the business complied with the highest standards in this regard".

Asked whether the 2012 agreement with RH had matured before or after Kina's acquisition of Maybank (PNG) Ltd, Kina did not respond.

Singapore's Oversea-Chinese Banking Corporation, Ltd is the second-largest financial services group, by assets, in Southeast Asia.²⁰⁴ The bank says it "will not engage in or knowingly finance any activity where there is clear evidence of immitigable adverse impact to the environment, people or communities".²⁰⁵ It requires borrowers to have their own policies against deforestation.²⁰⁶ The bank's Environmental, Social and Governance (ESG) risk assessment process, implemented in 2017, requires it to check their customers' management of ESG risks like deforestation and occupational safety at least annually.^{207 208} RH's actions in PNG should have been scrutinized several times over by the time this report was written. That OCBC should finance RH illustrates perfectly why internal policies are not sufficient to prevent financing of the kind of abuses detailed in this investigation.

Contacted by Global Witness, OCBC Bank said that banking regulations prevented it from discussing individual clients. "However," it wrote, "we require our borrowers to have safeguard[s] against deforestation and to take into consideration social issues such as child/forced labour,

occupational health and safety as well as any resettlement of affected communities in our assessment.”

The bank did not say whether it had checked RH’s management of environmental and social risks, as required under its policy.

“We are committed to this sustainability journey,” it added.

A third funder, RHB Bank, controls dozens of commercial and investment banking entities throughout Southeast Asia. This includes two banks in the consortium that provided the loan to RH’s subsidiary Gilford.²⁰⁹ It did not formalise a policy framework requiring social and environmental sustainability of its customers’ operations until 2019.²¹⁰ This framework states it is “integrating ESG factors and risks” into its business and seeking to minimise “negative impacts to the environment and society”.²¹¹ The bank’s involvement with the loan makes a mockery of this commitment.

RHB did not deny having financed RH. The bank said: “At RHB, we formally embarked on our sustainability journey in the fourth quarter of 2018 and institutionalized it in 2019. Since then, we continue to take a practical approach and have progressively embed [ESG] practices or considerations into our business and operations as part of our overall sustainability journey.”

The bank said that under its ESG Risk Assessment tool for the palm oil sector, customers with a plantation size of over 100 acres were required to obtain sustainability certification, abide by the Malaysian Palm Oil Board’s (MPOB) codes of good practices, and “avoid virgin forest, aboriginal or heritage land”.

Yet as with ENB’s financing, the money trail does not only originate in Malaysia - for these banks count among their major shareholders some of the biggest names in global finance. These include many of the same investors as Maybank’s, such as BlackRock, Norges Bank Investment Management (NBIM), and the Vanguard Group.²¹² Many of these financiers’ names appear repeatedly behind the flows of money enabling the wholesale destruction of tropical forests, despite their own investment guidelines acknowledging climate risk.^{213 214 215 216 217} NBIM’s 2019 annual report said it “urged [banks] to strengthen their due diligence and to report on climate and deforestation risks”.²¹⁸ Yet actions speak louder than words; it has not divested from the likes of Maybank, which continually finance deforestation.

Despite their massive influence and power - BlackRock is the world’s largest asset manager and NBIM manages the world’s largest sovereign wealth fund - these financiers did not acknowledge responsibility for the abuses they had enabled. See p. 18 for these financiers’ responses.

Global Witness has also discovered an entry in Papua New Guinea’s national collateral registry indicating BSP Financial Group Limited (BSP Financial, previously Bank of South Pacific Limited) provided a 30-year loan to Gilford in 2018.²¹⁹ The publicly available information does not specify the loan amount, but as collateral, Gilford listed all its current and future property.²²⁰ Major shareholders of BSP Financial include the PNG Sustainable Development Program Ltd (“PNGSDP”) and the International Finance Corporation, whose mandate is to improve people’s lives “by encouraging the growth of the private sector in developing countries”.^{221 222} For its part, SDP’s self-described goal is to provide “lasting benefits for the people of Papua New Guinea”.²²³ Once again, given the litany of harms and unethical practices discussed earlier, this is a deal that should never have been made.

BSP Financial did not respond to repeated requests for comment.

PNGSDP said that its mandate to deliver development initiatives for the people of PNG involved investing its Long Term Fund to generate attractive returns. It added, “Our investment in BSP represents a very small part of our overall investment portfolio” and said that it was a passive investor in BSP with no knowledge of or influence over the bank’s lending.

PNGSDP said that it was in the process of reducing its exposure to BSP. “This orderly process is in keeping with our investment strategy and the decision was made for completely unrelated, commercial considerations,” it said.

The International Finance Corporation said: “IFC has no knowledge of the specific allegations of abuse raised by Global Witness and condemns any acts of violence against individuals and communities.”

The corporation said it had not been made aware of any BSP exposure to Gilford.

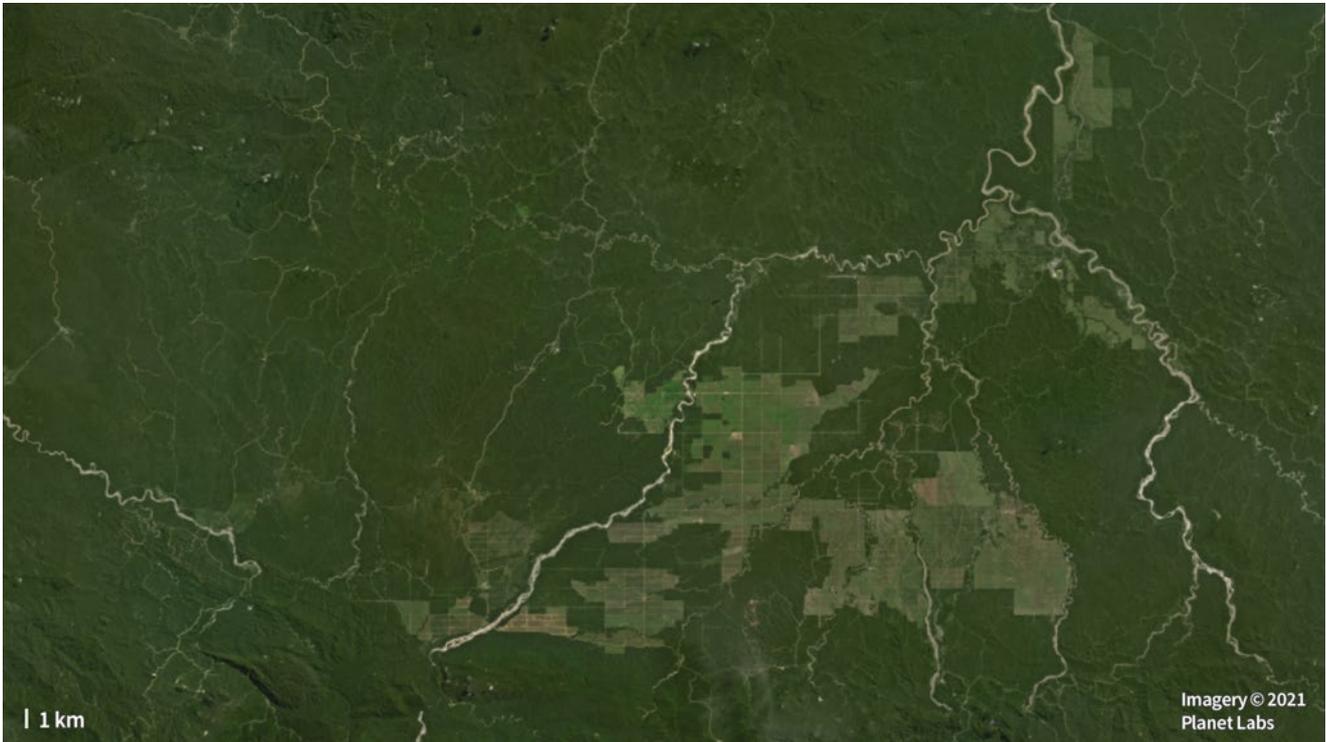
A spokesperson said: “IFC takes any environmental and social concerns relating to [its] Performance Standards very seriously.”

They added that the IFC and IFC Asset Management Company each held less than 1% of BSP’s shares, and the IFC had been reducing its shareholding over several years. The corporation said it had supported BSP to strengthen its environment and social risk management practice through a programme beginning in 2018.

By investing in banks that directly financed RH’s operations in PNG, these financiers are partly responsible for the abuses carried out by the company.

BEWANI OIL PALM PLANTATION LIMITED

Total forest destroyed, 2011-2019:
30,600 ha



Satellite imagery from 2019 reveals extensive forest clearance in the Bewani project area.

A short drive from Indonesian-controlled Papua, the port of Vanimo in north-west PNG's West Sepik Province, has the grit and dust of an industrial border town. At night, cigarette, alcohol, and gun-runners' boats leave the harbour, destined for the other side of the border.^{224 225} The small port is stacked high with logs from inland forests, most destined for China.²²⁶ The province has seen astronomical logging rates over recent years, with millions of cubic meters of timber exported.^{227 228} It has come in part from the area operated by Bewani Oil Palm Plantations Ltd ("Bewani"), which operates a [139,909 ha](#) concession south of Vanimo.²²⁹ Bewani was registered in PNG in 2010 by a member of the prominent and controversial Malaysian Tee dynasty.^{230 231 232} The family's other business interests span industries from Malaysian palm oil to phosphate mining on Australia's Christmas Island.^{233 234 235 236}

'Lost everything'

A recent BBC [documentary](#) about the Bewani plantation uncovered children there working barefoot amid dangerous working conditions.

According to one villager in the documentary: "We used to live by the forest, the forest was our source of food.

"Now the company came, we lost everything."

When Global Witness previously visited in 2016, to [reveal](#) widespread community opposition to Bewani's lease—which the company contested—investigators saw just one timber ship anchored in Vanimo's harbour. By 2019, the bay was full of vessels. A stream of logging trucks rolled down the main road, hundreds of logs from the province's felling operations stacked in piles ready for export. Assuming Global Witness's team were tourists—Vanimo is also a surfing hotspot—residents approached our investigators unprompted to describe the impact.²³⁷ They spoke candidly about the loss of their forests and resources, and how this had not led to any improvement

in their standard of living. Health centres meant to serve entire districts were said to have no staff, nor even basic medicines. (In 2018, the *New York Times* described a “public health emergency” in PNG, driven in part by widespread corruption and a collapsing medical supply chain that had left shelves bare of essential drugs and driven many rural clinics to closing.²³⁸)

Global Witness’s deforestation analysis indicates that over 30,000 ha has been cleared in the area since Bewani began its operations, destroying ecosystems once integral to the lives of local communities.²³⁹

In its response to Global Witness, Bewani said: “The allegations in your letter are factually and legally incorrect, clearly defamatory and do not represent the position of the overwhelming majority of the landowners who not only own the title to the SABL in question, but who support the oil palm development on the land concerned.”

“All land clearing activities undertaken since 2010 were conducted in strict supervision and compliance with all regulatory requirements imposed by both the PNG Forest Authority and the Conservation and Environment Protection Authority”, Bewani said.

It added that the only complaints from the government of Papua New Guinea concerning environmental issues in its operations were minor and “were rectified in no time”.

“Approximately 16,700 hectares of oil palm fruit [*sic*] have been planted to date of which majority portion of planted land is already bearing fruit and landowners are enjoying profit sharing as well as employment and business spin-off opportunities that marks significant improvements to their livelihoods”, the company wrote. “We have significantly expanded the road network in the project area”.

Bewani said it had not cleared any forest since 2019. It claimed there had been “rogue and unauthorized logging operators operating within SABL Portion 160C [the Bewani project area]” that had been dealt with in court.

Despite admitting to not having seen the 2019 BBC documentary due to it being unavailable in PNG, Bewani called it “unbalanced and partial”.

The company said it had a strict policy restricting child labour. “If there are children entering the plantations, it is not something that BOPPL allows or endorses,” the statement continued.



Vanimo was crowded with logging trucks when Global Witness researchers visited in 2019. © Global Witness

Will the real owners please stand up?

Against the backdrop of Bewani’s growing infamy, in 2019 the Tee family claimed to have washed their hands of the plantation.²⁴⁰ The Prosper Group, a conglomerate including palm oil mills in which the Tees have controlling stakes, had come under pressure from some of its biggest palm oil customers to cut ties with Bewani.²⁴¹ Prosper’s clients, [according to Chain Reaction Research](#), included giant traders and corporations including Cargill, Mewah, AAK, Wilmar International, IOI, and Unilever. These in turn supply massive fast food outlets, supermarkets, and household brands, reportedly including McDonalds and Walmart.²⁴⁴ Some of these traders received [grievance reports](#) following revelations by Greenpeace and Chain Reaction Research of deforestation carried out by Bewani.²⁴⁵ In what appeared to be an effort to maintain Prosper’s trading contracts with international brands, the Tee family divested from Bewani’s sole shareholder, the Malaysian company PNG Plantations Development Sdn Bhd.²⁴⁶ The Prosper Group was then welcomed back into lucrative palm oil supply chains, able to once more sell to powerful trading houses.

Regarding the Tees’ divestment from Bewani, Prosper admitted to Global Witness: “The divestment warded off the risk of trade suspensions that were already being imposed on Prosper.”

It added: “The Tee family no longer has commercial interest in the PNG plantation and its mill, but this does



Palm oil from the Bewani plantation has been exported to India, South Korea, and Singapore. © Global Witness

not necessarily diminish their sense of responsibility for the development.

“It is for this very reason the family keeps an open-door approach to the new owners.”

“Given the absence of coordination with the current owners of the Bewani plantation project, it is not realistic for the Tee family to effectively compensate deforestation in Bewani.”

Bewani pointed to a peatland rehabilitation project it had instead launched in Malaysia.

It said Prosper had adopted its own sustainable palm oil policy which was “up to par with many international palm oil traders’ procurement policies”.

But evidence uncovered by Global Witness shows the Tee dynasty continues to hold shares in a company operating in the Bewani plantation. Global Witness can also reveal previously undisclosed business ties between Tee family members and two of the plantation’s new directors.

The great switcheroo

The divestment took place in early 2019. According to Malaysian corporate registry documents **revealed** by Chain Reaction Research, on 1 February that year an anonymous company, Top Leap Holdings Ltd—reportedly registered in the British Virgin Islands—took over ownership of PNG Plantations Development Sdn Bhd, the vehicle that owned Bewani.^{247 248 249} Just days earlier, new directors of Bewani had also been installed. These

included Kong Fatt Yap and Eng Seong Goh.²⁵⁰ (Mr Goh was **previously exposed** by analysts at Chain Reaction Research as having other long term business ties to the Tees.)

A Global Witness analysis of Papua New Guinean corporate records reveals these directors, Mr Yap and Mr Goh, are shareholders with Top Leap Holdings in two other companies associated with the Bewani plantation: Bewani Forest Products and Ocean Paradise Ltd.^{251 252 253 254} (Bewani says it has “appointed” Bewani Forest Products to work on its plantation, and Ocean Paradise Ltd lists the plantation as its operation location in records on file with the PNG government.²⁵⁵) Top Leap and the new directors of Bewani became joint shareholders of Bewani Forest Products on the same day, 23 January 2019 - strongly suggesting that they are closely coordinating their business activities.²⁵⁶

Global Witness has also discovered Malaysian corporate records for what appears to be a closely related company, Ocean Paradise Sdn Bhd. Registered in July 2012, just one month before Ocean Paradise Ltd was registered in Papua New Guinea, the apparent Malaysian incarnation of the company is owned by four individuals. These include Tee Kim Tee, who owns 40% equity, alongside its largest individual shareholder in PNG, Kong Fatt Yap, who holds 30% equity in both the PNG and Malaysian companies.²⁵⁷

The apparent continued involvement of dynasty kingpin Tee Kim Tee in what appears to be a Malaysian sister company of Ocean Paradise Ltd, and of the Tees’ long-term associate Kong Fatt Yap in both the PNG and Malaysian firms, strongly suggests coordination between the Tee family and Top Leap. This raises further suspicion that despite the divestment, the Tees continue to work closely with the new Bewani directors and their business partners at Top Leap Holdings. As a company registered in a secrecy jurisdiction, the ultimate owners of Top Leap Holding remain a mystery.

Reached for comment, a Tee family spokesperson said: “None of the [Tee] family members or their legal representatives own shares or has directorship in Top Leap Holdings and their related core business.

“It is true that there are some corporate entities where ownership restructuring has not yet been wrapped up.

“This is the result of considerations other than those implied in your letter, namely as if the Tee family and Top Leap Holdings would maintain an ongoing but concealed business relationship.”

The spokesperson added: “We understand that you could construe things in such [a] manner but in reality, such is not the case.”

Both Bewani and the Tee family/Prosper disputed that there is any relationship between the two “Ocean Paradise” entities. A spokesman for Prosper acknowledged that Mr Yap, the Bewani director, was a shareholder of Ocean Paradise Sdn Bhd. It said that the company was currently dormant, adding that Ocean Paradise Ltd was “fully owned and run by former staff who have joined Top Leap since then”.

Bewani said: “Ocean Paradise Sdn Bhd has never been part of or an entity under the Bewani Oil Palm Project”, adding, “Ocean Paradise Sdn Bhd has nothing to do with our Ocean Paradise Ltd in any way whatsoever”. (Mr Yap, one of Bewani’s directors, is a major shareholder in both companies.)

It takes two to Tago

But there are yet more links between the Tee family and Bewani’s new directors Kong Fatt Yap and Eng Seong Goh. Global Witness has discovered that another company, Prime Horizon Limited, is directed partly by Goh, while also being 70%-controlled by a transport company called Tago Maritime Services Ltd (“Tago”).²⁵⁸ Tago is owned by two members of the Tee family.²⁵⁹ It is further evidence that Bewani’s new owners are closely linked to the Tee clan.

In a PNG corporate registration filing, Tago lists its operating location as the Bewani plantation.²⁶⁰

This suggests an ongoing business relationship between a Tee family-controlled company and Bewani.

The Tee family/Prosper said: “Tago Maritime is a fully owned company by the Tee family.

“This company was set up to operate the landing vessel that was required to transport goods to the development area.

“It still operates at the direction of local marketing and shipping staff.”

Mr Goh, the Bewani director, was “just a passive director” in Prime Horizon Ltd, the family said. “Prime Horizon Ltd was incorporated in 2018 and after the divestment in BOPPL [Bewani], the Tee family has not been able to find a replacement director since,” it added.

Prosper disputed Global Witness’s deforestation calculation, saying that it estimated closer to 21,000-23,000 ha had been cleared between 2011 and 2020. It said this number did not include degradation due to logging, and again claimed that there had been “a number of encroachments by illegal loggers” in the area.

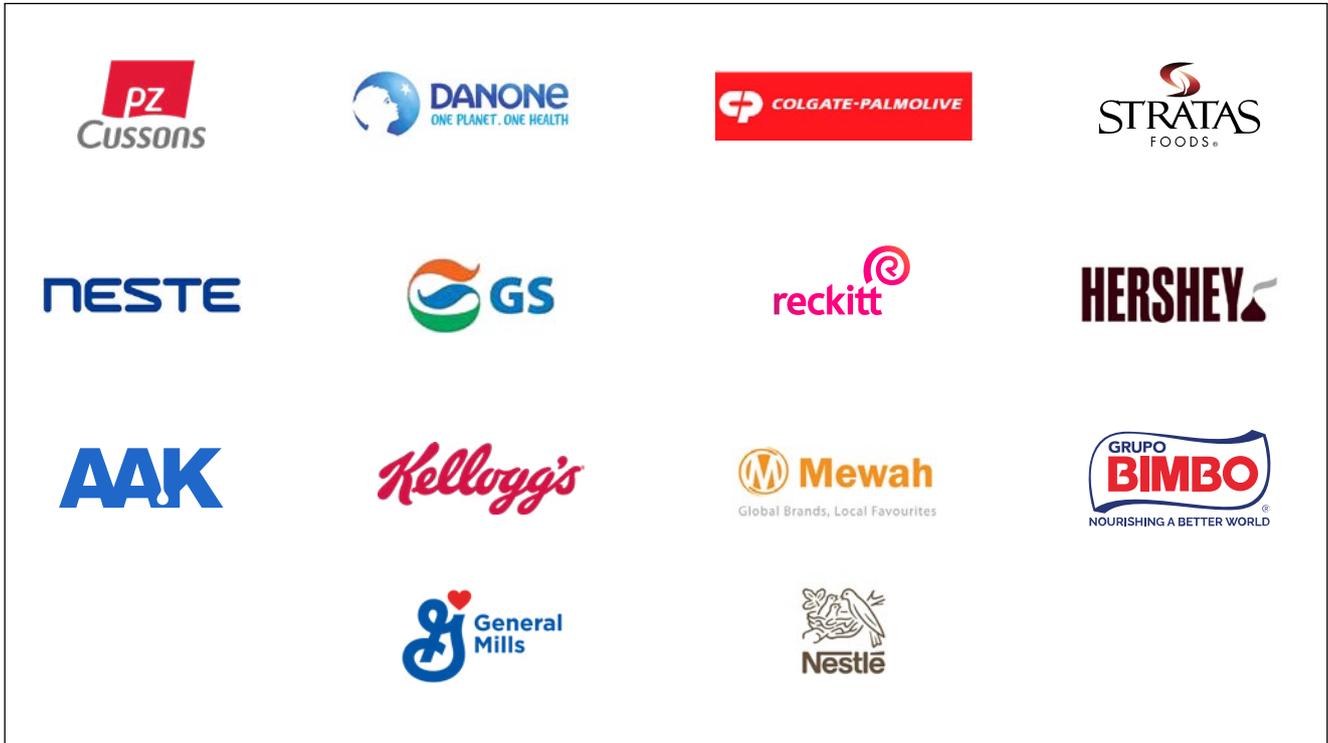
Beyond the companies identified by Global Witness, the Tee family maintain they have no other shareholding or directorships in any other PNG registered companies.

Global Witness was unable to reach Top Leap Holdings for its comment.



Land cleared for oil palm in the Bewani project area, 2016. © Global Witness

GLOBAL BUYERS



Palm oil produced by the companies in this report has been sold to big brands around the world.

Given the litany of offences detailed above, it may be surprising to learn ENB and RH sell palm oil to reputable companies. But Global Witness has discovered their product in the supply chains of a staggering list of household-name companies around the world. Brands from Nestlé to Colgate-Palmolive and Hershey admitted to having been previously supplied by the ENB and/or RH mills in PNG.²⁶¹ This is despite long-time industry pledges to eliminate deforestation-related palm oil from supply chains, and internal company policies committing themselves to upholding human rights and avoiding environmental abuses.

In 2019, both ENB and RH mills began appearing in the supplier lists of major corporations around the globe. This was a breach of many of their internal policies or public commitments. Cargill, Colgate-Palmolive, Danone, Kellogg's, Nestlé, and Reckitt Benckiser (Reckitt)—the parent company of Strepsils and Lysol—have all listed ENB and/or RH mills in PNG among their suppliers.²⁶²

^{263 264 265 266 267 268} These companies are members of the Consumer Goods Forum (CGF), an industry group

with hundreds of members that committed to end deforestation in its supply chains by 2020.^{269 270} It has failed to do so.²⁷¹

British manufacturer PZ Cussons – which makes Imperial Leather soap and Carex hand soap - was also supplied by the ENB Pomio mill.^{272 273} Grupo Bimbo, in 2018 the largest baking company in the world, was another customer.^{274 275} Neste Oyj, the world's largest producer of jet fuels made from biodiesel, listed the group's Pomio mill among its suppliers of palm oil byproducts.²⁷⁶ Other companies recently listing this palm oil in their supply chains include the Mewah Group, which claims that over a billion people use its products; the Swedish oils and fats manufacturer oil processor AAK, which claims to sell to more than 100 countries; and the commodity trader Cargill, known as the second-largest privately-owned company in the United States. Stratas Foods, a joint venture of giant commodities trader and food processing company ADM and ACH Food Companies, also listed an ENB mill among its suppliers.^{277 278 279 280 281 282 283 284} Mewah, AAK, and Cargill have also all listed the RH mill among their suppliers.

Palm oil from some of the worst plantations in the world thus finds its way into a ‘Who’s Who’ list of global food, biofuels, toiletries, and medicines producers. This broad list of buyers shows tainted palm oil from PNG plantations where grave human rights and environmental abuses and unethical practices have occurred has been traded and used globally.

Sticks in the throat

Many of these companies have No Deforestation, No Peat and No Exploitation (NDPE) policies, prohibiting deforestation, development on peatland and exploitation of Indigenous and local people and workers. Nestlé, which listed ENB as a supplier, once committed to using 100% “responsibly-sourced palm oil” by 2020.²⁸⁵ After it was accused in 2019 of having sourced palm oil from producers linked to forest fires in Indonesia, the manufacturer promised it would “immediately cease sourcing from any supplier found to be linked to any deforestation activity”.²⁸⁶ Iconic American chocolatier Hershey has also committed to sourcing 100 percent responsibly grown palm oil and boasts it can trace virtually all the palm oil it uses back to its mill of origin.²⁸⁷ Unfortunately, these mills recently included both mills operated by ENB.²⁸⁸ Reckitt, meanwhile, is the manufacturer of staples like Lysol cleaning products and Woolite detergent.²⁸⁹ In its response to Global Witness, Reckitt acknowledged that it was connected to ENB via its supply of palm oil derivatives, used in products including Lysol.^{290 291} The company claims to work “proactively with our suppliers to eliminate deforestation over time”.²⁹²



Papua New Guinea’s forests are critical to global climate.
Credit: Fábio Erdos/Panos

For details of these companies’ responses, see Table 1 on p. 34.

Industry wholesale giants Cargill and AAK are among these mills’ other recent customers. AAK has listed not only ENB’s Pomio mill but its Narangit mill in Gazelle District, where smallholders were kicked off their land.²⁹³ These purchases appear to violate the companies’ internal policies. AAK is a founding member of the Roundtable on Sustainable Palm Oil.²⁹⁴ Its sustainable palm oil policy commits the company to sourcing palm oil produced without the conversion of “High Conservation Value” or “High Carbon Stock” forests, or where the plantation was developed without community consent.²⁹⁵ AAK’s palm oil product customers include some of the largest and most well-known consumer brands in the world, reportedly including General Mills, Kraft Heinz, PepsiCo, and Unilever.²⁹⁶

Cargill, meanwhile, is one of the world’s largest importers and exporters of palm oil and has been implicated in multiple serious palm oil-related scandals, including widespread destruction of tropical forests and orangutan habitat.^{297 298} The company’s palm oil policy commits it to preventing the clearance of “ecologically and socially important forests”, to uphold the principle of prior consent by communities, and to prohibit child labour by companies in its supply chain.²⁹⁹ Allowing ENB palm oil into its supply chain makes a mockery of these commitments.

For details of these companies’ responses, see Table 1 on p. 34.

‘Journey of no deforestation’

Another major player to buy up tainted palm oil from ENB and RH is the Mewah Group, the giant Singapore-based oil processing company.³⁰⁰ It has purchased crude palm oil from both PNG mills owned by ENB, as well as crude palm kernel oil from ENB’s Liguria mill and RH’s “Mamusi” mill in Pomio.³⁰¹ Mewah’s sustainable palm oil policy pledges the company to “continue the journey of no deforestation”, requiring direct suppliers to comply with a sustainable palm oil policy and vowing to take remedial action should violations occur.³⁰² Mewah says it sells its products to customers in over 100 countries.³⁰³ One of those is Neste Oyj, the Finnish palm oil refiner that claims to be the world’s largest producer of renewable jet fuel. The ENB Pomio mill was listed explicitly among Neste’s suppliers of PFAD (palm fatty acid derivate, left over from palm oil refining).^{304 305}

For details of these companies’ responses, see Table 1 on p. 34.

Neste claims it sources PFAD only from suppliers with a “proactive approach to avoiding deforestation”.³⁰⁶ The company says it requires all its suppliers to be members of the RSPO, and claims that all its suppliers are committed to no-deforestation policies.^{307 308} Its Responsible Sourcing Principles commit it to not sourcing from areas where High-Conservation Value forest was converted to cultivation areas, or where FPIC was not obtained from communities.³⁰⁹ This means the purchase of palm oil residues from ENB plantations blatantly violates its own policy.

Colgate-Palmolive listed both the RH Mamusi mill and the ENB Liguria mill among its 2020 suppliers.³¹⁰ Colgate itself is reportedly the UK’s best-selling toothpaste, while Colgate-Palmolive claims to sell its products in “over 200 countries”.^{311 312}

These findings prove that industry self-regulation, including for financial actors, does not work. The companies in this report either lacked policies on ethical

sourcing or failed to apply them correctly.

Many have failed to respect human rights as required under international human rights standards applicable to business, and even those in PNG law. They have also failed to carry out the requisite checks on their supply chains to prevent, identify and address and account for deforestation. And they have failed to detect any other unethical practices, such as apparent corruption.

It is a stark illustration of why companies cannot continue to be allowed to mark their own homework on deforestation and other abuses in their supply chains. Without robust legal requirements accounting for deforestation and human rights abuses in supply chains, we will fail to save critical carbon sinks and allow abusive practices harming people on and around these palm oil plantations to continue.

For details of these companies’ responses, see Table 1 on p. 34.

Table 1. Global brands that have sourced from palm oil producers East New Britain Resources Group, Rimbunan Hijau, and/or Bewani Oil Palm Plantations Ltd in Papua New Guinea, and their responses to Global Witness’s requests for comment.

Global brand	Palm oil producer	Extracts from brands’ responses to Global Witness
AAK	ENB, RH	“AAK is committed to the sustainable and responsible sourcing and production of palm oil and other commodities,” the company wrote. “We take reports of such incidents [of social and environmental harms] very seriously.” AAK acknowledged having sourced palm oil from the Liguria, Narangit, and Mamusi mills, but said its only connection was via the Mewah Group, which had suspended purchases pending an investigation into the allegations raised by Global Witness. It said Mewah’s purchases from all three mills were one-off occasions, and another AAK supplier possibly exposed to Rimbunan Hijau’s Malaysian mills had initiated an investigation. AAK said it had also engaged a technical sustainability partner, Earthqualizer, to estimate deforestation at each mill that had taken place after 31 December 2015.
Cargill	ENB, RH	Cargill acknowledged that it was connected to RH and ENB via its indirect supply chain. It said that it had contacted its direct suppliers as part of its investigation, adding that in accordance with its palm oil grievance procedure, it would engage with and suspend suppliers where appropriate if they were found to be not compliant with its human rights and/or palm oil policies. “Cargill is committed to treating all people in our supply chains with dignity and respect and have written this formally into our Commitment to Human Rights”, the company wrote. “We are also working to eliminate deforestation in our supply chains”, adding that its palm oil policy “outlines our commitment to a transparent, traceable and sustainable palm oil supply chain and aims to deliver palm oil that is produced in accordance with No Deforestation, No Peat and No Exploitation (NDPE) practices.”
Colgate-Palmolive Company	ENB, RH	Colgate-Palmolive confirmed it had supply chain connections to the Liguria and Mamusi mills as of the first half of 2020, but said its mill list to be published in August 2021 would show that this was no longer the case. It said it had also identified links to RH via two mills in Malaysia. “We will include ENB and RH groups on our internal grievance log and continue to work with Earthworm Foundation and our suppliers to investigate the concerns raised and determine appropriate actions,” the company wrote. “We appreciate you bringing your concerns to our attention.”

Danone S.A.	ENB	<p>“Danone is committed to the principles of no deforestation, no development on peat, and no exploitation of rights of workers, indigenous peoples and local communities”, the company wrote. “We signed the New York Declaration on Forests and are a member of the Forest Positive Coalition of the Consumer Goods Forum (CGF).” Danone added that it participated in numerous other “alliances that further collaboration and progress toward zero deforestation”, including the RSPO and the Palm Oil Innovation Group. The company said it had stopped sourcing from ENB’s Liguria mill since the beginning of 2020, and that it had asked its supplier(s) to conduct investigations into their supply chains. “We are fully committed to achieve segregated sustainable palm oil,” Danone wrote. “We put in place a traceability system allowing us to map our supply chain, and a formal grievance process, with the support of Earthworm.”</p>
General Mills	ENB, RH	<p>General Mills said that although it was a “relatively minor user” of palm oil that it bought through a complex supply chain, it was committed to sourcing palm oil sustainably and took allegations of deforestation seriously. “Conducting ethical business and respecting human rights are core to our values,” it said. “Through our Global Responsible Sourcing program, we uphold our Supplier Code of Conduct and drive ongoing supplier progress in areas of health and safety, human rights, business integrity and the environment.” General Mills said it had entered Global Witness’s allegations into its grievance process and would engage its suppliers and report on its findings.</p>
Grupo Bimbo S.A.V. de C.V.	ENB	<p>Grupo Bimbo said that since releasing its global palm oil policy in 2016, it had been working on improving traceability, engaging with suppliers to implement its policy, investing in two projects in Mexico to halt deforestation and improve smallholders’ livelihoods, and verifying deforestation through satellite analysis. Regarding its exposure to ENB, it said, “[Our suppliers] have already confirmed that the source from those mills has been suspended. We can assure you that at Grupo Bimbo we have the right monitoring mechanisms and rigorous processes to supervise the compliance of our Global Palm Oil Policy and in the case of any violations, we will take the required actions.”</p>
GS Global	Bewani	<p>GS Global said that it had bought palm oil from “ENB Trading Ltd”, which in turn had bought it from Vanimo Green Palm Oil Mill. When asked by Global Witness if it denied having bought palm oil from Bewani, which controls the Vanimo Green mill, the giant corporation said it could not check where ENB Trading had sourced its oil.</p>
Mewah Group	ENB, RH	<p>“Your report is certainly useful for us as well as the entire palm oil industry, as we have not seen another similar grievance case being reported by another NGO,” wrote the Mewah Group. It said it had reached out to ENB and RH to begin an investigation and had filed a formal grievance in Mewah’s sustainability grievance log. Mewah said it put in place a groupwide suspension on all trading with the companies pending the completion of its investigation, and that it had not purchased from ENB or RH since April 2020 and June 2020, respectively. “If any of these allegations is proved genuine,” the company wrote, “we will demand the respective company to undertake necessary recovery plan to compensate for HCS [high carbon stock] forest loss or human rights violation that is identified within its operation.”</p>
MGV Commodity Pte Ltd	Bewani	<p>MGV Commodity said that it had not bought from Bewani since 2019. “We did very small volume of shipments,” the company said, adding: “We are very ethical in our trade”. It said it had no plans to buy from Bewani in the future.</p>
Neste Oyj	ENB	<p>Neste said that its investigation had found that its exposure to ENB had been via Mewah, which not been a supplier to Neste since the second half of 2020. It provided a link to its sustainability dashboard but did not otherwise comment on Global Witness’s findings.</p>
Nestlé S.A.	ENB	<p>“Nestlé is committed to sourcing 100 percent responsibly sourced and deforestation-free palm oil,” the company said.</p> <p>Nestlé said it had implemented responsible standards in its palm oil supply chain, prioritizing traceability to plantations, and monitored deforestation by satellite. The company said it applies a “suspend and engage” policy with suppliers found deforesting or not able to demonstrate they had followed FPIC processes, and works to improve sustainability in the industry. “As of December 2020,” Nestlé wrote, “70% of the palm oil we sourced was assessed as deforestation-free and we are progressing towards achieving 100% by the end of 2022.” Nestlé said it had not received any palm oil from ENB’s Liguria mill since 2019, but that it appeared to be connected to nine RH mills in Malaysia via various suppliers. The company said it had asked Earthworm to investigate Global Witness’s allegations, and if any mill was involved in deforestation or had failed to seek proper consent from traditional landowners, it would suspend them at the group level.</p>

PZ Cussons	ENB	<p>PZ Cussons said it had worked with the Earthworm Foundation to confirm the deforestation described by Global Witness. “Having confirmed it has taken place and is identifiable as palm plantation, we immediately activated our non-compliance grievance mechanism,” it said. “We are already engaging with [...] suppliers directly to instruct them to engage with East New Britain Resource Group to request an immediate stop to current activities that contravene our NDPE position.” It added, “If we do not receive an appropriate response from them then we will instruct [suppliers] to confirm the removal of the plantation company and parent group from their supply chains.” The company said its goal was to buy 100% of its palm oil from suppliers independently verified to be NDPE-compliant.</p>
Oleon	ENB	<p>Oleon said: “Oleon is committed to protecting human rights in the workplace and in the communities where we do business. This commitment is shared with our shareholder the Avril Group. The Avril Group strives to obtain its palm oil from suppliers who can prove that its cultivation is in line with the Group’s No Deforestation, No Peat, No Exploitation (NDPE) commitment, and is fully traceable back to the mills.</p> <p>“Oleon is sourcing from Narangit and Liguria palm oil mills via other suppliers. Our suppliers have informed us that as of July 2021 there is a groupwide suspension of ENB until the investigation process is completed. We know, that cutting off purchases alone does not usually solve the problem on the ground for the local communities, and workers who have been harmed. As such, we are in conversations with Earthworm Foundation to explore what could be done to bring some level of support to the communities and workers who have been impacted.”</p>
Reckitt Benckiser Group plc	ENB	<p>Reckitt said that palm oil from the Liguria and Narangit mills had not entered its supply chain, but that it did have a supply chain connection to ENB via a supplier of palm oil derivative products. “Our supplier is investigating further with ENB and we have required ENB’s removal from our supply chain,” it wrote. Reckitt said: “We take our responsibility for meeting our standards very seriously and continue to work in a number of ways to strengthen standards in our and the wider palm oil supply network.” It pointed to its membership in the Consumer Goods Forum’s ‘Forest positive’ and ‘Human rights’ coalitions of action, and said that it was using satellite analysis to monitor deforestation in its supply chain and working to support smallholder farmers. “We will naturally continue to investigate, working with Earthworm and others, and taking any further action necessary to exclude these suppliers from our network,” it said.</p>
Stratas Foods	ENB	<p>Stratas, a joint venture of ADM and ACH Food Companies, acknowledged that ENB was part of its supply chain “for a very limited time in the third quarter of 2019”, via its supplier AAK. “Our Sustainable Palm Policy spells out what actions we might take in response to a substantiated grievance. In addition, your allegations implicate our Corporate Ethics and Human Rights Policies,” it said. “Stratas and AAK are committed to accountability and transparency in our supply chains, so I am confident we will be able to conclude our investigation promptly. The results of that investigation and our next steps will be disclosed in our grievance log at the conclusion of our investigation.”</p> <p>ADM said that it took “extremely seriously” any allegations of social and/or environmental non-compliance, and that it had zero tolerance for such violations in its supply chain. “ADM is working diligently to implement its Policy to Protect Forests, Biodiversity and Communities, and Human Rights Policy and to ensure these are upheld across its supply chain. The policies apply to ADM’s own operations and across all supply chains in which ADM operates, including all supplier tiers back to the origin from which commodities are sourced, and for all companies/JVs in which ADM holds an ownership stake,” it wrote. ADM said it was supporting Stratas in engaging in its grievance resolution mechanism, and that it would enter Global Witness’s allegations into its own grievance log and would reach out to its direct supplier(s) for an investigation.</p> <p>ACH Food Companies did not respond to repeated requests for comment.</p>

The Hershey Company	ENB	“The Hershey Company takes all allegations of NDPE violations very seriously”, the company wrote. “Since 2013, Hershey has been committed to achieving a traceable and sustainable NDPE palm oil supply chain in line with our Responsible Palm Oil Sourcing Policy as well as our Supplier Code of Conduct and No Deforestation Policy.” It noted that it did not purchase palm oil directly from mills, but acknowledged that the Liguria and Narangit mills appeared in a 2020 mill list, via its supplier AAK. “The list represents all mills connected to Hershey’s suppliers during the reporting period and likely includes mills whose product was not specifically sold to Hershey”, it said. Nevertheless, it said it had initiated a grievance procedure and had suspended ENB from its supply chain. “We will continue to work with supply chain partners and Earthworm Foundation to define necessary corrective actions and what support can be given to the communities and workers who have been impacted,” Hershey said.
The Kellogg Company	ENB	Kellogg’s said: “Thank you again for contacting us regarding this issue and we take it very seriously. We have internally reviewed the complaint and are following our public grievance process. We have performed outreach to three potentially impacted suppliers.” It said it would continue to monitor the situation.

Crowd-sourcing due diligence

Global Witness has found palm oil from the ENB Group’s plantations in the supply chains of major companies from Cargill to Nestlé. Many of these are paying members of the Earthworm Foundation, formerly known as The Forest Trust.³¹³ Earthworm says it helps companies eliminate deforestation from their supply chains.³¹⁴ It works with these companies on their use of palm oil, including by improving transparency and implementing NDPE policies.³¹⁵ The not-for-profit organization requires its members to provide it all relevant information from their supply chains.³¹⁶ But in every case, these companies’ partnerships with Earthworm pre-date by years their publicly disclosed purchases of palm oil from the ENB Group’s mills.³¹⁷ That means all these companies’ new purchases from groups that Global Witness calculates has deforested many thousands of hectares of rainforest since 2010 have apparently escaped scrutiny.

An Earthworm spokesperson said: “We admit that we were not aware of the serious legal and human rights violations that were carried out” by ENB and RH. “We are taking these very seriously and are calling on our members to do the same.” Earthworm said that since receiving this information, it had identified all its members’ supply chain links to ENB and RH, including at the parent company level, notified its members, and urged them to treat these issues “with the highest priority”.

“We know [...] that cutting off purchases alone does not usually solve the problem on the ground for local communities, and workers who have been harmed,” Earthworm continued. “As such, we are initiating conversations with our members to explore what may be possible to do to bring some level of support to the communities and workers currently who have been impacted.

Earthworm said it worked with its members to require each of its suppliers to provide information about its palm oil supply chain back to the mill level, which could result in a list of over a thousand mills, depending on the member. It could not credibly check the environmental and social performance of each mill itself, the organisation said, and so encouraged members to make these lists public to enable the crowd-sourcing of such checks.

Heavy industry

Global Witness has obtained PNG customs records indicating that Bewani has exported shipments of palm oil to customers in at least three countries: India (via the Seychelles), Singapore, and South Korea.^{318 319}

Two of its customers, based in the Seychelles and Singapore, according to customs data, keep a low profile. A Global Witness researcher visited an address given for MGV Commodity Pte. Ltd in Singapore, headquartered in a firm of accountants. While they were able to confirm that the company does exist, the principal was said to rarely visit the office. No record of the Seychelles company Perfect Essence International exists in the country's corporate register, and Global Witness was unable to reach the company for comment. But if Global Witness's investigation of where ENB and RH's product ends up is anything to go by, there is every chance that from these merchants, Bewani palm oil may soon reach the supply chains of well-known brands that have failed to perform basic due diligence on their supply chains.

The third Bewani customer identified by Global Witness is a different story. In September 2019, according to customs documentation, the oil tanker MT Bnoah sailed out of Vanimo carrying over 1.5 million kilograms of palm oil. Its destination: the Gangnam District of Seoul, home to the glitterati of South Korean society and immortalized



Waterfront at night in Papua New Guinea's capital Port Moresby. © Global Witness

by rapper PSY. Its buyer was GS Global Corporation, a metals, petrochemicals, and industrial products trader with revenues of about £1.5 billion in 2020.^{320 321}

For these companies' responses, see Table 1 on p. 34.



Banana boats wait for passengers along the Papua New Guinea coast. © Global Witness

CONCLUSIONS



Mangroves at Wara Puk Puk (Crocodile River) in the north coast region of East New Britain Province, Papua New Guinea. © Global Witness

PNG stands on a precipice. Rural communities and the forests and biodiversity they depend on are in the path of a massive expansion of the palm oil industry. This would be catastrophic if allowed to proceed in the same reckless, irresponsible and unethical way as exposed in this report.

Our investigation shows the extent of these predatory practices – they are systemic and widespread across key new players in the palm oil sector in PNG. ENB, RH, and Bewani all engaged in large-scale deforestation of climate-critical forest. Community landowners, who depend on these forests for their livelihoods, have raised grave concerns about the lack of free, prior and informed consent involved in these companies' access to land. This investigation has documented other abuses, from detaining community members and the use of police to violently suppress protest, to negligence leading to workers' deaths. Two of the companies we investigated enjoyed extensive financing from a web of banks and financial actors, and all have sold on tainted palm oil to global brands without any checks, sanctions or penalties. All of this must stop.

Governments whose businesses are engaged in palm oil supply chains or financing must hold them accountable for their impacts on deforestation and forest-related human rights risks.

The PNG government must immediately take action to uphold land rights, stamp out any corruption and tax evasion, and hold to account companies breaking the law and abusing human rights or ignoring the safety of workers.

The financiers of these destructive oil palm plantations also bear a heavy responsibility. They have profited from tens of thousands of hectares of PNG rainforest being flattened, untold numbers of communities being left destitute, and the brutalization of communities by police paid to harm rather than protect them. Many oil palm workers have been killed or seriously injured on projects they have bankrolled. In several instances local laws protecting people and the environment have been broken. This report illustrates once again how internal policies are not enough to steer financiers to make the right decision, when they are so often ignored.

If the story told by this report hinges on rural PNG, it began in New York, Oslo, Rotterdam, Singapore, and Kuala Lumpur. The governments of countries where these financiers and their global owners are based must act responsibly and require banks and investors to conduct thorough checks to ensure their money is not used to destroy forests. The global brands buying from these plantations, which now circle the globe and sell products from toothpaste to biodiesel, must stop contributing to and benefiting from deforestation and other harm in their palm oil supply chains. The gravity of the crimes and human rights abuses outlined in this report means there can be no more excuses.

Recommendations

Government of Papua New Guinea

- Immediately investigate all injuries and deaths on oil palm plantations.
- Ensure that all workers injured on oil palm plantations, or the next of kin of workers who died on the plantation, are immediately acknowledged and compensated.
- Provide support for injured workers and their next of kin to find suitable replacement employment in palm oil agriculture or, if desired, an alternate industry.
- Immediately investigate companies involved for potential violations of statutes including, but not limited to, the Employment Act, the Industrial Health, Safety and Welfare Act, the Workers Compensation Act, and the Road Traffic Act. Where applicable, impose relevant penalties.
- Assign an industrial safety inspector to initiate and maintain a regular system of industrial safety inspection for the PNG palm oil plantations and mills that do not already report publicly on their safety record. The cost of these inspections should be a user-pays system where the company pays for the inspector's visits.
- Review the records of any Royal PNG Constabulary officers involved in alleged harassment of or violence toward citizens. Take appropriate disciplinary action where applicable.
- Freeze the issuance of new forest clearance authorities (FCAs) and cancel existing FCAs except where the holder can prove they are complying with all national, customary, and international laws and have obtained free, prior and informed consent from local communities in order to operate.
- Require all palm oil operations in Papua New Guinea to meet or exceed industry best practices with regards to protecting ecosystems; avoiding deforestation; upholding community and human rights, including worker rights; and ethical and transparent business dealings.



Papua New Guinea is home to at least five per cent of all species on Earth. © Global Witness

Governments of the UK, US, EU, and other countries home to companies importing palm oil or financing palm oil-linked banks or companies:

- Introduce and implement legislation requiring businesses, including the finance and investment sector, to identify, prevent, mitigate, and report on deforestation and forest-related human rights risks and impacts in their supply chains and financing.
- Host governments for banks named in this report should investigate and report on whether the banks have legally misled their shareholders or clients as to their due diligence processes, including any potential exposure to handling the proceeds of crime

Banks funding these palm oil companies:

- Immediately suspend any services, financing or contracts with ENB, RH, and Bewani Oil Palm Plantations Ltd and their subsidiaries or affiliate companies, pending a full review of any potential legal and human rights violations.
- More broadly, exclude financing to PNG palm oil and related operations unless adequate due diligence has been undertaken, including that the bank has gained independent, community-informed data that ensures that business practices exclude deforestation, have secured the legitimate free, prior and informed consent of Indigenous peoples and local communities, and are not exposed to human rights abuses, including labour violations.

Investors and shareholders in banks financing these palm oil companies:

- Withhold financing from any bank or agribusiness company that is unable to show that it has clear, implemented practices to exclude deforestation and require the free, prior and informed consent of Indigenous peoples and local communities
- Ensure that any bank or company claims are cross-checked by ground-truthed data (information provided by independent third parties based on on-the-ground information) and that banks and investors are contributing to remedy for any prior harms caused.
- East New Britain Resources Group, Rimbunan Hijau Group, and Bewani Oil Palm Plantations Ltd:

- Cooperate with investigations into the allegations named in this report, including allegations of child labour, bribery, environmental devastation, tax evasion, and negligence regarding worker health and safety, where relevant.

- Work to ensure that all workers injured on oil palm plantations, or the next of kin of workers who died on the plantation, are immediately acknowledged and compensated.

- More broadly, work to provide redress and remedy for any harms arising from their business.

Global buyers

- Cease sourcing palm oil and palm oil products originating from ENB's, RH's, and Bewani's mills in PNG, with immediate effect.

- Review internal processes and third-party assistance to identify how these companies were allowed into their supply chains.

- Work to ensure that all workers injured on oil palm plantations, or the next of kin of workers who died on the plantation, are immediately acknowledged and compensated.

- More broadly, work to provide redress and remedy for any harms arising from their business.

- Publicly disclose the end products manufactured using this palm oil or palm-related derivatives, as well as country of origin.

APPENDIX 1

Deaths and accidents of Rimbunan Hijau employees on its oil palm plantations in Pomio District, East New Britain Province, Papua New Guinea.

Workers' ages and occupations at the time of their accidents are shown. Information on reported deaths and accidents, including the circumstances of individual incidents, workers' personal details, and compensation received, was drawn from Office of Workers' Compensation records, where available, and/or interviews conducted with next of kin and other community members in Pomio District between October 2020-February 2021. When this report went to publication, the OWC database was undergoing renovations and was offline.

1. Ms. Monica Alois		
	Age	22 ¹ years
	Occupation	Loose fruit collector ²
	Employer listed as:	RH Trading, Frontier Holdings, and Niugini Lumber Merchants
PNG Office of Workers Compensation Case Report Number:	CRN-0660319-F12121118	
Incident	Ms. Alois fell from the back of a moving Toyota Land Cruiser vehicle on her way back to the camp site on the plantation, resulting in her death by cerebral hemorrhage. ³	
Outcome	Fatality	
Areas of concern	➤ Whether safe and reliable transportation to and from the workplace was provided by the company.	
Potential non-compliances:	<ul style="list-style-type: none"> ➤ PNG Road Traffic Act 2014 ➤ PNG Employment Act ➤ Workers Compensation Act 	
Date of incident:	2018	
Compensation received:	None	

2. Mr. Joe Lui		
	Age	30 years ⁴
	Occupation	Mechanic
	Employer listed as:	Sinar Tiasa (PNG) Ltd
PNG Office of Workers Compensation Case Report Number:	CRN-0510819-F12EAS291118	
Incident	Mr. Lui suffered a motor vehicle accident while road testing a repaired motorbike after repairing, resulting in his death. ⁵	
Outcome	Fatality	
Areas of concern	<ul style="list-style-type: none"> ➤ Official accident reports maintained by OWC are illegible. This is a concern in and of itself. ➤ For a young mechanic to lose his life while working in a controlled environment may suggest a lack of rules and regulation determining work safe procedures and processes. 	
Potential non-compliances:	<ul style="list-style-type: none"> ➤ Industrial Safety, Health and Welfare Act ➤ Road Traffic Act 2014 ➤ Workers' Compensation Act 	
Date of incident:	2018	
Compensation received:	Unknown	

1 Monica Alois coroner report, on file with Global Witness.

2 Monica Alois next of kin interview, on file on file with Global Witness.

3 Monica Alois police report, on file on file with Global Witness.

4 Data obtained from the PNG Office of Workers' Compensation database at www.owc.pg.gov

5 NiuGini Environment Management Services (2021). Palm oil producer safety and health review prepared for Global Witness.

3. Mr. Joachim Kankan		
	Age	38 years ⁶
	Occupation	Driver
	Employer listed as:	Sinar Tiasa (PNG) Ltd
PNG Office of Workers Compensation Case Report Number:	CRN-0980619-F12WES240417	
Incident	Mr. Kankan was hit by a dump truck and subsequently passed away. ⁷	
Outcome	Fatality	
Areas of concern	<ul style="list-style-type: none"> ➤ Official files are insufficient for review. This is a concern of itself. In Global Witness's assessment, Mr. Kankan's death contributes to a troubling pattern of motor vehicle fatalities on the RH plantations. ➤ If an investigation was not conducted into Mr. Kankan's death, it should be done immediately and used to develop company safety procedures. 	
Potential non-compliances:	<ul style="list-style-type: none"> ➤ PNG Road Traffic Act 2014 ➤ Industrial Safety, Health and Welfare Act 1965 ➤ Workers Compensation Act 	
Date of incident:	2017	
Compensation received:	Unknown	

4. Mr. Leo Kaukau		
	Age	49 years ⁸
	Occupation	Forklift Operator
	Employer listed as:	Sinar Tiasa (PNG) Ltd
PNG Office of Workers Compensation Case Report Number:	No records found on PNG Office of Workers Compensation website (www.owc.gov.pg)	
Incident	While on the plantation, Mr Kaukau cooked dinner for himself and his son Ronald Kaukau with water collected and stored in a used chemical container; he promptly began vomiting in the night and died the next day.	
Outcome	Fatality	
Areas of concern	<ul style="list-style-type: none"> ➤ Whether ample clean, safe drinking water was provided to workers on the plantation. ➤ Chemical containers appear to have been negligently unsecured and not made unusable, in violation of FAO best practices and RSPO PNG NIWG Criteria 4.6.10. Storage and disposal of chemicals as prescribed in the GIFAP Code of Practice: Specific Guidance: Proper storage and disposal of waste material, according to procedures that are fully understood by workers and managers. Also see Criterion 5.3 on waste disposal. All redundant and excess plantation chemical containers must be triple rinsed and then punctured before disposal in a designated landfill. Records to be kept. 	
Potential non-compliances:	<ul style="list-style-type: none"> ➤ Industrial Safety, Health and Welfare Act 1965 ➤ Workers Compensation Act 	
Date of incident:	2014	
Compensation received:	None	

6 Data obtained from the PNG Office of Workers' Compensation database at www.owc.pg.gov

7 Ibid.

8 Global Witness interview with Felix Tau (2021).

5. Ronald Kaukau		
	Age	11 ⁹ years
	Dependent Child, Student.	
While living on the plantation with his father Leo Kaukau, ate dinner cooked with water collected and stored in a used chemical container; he promptly began vomiting in the night and died the next day.		
Outcome	Fatality	
Areas of concern	<ul style="list-style-type: none"> ➤ Whether ample clean, safe drinking water was provided to workers on the plantation. ➤ Chemical containers appear to have been negligently unsecured and not made unusable, in violation of FAO best practices and RSPO PNG NIWG Criteria 4.6.10. <i>Storage and disposal of chemicals as prescribed in the GIFAP Code of Practice: Specific Guidance: Proper storage and disposal of waste material, according to procedures that are fully understood by workers and managers. Also see Criterion 5.3 on waste disposal. All redundant and excess plantation chemical containers must be triple rinsed and then punctured before disposal in a designated landfill. Records to be kept.</i> 	
Potential non-compliances:	➤ Industrial Safety, Health and Welfare Act 1965	
Date of incident:	2014	
Compensation received:	None	

6. Mr Anton Kelal ¹⁰		
	Age	22 years
	Occupation	Ramp Keeper
	Employer listed as:	Sinar Tiasa (PNG) Ltd.
PNG Office of Workers Compensation Case Report Number:	No records found on PNG Office of Workers Compensation website (www.owc.gov.pg)	
Incident	Mr Kelal fell out of the crew side of a dump truck, hitting his head, and died of his injuries. ¹¹	
Outcome	Fatality	
Areas of concern	➤ No police report on this motor vehicle accident was available for sighting at the time of this publication.	
Potential non-compliances:	<ul style="list-style-type: none"> ➤ Industrial Safety, Health and Welfare Act 1965 ➤ Workers Compensation Act ➤ Road Traffic Act 2014. 	
Date of incident:	2020	
Compensation received:	PGK5,000 (about £1,000) for funeral expenses	

7. Mr. Joe Kingsly ¹²		
	Age	22 years
	Occupation	General Worker
	Employer listed as:	Sinar Tiasa (PNG) Ltd.
PNG Office of Workers Compensation Case Report Number:	No records found on PNG Office of Workers Compensation website (www.owc.gov.pg)	
Incident	Mr Kingsly reportedly fell and hit his side on a rock while cutting fresh fruit bunches from an oil palm tree, later dying of his injuries.	
Outcome	Fatality	
Areas of concern	➤ Insufficient documentation is available to ascertain whether Mr Kingsly's death was the result of negligence.	
Potential non-compliances:	<ul style="list-style-type: none"> ➤ PNG Employment Act ➤ Workers Compensation Act 	
Date of incident:	April 2020	
Compensation received:	None	

9 Global Witness interview with Felix Tau (2021).

10 Global Witness interview with Lawrence Lapuli (2021).

11 Anton Kelal witness statement and Anton Kelal death certificate, on file with Global Witness

12 Global Witness interview with J. Kingsly's son (2020).

8. Mr Cosmas Manane		
	Age	25 years ¹³
	Occupation	Survey aide
	Employer listed as:	Niugini Lumber Merchants Limited
PNG Office of Workers Compensation Case Report Number:	CRN-0360618-F12WES261115	
Incident	Mr. Manane walked through the bush (forest) alone to the plantation camp after working in the field. He died in his sleep that night.	
Outcome	Fatality	
Areas of concern	☞ There is no record of an inquest or autopsy in Mr Manane's OWC file. ¹⁴	
Potential non-compliances:	<ul style="list-style-type: none"> ☞ PNG Employment Act ☞ Workers Compensation Act 	
Date of incident:	2015	
Compensation received:	Unknown	

9. Mr Patrick Puka		
	Age	40 ¹⁵ years
	Occupation	Surveyor ¹⁶
	Employer listed as:	Niugini Lumber Merchants Limited
PNG Office of Workers Compensation Case Report Number:	Link	
Incident	While in a company car, Mr Puka was involved in a motor vehicle accident and died from severe head and spinal injuries. ¹⁷	
Outcome	Fatality	
Areas of concern	☞ Available documentation is insufficient to determine whether RH was negligent in allowing its employees to travel in this vehicle. ¹⁸	
Potential non-compliances:	<ul style="list-style-type: none"> ☞ PNG Road Traffic Act 2014 ☞ PNG Employment Act ☞ Workers Compensation Act 	
Date of incident:	2014	
Compensation received:	Unknown	

13 Cosmas Manane police report, on file with Global Witness.

14 Cosmas Manane supervisor report, on file with Global Witness.

15 Patrick Puka death certificate, on file with Global Witness.

16 Patrick Puka supervisor statement, on file with Global Witness.

17 Patrick Puka witness statement, on file with Global Witness.

18 NiuGini Environment Management Services (2021). Palm oil producer safety and health review prepared for Global Witness

10. Mr Robert Rolpha		
	Age	37 ¹⁹ years
	Occupation	Chainsaw operator ²⁰
	Employer listed as:	Niugini Lumber Merchants Limited
PNG Office of Workers Compensation Case Report Number:	No records found on PNG Office of Workers Compensation website (www.owc.gov.pg)	
Incident	Mr. Rolpha caught a ride on a construction road grader to travel home from work; he fell from the grader, rupturing his spleen and resulting in his death.	
Outcome	Fatality	
Areas of concern	<ul style="list-style-type: none"> ➤ Whether safe and reliable transportation to and from the workplace was provided by the company. ➤ An additional passenger appears to have been negligently allowed to ride on single-seat heavy equipment. 	
Potential non-compliances:	<ul style="list-style-type: none"> ➤ PNG Road Traffic Act 2014 ➤ PNG Employment Act ➤ Workers Compensation Act 	
Date of incident:	2016	
Compensation received:	None	

11. Mr Edgar Tanewa		
	Age	20 years
	Occupation	Bunch recorder
	Employer listed as:	Sinar Tiasa (PNG) Ltd.
PNG Office of Workers Compensation Case Report Number:	CRN: 0050518-F12EAS200317	
Incident	Mr. Tanewa was operating a motorbike on the plantation. He was hit by a truck whilst attempting to overtake it and died of his injuries: a severe head injury and associated haemo-pneumothorax. ^{21 22}	
Outcome	Fatality	
Areas of concern	➤ Has RH implemented safety training, including driver safety training, on its plantations? ²³	
Potential non-compliances:	<ul style="list-style-type: none"> ➤ PNG Road Traffic Act 2014 ➤ PNG Employment Act ➤ Workers Compensation Act 	
Date of incident:	2017	
Compensation received:	Unknown	

19 Robert Rolpha death certificate, on file with Global Witness

20 Robert Rolpha next of kin interview, on file with Global Witness.

21 Edgar Tanewa witness statement, on file with Global Witness.

22 Edgar Tanewa postmortem, on file with Global Witness.

23 NiuGini Environment Management Services (2021). Palm oil producer safety and health review prepared for Global Witness.

12. Mr Dominic Wainau		
	Age	41 years
	Occupation	Dump truck driver ²⁴
	Employer listed as:	Sinar Tiasa (PNG) Ltd.
PNG Office of Workers Compensation Case Report Number:	<u>CRN: 0979619-F12WES020917</u>	
Incident	The truck Mr Wainau was driving overturned; he either jumped or was thrown from the cab. ²⁵ He died of his injuries, including a fractured pelvis and flail chest, in which a segment of the rib cage is broken and detached from the chest wall. ²⁶	
Outcome	Fatality	
Areas of concern	<ul style="list-style-type: none"> ➤ Was Mr Wainau was wearing a safety belt? ➤ No medical officer was apparently on site to treat his injuries, necessitating his evacuation to the Palmalmal health center. ➤ After the accident, it appears that Mr. Wainau was still alive. An investigation should assess whether he could have been saved, if incident management had been handled by trained safety and/or medical officers at the incident site.²⁷ 	
Potential non-compliances:	<ul style="list-style-type: none"> ➤ PNG Road Traffic Act 2014 ➤ Workers Compensation Act 	
Date of incident:	2017	
Compensation received:	Unknown	

13. Mr Philip Alrea		
	Age	55 ²⁸ years
	Occupation	Supervisor ²⁹
	Employer listed as:	Niugini Lumber Merchants Limited
PNG Office of Workers Compensation Case Report Number:	<u>CRN-0210818-F11WES310517</u>	
Incident	Mr. Alrea fell off a bike while supervising work, breaking his leg and losing 60% of its efficient use. ^{30 31}	
Outcome	60% loss of efficiency of left leg.	
Areas of concern	<ul style="list-style-type: none"> ➤ No police report is available. ➤ Interviews do not indicate evidence of a company safety officer or safety training provided to employees.³² Has such training been provided and mandated? 	
Potential non-compliances:	<ul style="list-style-type: none"> ➤ PNG Road Traffic Act 2014 ➤ Workers Compensation Act 	
Date of incident:	2017	
Compensation received:	None	

24 Dominic Wainau supervisor statement, on file with Global Witness.

25 Dominic Wainau witness statement, on file with Global Witness.

26 Dominic Wainau death certificate, on file with Global Witness.

27 NiuGini Environment Management Services (2021). Palm oil producer safety and health review prepared for Global Witness.

28 Data obtained from the PNG Office of Workers' Compensation database at www.owc.pg.gov

29 Global Witness interview with Philip Alrea (2020).

30 NiuGini Environment Management Services (2021). Palm oil producer safety and health review prepared for Global Witness

31 Philip Alrea final medical report, on file with Global Witness.

32 NiuGini Environment Management Services (2021). Palm oil producer safety and health review prepared for Global Witness.

14. Mr Bakom Anak Jali		
	Age	56 years ³³
	Occupation	Bulldozer operator
	Employer listed as:	Sinar Tiasa (PNG) Ltd.
PNG Office of Workers Compensation Case Report Number:	<u>CRN-0540319-F11EAS260 818</u>	
Incident	Mr Jali's hand and arm were crushed while he was crossing a flooded river in an excavator as a passenger. ³⁴	
Outcome	Loss of 80% efficacy of left arm.	
Areas of concern	➤ Crossing a flooding river in an excavator as a passenger on a single seat earth moving machinery is a serious breach of safety protocols, suggesting a lack of safety training. ³⁵	
Potential non-compliances:	➤ PNG Employment Act ➤ Workers Compensation Act	
Date of incident:	2018	
Compensation received:	Unknown	

15. Mr Timothy Joe		
	Age	29 ³⁶ years
	Occupation	Fertilizer stacker ³⁷
	Employer listed as:	Sinar Tiasa (PNG) Ltd.
PNG Office of Workers Compensation Case Report Number:	<u>CRN 0990619-F11WES030117</u>	
Incident	Mr. Joe's hand was crushed by a falling pallet; he developed an infection and extension contracture, requiring surgery. ³⁸	
Outcome	Contracture requiring plastic surgery ³⁹	
Areas of concern	➤ Apparent lack of supervision of employees working with heavy objects and working at heights; no record keeping of near miss, minor injuries and accidents; no inspection and monitoring of safe and unsafe working conditions. ⁴⁰	
Potential non-compliances:	➤ PNG Employment Act ➤ Workers Compensation Act	
Date of incident:	2017	
Compensation received:	Unknown	

33 Bakom Anak Jali interim medical report, on file with Global Witness.

34 Bakom Anak Jali statement, on file with Global Witness.

35 NiuGini Environment Management Services (2021). Palm oil producer safety and health review prepared for Global Witness.

36 Data obtained from the PNG Office of Workers' Compensation database at www.owc.pg.gov

37 Timothy Joe witness statement, on file with Global Witness.

38 Timothy Joe medical report, on file with Global Witness

39 Timothy Joe medical diagnosis report, on file with Global Witness

40 NiuGini Environment Management Services (2021). Palm oil producer safety and health review prepared for Global Witness.

16. Mr Paul Kinroro		
	Age	54 years
	Occupation	GPS Surveyor
	Employer listed as:	Sinar Tiasa (PNG) Ltd.
PNG Office of Workers Compensation Case Report Number:	No records found on PNG Office of Workers Compensation website (www.owc.gov.pg)	
Incident	Mr. Kinroro was involved in a motor vehicle accident during working hours, sustaining scalp lacerations and a broken wrist. He had to pay for his medical costs out of pocket.	
Outcome	Injuries to scalp and head. Fulfilled his own medical bills.	
Areas of concern	<ul style="list-style-type: none"> ➤ Mr Kinroro's accident is part of a troubling pattern of motor vehicle accidents on the RH oil palm plantations. 	
Potential non-compliances:	<ul style="list-style-type: none"> ➤ PNG Road Traffic Act 2014 ➤ Workers Compensation Act 	
Date of incident:	2014	
Compensation received:	None	

17. Ms Bertha Kanmugurea		
	Age	–
	Occupation	General worker
	Employer listed as:	Sinar Tiasa (PNG) Ltd.
PNG Office of Workers Compensation Case Report Number:	No records found on PNG Office of Workers Compensation website (www.owc.gov.pg)	
Incident	Ms. Kanmugurea was accidentally sprayed by another employee with herbicide 2,4-D; she sustained eye injuries and still feels weak and suffers chest pain. She is currently unable to work due to her injuries. ⁴¹	
Outcome	Injuries to eyes. Alleged loss of energy and pain in her chest.	
Areas of concern	<ul style="list-style-type: none"> ➤ For one employee to spray another with chemicals indicates a lack of safety awareness, training and identification of risks and in handling agricultural chemicals at work.⁴² ➤ Apparent failure to use personal protective equipment when handling agrochemicals ➤ Agrochemical use should be guided by GIFAP/industry best practices as established by the RSPO, which should include: <ul style="list-style-type: none"> – Eye protection – Full body protection – Gloves and rubber boots 	
Potential non-compliances:	<ul style="list-style-type: none"> ➤ PNG Employment Act ➤ Workers Compensation Act 	
Date of incident:	2012	
Compensation received:	None	

41 Global Witness interview with Bertha Kanmugurea (2020).

42 NiuGini Environment Management Services (2021). Palm oil producer safety and health review prepared for Global Witness.

18. Mr Timothy Kundi		
	Age	35 years ⁴³
	Occupation	Field worker
	Employer listed as:	Sinar Tiasa (PNG) Ltd.
PNG Office of Workers Compensation Case Report Number:	No records found on PNG Office of Workers Compensation website (www.owc.gov.pg)	
Incident	Mr Kundi was sprayed in the eye with a glyphosate herbicide, resulting in infection, corneal corrosion, and partial blindness. He is currently unable to work.	
Outcome	Eye infection, corneal corrosion, and partial blindness. ⁴⁴	
Areas of concern	<ul style="list-style-type: none"> ➤ No evidence of safety training or protective personal equipment provided to employees.⁴⁵ ➤ Agrochemical use without following recommended safety procedures by ILO conventions and PNG Industrial Safety, Health and Welfare Act places workers at risk of injury to themselves and the environment. 	
Potential non-compliances:	<ul style="list-style-type: none"> ➤ PNG Industrial Safety, Health and Welfare Act ➤ PNG Employment Act ➤ Workers Compensation Act 	
Date of incident:	2018	
Compensation received:	None	

19. Mr Kevin Lolale		
	Age	55 ⁴⁶ years
	Occupation	Maintenance worker
	Employer listed as:	Sinar Tiasa (PNG) Ltd.
PNG Office of Workers Compensation Case Report Number:	CRN-0480819-F11EAS210818	
Incident	Mr Lolale was in a motor vehicle accident whilst driving a motorbike on the plantation and was referred to hospital with back pain.	
Outcome	Back injury	
Areas of concern	<ul style="list-style-type: none"> ➤ No evidence of motor vehicle safety training. Possible lack of upkeep of vehicle.⁴⁷ 	
Potential non-compliances:	<ul style="list-style-type: none"> ➤ PNG Road Traffic Act 2014 ➤ PNG Industrial Safety, Health and Welfare Act ➤ Workers Compensation Act 	
Date of incident:	2018	
Compensation received:	Unknown	

43 Global Witness interview with Timothy Kundi (2020).

44 Timothy Kundi medical report, on file with Global Witness.

45 NiuGini Environment Management Services (2021). Palm oil producer safety and health review prepared for Global Witness.

46 Kevin Lolale statement, on file with Global Witness.

47 NiuGini Environment Management Services (2021). Palm oil producer safety and health review prepared for Global Witness.

20. Mr Barnabas Momkale		
	Age	24 ⁴⁸ years
	Occupation	Security guard
	Employer listed as:	Sinar Tiasa (PNG) Ltd.
PNG Office of Workers Compensation Case Report Number:	CRN-0141014F11EAS141212	
Incident	An unsecured log fell from a loaded truck and hit Mr Momkale, breaking two bones in his leg and requiring surgery. ⁴⁹	
Outcome	Lost 60% of the efficacy of the right leg.	
Areas of concern	➤ Logs were negligently unsecured during transportation. ⁵⁰	
Potential non-compliances:	<ul style="list-style-type: none"> ➤ PNG Road Traffic Act 2014 ➤ PNG Industrial Safety, Health and Welfare Act ➤ Workers Compensation Act 	
Date of incident:	2012	
Compensation received:	None	

21. Mr Peter Pavulo		
	Age	50 years ⁵¹
	Occupation	Welder
	Employer listed as:	Sinar Tiasa (PNG) Ltd.
PNG Office of Workers Compensation Case Report Number:	CRN-0470416-F11EAS270715	
Incident	While Mr Pavulo was repairing a bulldozer, the roller chain fell and crushed half of one finger, which was subsequently amputated. Witness statements include no evidence of lifting aids for heavy machinery, safety staff, or supervision provided to employees. ⁵² He had to pay for his own medical expenses and says he still finds it very difficult to work with the injured hand.	
Outcome	Right middle finger crushed by roller chain, later amputated.	
Areas of concern	➤ Mr Pavulo's accident forms part of a troubling pattern of serious and avoidable injuries on the RH oil palm plantations.	
Potential non-compliances:	<ul style="list-style-type: none"> ➤ PNG Employment Act ➤ PNG Industrial Safety, Health and Welfare Act ➤ Workers Compensation Act 	
Date of incident:	2015	
Compensation received:	Compensation received: PGK1,060 (about £210)	

48 Global Witness interview with Barnabas Momkale (2020).

49 Barnabas Momkale medical report, on file with Global Witness.

50 NiuGini Environment Management Services (2021). Palm oil producer safety and health review prepared for Global Witness.

51 Peter Pavulo medical report, on file with Global Witness.

52 NiuGini Environment Management Services (2021). Palm oil producer safety and health review prepared for Global Witness.

22. Mr George Ravungkia		
	Age	45 years ⁵³
	Occupation	Subcontracted fieldworker
	Employer listed as:	Sinar Tiasa (PNG) Ltd.
PNG Office of Workers Compensation Case Report Number:	No records found on PNG Office of Workers Compensation website (www.owc.gov.pg)	
Incident	Mr. Ravungkia hitched a ride home from work on the plantation on a motorbike. He fell from the motorbike, lacerating his Achilles tendon.	
Outcome	Permanent injury to Achilles tendon on the leg	
Areas of concern	<ul style="list-style-type: none"> ➤ No safe and reliable transport evidently provided for plantation employees: this indicates a lack of due care for workers and is a serious safety risk.⁵⁴ 	
Potential non-compliances:	<ul style="list-style-type: none"> ➤ PNG Road Traffic Act 2014 ➤ PNG Industrial Safety, Health and Welfare Act ➤ Workers Compensation Act 	
Date of incident:	2017	
Compensation received:	None	

23. Mr Charles Sai		
	Age	22 years ⁵⁵
	Occupation	Dump truck driver
	Employer listed as:	Sinar Tiasa (PNG) Ltd.
PNG Office of Workers Compensation Case Report Number:	No records found on PNG Office of Workers Compensation website (www.owc.gov.pg)	
Incident	A log slipped and hit Mr Sai on the neck, fracturing several of his vertebrae and risking paralysis. Mr Sai reportedly had to pay for his medical care and a copy of his own worker's compensation report.	
Outcome	Risk of potential paraplegia due to neck and spinal injuries	
Areas of concern	<ul style="list-style-type: none"> ➤ There is no evidence of safety signage and barricades to safeguard employees and the public from the potential collapse of logs in this highly seismically active area.⁵⁶ 	
Potential non-compliances:	<ul style="list-style-type: none"> ➤ PNG Industrial Safety, Health and Welfare Act ➤ PNG Employment Act ➤ Workers Compensation Act 	
Date of incident:	2013	
Compensation received:	None	

53 Global Witness interview with George Ravungkia (2020).

54 NiuGini Environment Management Services (2021). Palm oil producer safety and health review prepared for Global Witness.

55 Charles Sai radiology report, on file with Global Witness.

56 NiuGini Environment Management Services (2021). Palm oil producer safety and health review prepared for Global Witness.

24. Mr Samson Waso

	Age	42 years ⁵⁷
	Occupation	Jinker driver
	Employer listed as:	Niugini Lumber Merchants Ltd.
PNG Office of Workers Compensation Case Report Number:	CRN-0640518-F11EAS180un516	
Incident	A log fell from a loaded truck onto Mr Waso's hand, crushing two of his fingers, which were subsequently amputated. ⁵⁸	
Outcome	Amputation	
Areas of concern	➤ There is no evidence of a safety officer on site, nor of a supervisor's presence during dangerous industrial activities (offloading logs). ⁵⁹	
Potential non-compliances:	<ul style="list-style-type: none"> ➤ PNG Road Traffic Act 2014 ➤ PNG Employment Act ➤ Workers Compensation Act 	
Date of incident:	2016	
Compensation received:	Unknown	

Abbreviations used

- RSPO** Round Table on Sustainable Palm Oil (production)
- NIWG** National Interpretation Working Group (for RSPO)
- OWC** PNG Office of Worker Compensation
- CRN** Case Report Number (used by OWC) to register individual cases
- GIFAP** International Group of National Associations of Manufacturers of Agrochemical Products

⁵⁷ Samson Waso statement, on file with Global Witness.

⁵⁸ Samson Waso interim medical report, on file with Global Witness.

⁵⁹ NiuGini Environment Management Services (2021). Palm oil producer safety and health review prepared for Global Witness.

APPENDIX 2

Methodology

Global Witness focused this investigation on the East New Britain Resources Group of companies (ENB), the Rimbunan Hijau Group of companies (RH), and Bewani Oil Palm Plantations Ltd (Bewani) in Papua New Guinea (PNG). ENB and RH are operating oil palm plantations in East New Britain Province (ENBP), and Bewani is operating an oil palm plantation in Sandaun (West Sepik) Province. While there are other palm oil companies operating in PNG, these three have together deforested tens of thousands of hectares since 2010, and were exporting palm oil in 2019, when we began this research.

Between 2019-2021, Global Witness researchers met with and interviewed local community members and civil society organizations in both provinces. We interviewed two former oil palm plantation workers in ENBP, and subsequently conducted an extensive investigation into worker health and safety on the Rimbunan Hijau plantations in Pomio District, ENBP, described below. In PNG, and remotely, undercover Global Witness researchers carried out multiple covert interviews with ENB employees and with a director of Tobar Investment Ltd. This report also draws on an interview with community members from Gazelle district, ENBP, that Global Witness researchers conducted in 2017.

Global Witness used ship tracking data accessed via the commercial service [MarineTraffic](#) to reconstruct the voyage of the *Chem Peace* from PNG to India. We accessed corporate records using publicly accessible databases of the [PNG Investment Promotion Authority](#), [Companies Commission of Malaysia](#), and Singapore's [Accounting and Corporate Regulatory Authority](#). Company shareholding was assessed via Refinitiv Eikon. Global brands' exposure to the ENB and RH mills was checked using publicly available mill lists published by the companies themselves.

Deforestation analysis

Global Witness used shapefiles for the Rimbunan Hijau and Bewani concessions previously published in our 2017 report [Stained Trade](#). We derived a shapefile for the ENB 'Ili-Wawas' project drawing from the map included in that project's 2005 [Environmental Impact Statement](#).

We used the [global forest change 2000-2019 dataset](#) (Hansen/UMD/Google/USGS/NASA) to calculate forest loss within each concession boundary by year,

using ArcGIS. To ensure the forest lost area was originally natural forest, we used images from sources including Google Earth, Sentinel 2 and Landsat to check the forest type of the lost area before deforestation. The vast majority of forest loss (ca. ~99%) appeared to be natural forest.

Worker health and safety incidents

Acting on tips received from two former employees and a community member, Global Witness launched an investigation into worker health and safety on the RH oil palm plantations in Pomio District, ENBP. We began by searching the publicly accessible PNG Office of Workers' Compensation (OWC) [database](#). Under the Workers' Compensation Act, companies are required to report workplace accidents and deaths to the OWC. Each such report is given a unique reference number in a searchable database. Global Witness found records of seven deaths and seven accidents that we were able to determine had happened on RH's plantations in Pomio.

We then worked with a local community member in Pomio District to interview accident survivors and/or their next of kin, and to identify additional incidents. (We are omitting the name of our local colleague for their safety.) This process ran between Oct 2020-Feb 2021 and captured interviews with fourteen survivors or their next of kin. It produced additional documentation for several cases we had identified from the OWC database, and revealed five additional deaths and five additional serious injuries that Global Witness could substantiate based on documentation.

The majority of the injured and deceased workers Global Witness documented were men. This may reflect the fact that women more often work in an informal capacity on palm oil plantations, e.g. as "loose fruit" collectors.

Global Witness has seen and collected copies of documentation related to these cases including workers' medical reports; autopsy reports; police reports; worker, witness, and supervisor statements; insurance forms; proof of employment, including payslips; and accident and autopsy photos. We arranged for one worker and the next of kin of a deceased worker to be interviewed on video. All interviews were captured in writing with our interviewer translating from spoken Tok Pisin to English where necessary. When this report went to publication, the OWC database was undergoing renovations and was offline.

Papua New Guinean health and safety consultancy Niugini Environment Management Services (NgEMS) reviewed the findings for Global Witness. Principal Tony Aromo has over a decade's experience in the palm oil sector in PNG and served as a technical expert on the working group developing nationally appropriate standards for RSPO.¹

Comparison of fatal accidents, Rimbunan Hijau/New Britain Palm Oil Limited

Global Witness compared the fatal accidents we documented at Rimbunan Hijau's operations with those at another oil palm company operating in PNG.

Four Rimbunan Hijau (RH) companies are working in the group's "Sigite Mukus" project in Pomio, ENBP:

- Rimbunan Hijau (PNG) Limited²
- Sinar Tiasa (PNG) Limited³
- Gilford Limited⁴
- Niugini Lumber Merchants Limited⁵

Because it is unknown how many personnel from each company are entirely devoted to the Sigite Mukus project, and in order to produce a conservative comparison with another company's operations, for the purpose of the analysis of fatal accidents undertaken in this report all employees listed as working in annual company reports for all four of these companies were included in the table below.

In 2010, work officially began on the Sigite Mukus project.⁶

Table 1. Full-time staff of RH companies operating in Sigite Mukus, according to annual reports filed with the PNG Investment Promotion Authority.

Company	2010	2015	2020
Rimbunan Hijau (PNG) Limited	98	98	183
Sinar Tiasa (PNG) Limited	2	2	2,218
Gilford Limited	0	20	142
Niugini Lumber Merchants Limited	467	470	268
Totals	567	590	2,811

According to annual company reports filed with the PNG Investment Promotion Authority, the total number of employees at these four companies combined varied between 567-2,811 in the years Global Witness assessed (2010, 2015, and 2020).

In order to compare the fatalities Global Witness documented at the Sigite Mukus operation with another PNG operation of roughly similar size, we looked at publicly available reports from New Britain Palm Oil Ltd. (NBPOL). NBPOL, owned by Sime Darby,⁷ operates six plantations in PNG.⁸ The company is RSPO certified and publishes its policies regarding human rights and worker health and safety.⁹

Of NBPOL's PNG operations, the Higturu and Milne Bay plantations are closest in size to the largest number of employees calculated for Sigite Mukus (employing 2,325 and 3,132 people respectively).¹⁰

1 Roundtable on Sustainable Palm Oil (undated). National Interpretations <https://rspo.org/certification/national-interpretations>
2 Srinivisan, P. PNG MP responds to allegations of exploitation and abuse in logging industry - Pacific Beat - ABC Radio Australia (2020). <https://www.abc.net.au/radio-australia/programs/pacificbeat/mp-responds-to-allegations-of-exploitation-abuse-in-png-logging/11872384>
3 Hambloch, C. Land formalization turned land rush: the case of the palm oil industry in Papua New Guinea. Paper prepared for presentation at the "2018 World Bank Conference on Land and Poverty" (2018). <https://actnowpng.org/sites/default/files/publications/Land%20Formalisation%20Turned%20Land%20Rush%20Hambloch%202018.pdf>
4 Ibid.
5 Tunama, D. An Exploration of the Impact of Oil Palm Development on Women in Pomio, East New Britain Province, Papua New Guinea (2014). <https://core.ac.uk/download/pdf/35469649.pdf>
6 Global Witness. Stained Trade: how U.S. imports of exotic flooring from China risk driving the theft of indigenous land and deforestation in Papua New Guinea. (2017) <https://www.globalwitness.org/en/campaigns/forests/stained-trade/>
7 Reuters. Malaysia's Sime Darby completes \$1.74 bln New Britain Palm Oil buy. (2015) <https://www.reuters.com/article/new-britain-sime-darby-bhd/malysias-sime-darby-completes-1-74-bln-new-britain-palm-oil-buy-idUSL4N0W508H20150303>
8 New Britain Palm Oil Limited. "Our operations at a glance." https://www.nbpol.com.pg/?page_id=83
9 New Britain Palm Oil Limited. "Roundtable on Sustainable Palm Oil and Sustainable Agriculture Network." https://www.nbpol.com.pg/?page_id=277
10 New Britain Palm Oil Limited. "A safe and fair workplace." https://www.nbpol.com.pg/?page_id=204

Compared to both of these plantations, there were significantly more fatalities at the Rimbunan Hijau operation (see Table 2). Over the 2010-2020 time span assessed, one worker died at the Higaturu plantation and three workers died at the Milne Bay plantation. In comparison, 12 people—11 workers and one school-aged dependent of a worker—died at the RH operation over the same time period, according to Global Witness’s analysis of Office of Workers’ Compensation records and interviews with survivors conducted in 2020 and 2021.

Table 2. Fatalities at three PNG oil palm plantation operations, 2010-2020.¹¹

Company	Employees (est. in 2020)	Fatalities 2010-2020
Rimbunan Hijau – Sigite Mukus	2,811	12
NBPOL - Higaturu	2,325	1
NBPOL – Milne Bay	3,132	3

It is unknown how many hectares (ha) of oil palm have been planted within the Sigite Mukus project. RH has claimed that 31,000 ha are slated for oil palm.¹² However, Global Witness estimates that ~24,600 ha of forest has been cleared within the project area. The total amount of palm planted therefore is unlikely to exceed 24,600 ha, and may be significantly less.

The NBPOL Higaturu and Milne Bay plantations combined had a total area of 20,459 hectares devoted to oil palm in 2015.¹³ Combining the fatality rate for these two operations likewise, the NBPOL operations are still far less lethal on a per-hectare, as well as a per capita, basis.

11 NBPOL 2010-2015 data is drawn from New Britain Palm Oil Limited Sustainability Report <https://www.nbpol.com.pg/wp-content/uploads/downloads/2016/11/NBPOL-Sustainability-Report-2015-Final-SP.pdf>. 2016-2020 data is drawn from: New Britain Palm Oil Limited. “A safe and fair workplace.” https://www.nbpol.com.pg/?page_id=204

12 Business Advantage PNG. Spotlight focus on palm oil. (2012) <https://www.businessadvantagepng.com/spotlight-focus-on-palm-oil/>

13 New Britain Palm Oil Limited Sustainability Report 2014/2015. <https://www.nbpol.com.pg/wp-content/uploads/downloads/2016/11/NBPOL-Sustainability-Report-2015-Final-SP.pdf>

REFERENCES

- 1 UCSUSA (2016). Palm oil. <https://www.ucsusa.org/resources/palm-oil>
- 2 Reuters (2019). Malaysia's Mahathir says linking palm oil to deforestation 'baseless'. <https://www.reuters.com/article/us-malaysia-palmoil-deforestation/malaysias-mahathir-says-linking-palm-oil-to-deforestation-baseless-idUSKCN1VD0CR>
- 3 Bronsky, J., et al. (2019). Palm Oil and Beta-palmitate in Infant Formula: A Position Paper by the European Society for Paediatric Gastroenterology, Hepatology, and Nutrition (ESPGHAN) Committee on Nutrition. *Journal of Pediatric Gastroenterology and Nutrition*: May 2019 - Volume 68 - Issue 5 - p 742-760. https://journals.lww.com/jpgn/Fulltext/2019/05000/Palm_Oil_and_Beta_palmitate_in_Infant_Formula__A.28.aspx
- 4 Rainforest Action Network (2015). Maruchan responds to pressure in an instant but its new palm oil commitment falls short. https://www.ran.org/the-understory/maruchan_palm_oil_commitment_falls_short/
- 5 Bito, B. and N. Petit (2016). Final report: toward sustainable agricultural commodities in Papua New Guinea. *Toward Sustainable Agricultural Commodities in Papua New Guinea (2016)*
- 6 Personal communication, UNDP Papua New Guinea (2020).
- 7 Mongabay/Hance. J. (2014). Illegal logging makes up 70 percent of Papua New Guinea's timber industry. <https://news.mongabay.com/2014/04/illegal-logging-makes-up-70-percent-of-papua-new-guineas-timber-industry/>
- 8 Convention on Biological Diversity (undated). Papua New Guinea. <https://www.cbd.int/countries/profile/?country=pg>
- 9 ABC Australia (undated). Charting the Pacific – Places. https://www.abc.net.au/ra/pacific/places/country/papua_new_guinea.htm
- 10 See Papua New Guinea Defence Force Core Services (undated). Maritime Surveillance, Patrol Response http://www.defence.gov.pg/core_services/cs_maritime_patrol.html; and The Commonwealth (undated). United Kingdom. <https://thecommonwealth.org/our-member-countries/united-kingdom>
- 11 Papua New Guinea Department of Agriculture and Livestock (2016). Report on the state of biodiversity for food and agriculture in Papua New Guinea. <http://www.fao.org/3/CA3422EN/ca3422en.pdf>
- 12 Barrows, L.R. et al. (2009). Making the most of Papua New Guinea's biodiversity: Establishment of an integrated set of programs that link botanical survey with pharmacological assessment in "The Land of the Unexpected." *Pharmaceutical Biology*. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2794140/>
- 13 Convention on Biological Diversity (undated). Papua New Guinea. <https://www.cbd.int/countries/profile/?country=pg>
- 14 National Geographic Society Photo Ark (undated). Combed Dragon or Indonesian Forest Dragon <https://www.nationalgeographic.org/projects/photo-ark/animal/lophosaurus-dilophus/>
- 15 IUCN (2016). Huon Tree Kangaroo (*Dendrolagus matschiei*). <https://www.iucnredlist.org/species/6433/21956650>
- 16 South Pacific Regional Environment Programme. A pocket guide to the birds of paradise of Papua New Guinea. <https://www.sprep.org/attachments/VirLib/PNG/bird-paradise-birdwatching-pocket-guide.pdf>
- 17 Schuiteman, A., Jan Vermeulen, J., De Vogel, E., and A. Vogel (2011). Nocturne for an unknown pollinator: first description of a night-flowering orchid (*Bulbophyllumnocturnum*). *Botanical Journal of the Linnean Society*. <https://academic.oup.com/botlinnean/article/167/3/344/2418626>
- 18 Vincent, J.B. et al. *note in Forest carbon in lowland Papua New Guinea: local variation and the importance of small trees* (2015). *Austral Ecology*. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4461161/>
"Forest carbon estimates for PNG have been contentious. Ground-based forest inventories have produced estimates of lowland rainforest carbon ranging from 111.34 Mg [*megagram*] C ha⁻¹ (Bryan *et al.* 2010a) and 120.8 Mg C ha⁻¹ (Fox *et al.* 2010) to 169.9 Mg C ha⁻¹ (Bryan *et al.* 2010b) whereas estimates from remote sensing ranged 147–153 Mg C ha⁻¹ (Saatchi *et al.* 2011). Scaling such variation to the estimated 18.65 million hectares of lowland rainforest in PNG (Shearman & Bryan 2011) suggests that massive uncertainty is associated with the regional carbon stock." GW calculates, based on these ranges and noting that 1 Mg = 1 metric ton, that the lower bound of lowland rainforest carbon is (111.34 mt C/ha * 18.65 m ha =) 2,076,491,000 mt C and that the upper bound is (169.9 mt C/ha * 18.65 m ha =) 3,168,635,000 mt C.
- 19 Conn, B. and K. Damas. *Araucaria hunsteinii in Guide to trees of Papua New Guinea*. https://www.pngplants.org/PNGtrees/TreeDescriptions/Araucaria_hunsteinii_K_Schum.html
- 20 SIL-Papua New Guinea (undated). Languages of Papua New Guinea. https://pnglanguages.sil.org/resources/language_maps
- 21 Jubilee Australia, Oakland Institute, and Act Now. From Extraction to Inclusion (2020). <https://www.oaklandinstitute.org/sites/oaklandinstitute.org/files/extraction-inclusion.pdf>
- 22 Kik, A. et al. (2021). Language and ethnobiological skills decline precipitously in Papua New Guinea, the world's most linguistically diverse nation. *PNAS* 2021 Vol. 118 No. 22 <https://www.pnas.org/content/pnas/118/22/e2100096118.full.pdf>
- 23 Novotny, V. et al. (2012). The role of paraecologists in 21st century tropical forest research. https://www.researchgate.net/publication/268213929_The_role_of_paraecologists_in_21st_century_tropical_forest_research/link/5464c2c80cf221c8f57b9cf8/download
- 24 Mongabay/Woods, L. E. J. (2019). 'Beautiful legislation' fails to protect PNG's environment, landowners <https://news.mongabay.com/2019/02/beautiful-legislation-fails-to-protect-pngs-environment-landowners/>
- 25 Chatham House/Lawson, S. (2014). Illegal logging in Papua New Guinea https://www.chathamhouse.org/sites/default/files/home/chatham/public_html/sites/default/files/20140400LoggingPapuaNewGuineaLawson.pdf
- 26 Forest Trends (2006). Logging, legality, and livelihoods in Papua New Guinea, Volume 1 <https://www.forest-trends.org/wp-content/uploads/imported/png-volume-1-pdf.pdf>
- 27 Australian Conservation Foundation and Centre for Environmental Law and Community Rights (2003). Bulldozing Progress: human rights abuses and corruption in Papua New Guinea's logging industry <https://pngforests.files.wordpress.com/2013/05/bulldozing-progress-celcoracf-report-august-2006.pdf>
- 28 Mongabay/Butler, R.A. (2013). Malaysia has the world's highest deforestation rate, reveals Google forest map <https://news.mongabay.com/2013/11/malaysia-has-the-worlds-highest-deforestation-rate-reveals-google-forest-map/>
- 29 Guardian Environment Network/Young, T. (2011). Malaysian palm oil destroying forests, report warns <https://www.theguardian.com/environment/2011/feb/02/malaysian-palm-oil-forests>
- 30 Gabriel, J. and Wood, M. (2015). Rimbunan Hijau in the Forests of Papua New Guinea. *Journal of Pacific History*. https://www.researchgate.net/publication/279942791_The_Rimbunan_Hijau_Group_in_the_Forests_of_Papua_New_Guinea
- 31 Sarawak Report (2019). 'If It's Not A Profitable Business You Pack Up And You Leave!' Papuans Tell Sarawak Loggers <https://www.sarawakreport.org/2019/10/if-its-not-a-profitable-business-you-pack-up-and-you-leave-papuan-tell-sarawak-loggers/>
- 32 Oakland Institute (2016). The Great Timber Heist: The Logging Industry in Papua New Guinea <https://www.oaklandinstitute.org/great-timber-heist-logging-industry-papua-new-guinea>

- 33 Global Witness (2017). Stained Trade: how U.S. imports of exotic flooring risk driving the theft of indigenous land and deforestation in Papua New Guinea <https://www.globalwitness.org/en/campaigns/forests/stained-trade/>
- 34 Hambloch, C. Land formalization turned land rush: the case of the palm oil industry in Papua New Guinea. Paper prepared for presentation at the “2018 World Bank Conference on Land and Poverty” (2018). <https://actnowpng.org/sites/default/files/publications/Land%20Formalisation%20Turned%20Land%20Rush%20Hambloch%202018.pdf>
- 35 The National (2018). Bewani Oil Palm project all set for first shipment <https://www.thenational.com.pg/bewani-oil-palm-project-all-set-for-first-shipment/>
- 36 Bryan, J. and P. Shearman (eds.) (2015). The state of the forests of Papua New Guinea <https://png-data.sprep.org/system/files/The%20State%20of%20Forest%20in%20PNG%202014.pdf>
- 37 Tobar Investment Ltd and Tobar Business Group information accessed via the PNG Investment Promotion Authority.
- 38 Papua New Guinea Post-Courier/ Umau, P. (2019). East New Britain Business Grows from Strength to Strength. <https://postcourier.com.pg/east-new-britain-business-grows-from-strength-to-strength/>
- 39 Tobar Investment Ltd information accessed via the Papua New Guinea Investment Promotion Authority.
- 40 Loop PNG/Mou, F. (2017). Lamur plans to rescue Kokopo District <https://www.looppng.com/elections/lamur-plans-rescue-kokopo-district-58145>
- 41 Tobar Investment Ltd information accessed via the Papua New Guinea Investment Promotion Authority. (<https://www.ipa.gov.pg/>)
- 42 Papua New Guinea Post-Courier/ Umau, P. (2019). East New Britain Business Grows from Strength to Strength. <https://postcourier.com.pg/east-new-britain-business-grows-from-strength-to-strength/>
- 43 Pacific Media Watch (2017). O’Neill’s government loses ministers, Speaker and deputy PM in PNG vote <https://asiapacificreport.nz/2017/07/23/oneills-government-loses-ministers-speaker-and-deputy-pm-in-png-vote/>
- 44 Bito, B. and N. Petit (2016). Final report: toward sustainable agricultural commodities in Papua New Guinea. [Toward Sustainable Agricultural Commodities in Papua New Guinea \(2016\)](https://www.sustainableagriculture.com/papua-new-guinea)
- 45 Bernard Lolot LinkedIn profile: <https://pg.linkedin.com/in/bernard-lolot-471514a6>
- 46 Klopff, S. Private Lands Conservation in Papua New Guinea (2004). University of Colorado/Colorado Law School Scholarly Commons https://scholar.law.colorado.edu/cgi/viewcontent.cgi?article=1168&context=books_reports_studies
- 47 Papua New Guinea Land Act sections 10-12 http://www.paclii.org/pg/legis/consol_act/la199648/ and Papua New Guinea Constitution, section 53 http://www.paclii.org/pg/legis/consol_act/cotisopng534/
- 48 Mongabay/Woods, L. E. J. (2019). ‘Beautiful legislation’ fails to protect PNG’s environment, landowners <https://news.mongabay.com/2019/02/beautiful-legislation-fails-to-protect-pngs-environment-landowners/>
- 49 Jubilee Australia, Oakland Institute, and Act Now. From Extraction to Inclusion (2020). <https://www.oaklandinstitute.org/sites/oaklandinstitute.org/files/extraction-inclusion.pdf>
- 50 Papua New Guinea Land Act section 4, 10 http://www.paclii.org/pg/legis/consol_act/la199648/
- 51 Mongabay/Woods, L. E. J. (2019). ‘Beautiful legislation’ fails to protect PNG’s environment, landowners <https://news.mongabay.com/2019/02/beautiful-legislation-fails-to-protect-pngs-environment-landowners/>
- 52 Lattas, A. (2014). Land, environment & violence: the high cost of logging in Pomio. <https://www.pngattitude.com/2014/09/land-environment-violence-the-high-cost-of-logging-in-pomio.html>
- 53 World Resources institute (2013). Papua New Guinea Forest Legality <https://forestlegality.org/risk-tool/country/papua-new-guinea>
- 54 Transparency International (2020). Corruption Perceptions Index <https://www.transparency.org/en/cpi/2020/index/nzl>
- 55 Interview with Mr Michael Paisparea and Mr Bernard Lolot, on file with Global Witness.
- 56 PNG has ratified the International Labour Organization’s Minimum Age Convention of 1973, which allows children as young as 12 to conduct “light” work deemed not harmful to their health or schooling. The PNG Employment Act allows children as young as 12 to legally work, but only if they are working in a family-owned business. Papua New Guinea Employment Act section 103 (2) http://www.paclii.org/pg/legis/consol_act/ea1978149/
- 57 International Labour Organisation (1999). Worst Forms of Labour Convention https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C182
- 58 Myzabella, N., et al. (2019). Occupational health and safety in the palm oil industry: a systematic review. *Int J Occup Environ Med*; 10(4); 159-173. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6820316/#>
- 59 Washington Post/Mason, M. and McDowell, R. (2020) Palm oil labor abuses linked to world’s top brands, banks https://www.washingtonpost.com/business/palm-oil-labor-abuses-linked-to-worlds-top-brands-banks/2020/09/24/d51fa282-fed7-11ea-b0e4-350e4e60cc91_story.html
- 60 Wide Bay Conservation Association (undated). Balokoma Limited Relog Situational Report <https://www.dtp.unsw.edu.au/sites/default/files/u4/Isidor.Kaupan.Pulpul%20situational%20report%202.pdf>
- 61 Global Witness undercover interview with Michael Paisparea and Bernard Lolot (2019)
- 62 The National (2017). Oil palm industry grows, new project launched <http://www.thenational.com.pg/oil-palm-industry-grows-new-project-launched/>
- 63 Global Witness undercover interview with Eng Kwee Tan (2019)
- 64 Government of India Ministry of Finance (2017). Notification No.50/2017–Customs <https://www.cbic.gov.in/resources/htdocs-cbec/customs/cs-act/notifications/notfns-2017/cs-tarr2017/cs50-2017.pdf>
- 65 Government of India Ministry of Finance (2018). Notification No. 29/2018–Customs <https://www.cbic.gov.in/resources/htdocs-cbec/customs/cs-act/notifications/notfns-2018/cs-tarr2018/cs29-2018.pdf>
- 66 Government of India Ministry of Finance (2020). Notification No.43/2020–Customs <https://www.cbic.gov.in/resources/htdocs-cbec/customs/cs-act/notifications/notfns-2020/cs-tarr2020/cs43-2020.pdf>
- 67 Comprehensive economic cooperation agreement between the Government of Malaysia and the Government of the Republic of India (2011). <https://fta.miti.gov.my/miti-fta/resources/Malaysia-India/MICECA.pdf>
- 68 GST Law India (2018). Social Welfare Surcharge on Imports – A new levy by the Finance Act, 2018 <https://gstlawindia.in/social-welfare-surcharge-on-imports-w-e-f-02-02-2018-a-new-levy-by-the-finance-act-2018/>
- 69 Kolkata Port Traffic chart (6 January 2019) https://kolkataporttrust.gov.in/show_img.php?fid=4154
- 70 Business Standard News (2016) Ruchi Soya ranked no. 1 food and agri products company in Fortune 500 Report on India’s largest corporations https://www.business-standard.com/article/news-ani/ruchi-soya-ranked-no-1-food-and-agri-products-company-in-fortune-500-report-on-india-s-largest-corporations-116122800653_1.html
- 71 ENB Trading & Shipping Pte. Ltd business profile accessed via the Singapore Accounting & Corporate Regulatory Authority
- 72 ENBPOL information accessed via the Papua New Guinea Investment Promotion Authority.
- 73 Reuters/Chu, M.M. (2020) Palm oil prices to climb 17.9% in 2020 on tight supplies, biodiesel programs: Reuters poll <https://www.reuters.com/article/palmoil-poll-idINKBN1ZK0RI>
- 74 Historical exchange rates accessed via www.xe.com
- 75 UN Comtrade Database <https://comtrade.un.org/>
- 76 Bio of Paranjay Guha Thakurta (undated). <https://paranjay.in/bio>
- 77 Copyright 2020, S&P Global Market Intelligence (and its affiliates as applicable). All rights reserved.
- 78 Copyright 2020, S&P Global Market Intelligence (and its affiliates as applicable). Reproduction of any information, opinions, views, data or material, including ratings (“Content”) in any form is prohibited except with the prior written permission of the relevant party. Such party, its affiliates and suppliers (“Content Providers”) do not guarantee the accuracy, adequacy, completeness, timeliness, or availability of any Content and are not responsible for any errors or omissions (negligent or otherwise),

regardless of the cause, or for the results obtained from the use of such Content. In no event shall Content Providers be liable for any damages, costs, expenses, legal fees, or losses (including lost income or lost profit and opportunity costs) in connection with any use of the Content. A reference to a particular investment or security, a rating or any observation concerning an investment that is part of the Content is not a recommendation to buy, sell or hold such investment or security, does not address the suitability of an investment or security and should not be relied on as investment advice. Credit ratings are statements of opinions and are not statements of fact.

- 79 Email from RPNGC to Global Witness (2020).
- 80 ABC News/Tlozek, E. (2017). PNG deports Catholic missionary assisting locals with logging legal fight <https://www.abc.net.au/news/2017-06-13/png-deports-catholic-missionary-over-logging-legal-fight/8615042>
- 81 Global Witness interview with Doug Tennent (2019).
- 82 ABC News/Tlozek, E. (2017). PNG deports Catholic missionary assisting locals with logging legal fight <https://www.abc.net.au/news/2017-06-13/png-deports-catholic-missionary-over-logging-legal-fight/8615042>
- 83 Lattas, A. (2014). Land, environment & violence: the high cost of logging in Pomio. <https://www.pngattitude.com/2014/09/land-environment-violence-the-high-cost-of-logging-in-pomio.html>
- 84 Roman Catholic Archdiocese of Rabaul v Sam [2019] PGNC 427; N8145 (29 November 2019) <http://www.paclii.org/cgi-bin/sinodisp/pg/cases/PGNC/2019/427.html?stem=&synonyms=&query=archdiocese>
- 85 Archdiocese of Rabaul (2020). The matter of Putput. Accessed via <https://www.facebook.com/CatholicArchdioceseOfRabaul/photos/pcb.1338815049653177/1338814696319879/>
- 86 Email from Doug Tennent to Global Witness (2020).
- 87 Email from RPNGC to Global Witness (2020).
- 88 Bryan, J. and P. Shearman (eds.) (2015). The state of the forests of Papua New Guinea. <https://png-data.sprep.org/system/files/The%20State%20of%20Forest%20in%20PNG%202014.pdf>
- 89 BirdLife (2018). Are we too late to save the elusive birds of this Papua New Guinea island? <https://www.birdlife.org/worldwide/news/are-we-too-late-save-secretive-birds-papua-new-guinea-island>
- 90 Ibid.
- 91 PNGi Forest Portal (2020). Retrieved June 2021 from <https://pngiforests.org>
- 92 WWF (undated). Responsible purchasing https://www.panda.org/discover/our_focus/food_practice/sustainable_production/palm_oil/responsible_purchasing/
- 93 Roundtable on Sustainable Palm Oil (2021). Impact <https://rspo.org/impact>
- 94 Roundtable on Sustainable Palm Oil (undated). About RSPO <https://www.rspo.org/about>
- 95 Roundtable on Sustainable Palm Oil (undated) RSPO Supply Chains <https://rspo.org/certification/supply-chains>
- 96 Mongabay/Jong, H.N. (2019). RSPO adopts total ban on deforestation under sweeping new standards <https://news.mongabay.com/2018/11/rspo-adopts-total-ban-on-deforestation-under-sweeping-new-standards/>
- 97 Greenpeace (2021). Destruction: Certified <https://www.greenpeace.org/international/publication/46812/destruction-certified/>
- 98 Environmental Investigation Agency UK Ltd and Grassroots (2015). Who Watches the Watchmen? Auditors and the breakdown of oversight in the RSPO <https://eia-international.org/wp-content/uploads/EIA-Who-Watches-the-Watchmen-FINAL.pdf>
- 99 Greenpeace (2021). Destruction: Certified <https://www.greenpeace.org/international/publication/46812/destruction-certified/>
- 100 Ibid.
- 101 Inside Climate News/Gustin, G. (2019). Industrial Agriculture, an Extraction Industry Like Fossil Fuels, a Growing Driver of Climate Change <https://insideclimatenews.org/news/25012019/climate-change-agriculture-farming-consolidation-corn-soybeans-meat-crop-subsidies/>
- 102 Global Witness (2021). The EU needs to hold the financial sector to account if it is to end its complicity in global deforestation <https://www.globalwitness.org/en/blog/eu-needs-to-hold-financial-sector-account-if-it-ends-its-complicity-global-deforestation/>
- 103 Global Witness (2020). Strengthening corporate responsibility <https://www.globalwitness.org/en/campaigns/forests/strengthening-corporate-responsibility-uk-briefing/>
- 104 NEPCon (2017). Timber Legality Risk Assessment: Papua New Guinea <https://preferredbynature.org/sites/default/files/library/2017-08/NEPCon-TIMBER-PapuaNewGuinea-Risk-Assessment-EN-V1.1.pdf>
- 105 Radio New Zealand/Blades, J. (2017). New minister aims to clean up corrupt PNG Lands Dept <https://www.rnz.co.nz/international/pacific-news/338010/new-minister-aims-to-clean-up-corrupt-png-lands-dept>
- 106 ENBPOL charge document on file with Global Witness.
- 107 Maybank (2013). Key business entities <https://www.maybank.com/MaybankAR13/pdf/kbe.pdf>
- 108 ENBPOL charge document on file with Global Witness.
- 109 Chicago Tribune/Mason, M. and McDowell, R. (2020). Palm oil is a big business and virtually impossible to avoid. The workers who cultivate it are abused. <https://www.chicagotribune.com/nation-world/ct-nw-palm-oil-worker-abuse-20201121-q2grzchac5b2hg57gnww4dex7m-story.html>
- 110 Profundo and Tuk Indonesia (2018). Maybank: the single largest palm oil financier https://www.banktrack.org/download/maybank_the_single_largest_palm_oil_financier/maybankreportenglish210218.pdf
- 111 Ibid.
- 112 Maybank Sustainability Report 2020 https://maybankfoundation.com/index.php/media-center/sustainability-reports?task=calleleme nt&format=raw&item_id=323&element=8956f649-9a99-4a73-bcaa-09214efe8e5e&method=download
- 113 Maybank shareholders report accessed via Refinitiv on 13 June 2021
- 114 MarketWatch/Beals, R.K. (2020). World's largest asset manager BlackRock joins \$41 trillion climate-change investing pact <https://www.marketwatch.com/story/worlds-largest-asset-manager-blackrock-joins-41-trillion-climate-change-investing-pact-2020-01-09>
- 115 Sovereign Wealth Fund Institute (undated). Top 100 Largest Sovereign Wealth Fund Rankings by Total Assets <https://www.swfinstitute.org/fund-rankings/sovereign-wealth-fund>
- 116 LinkedIn.com (2020) Robeco profile <https://www.linkedin.com/company/robeco/>
- 117 Pyrford International Ltd (2009). Disclaimer <https://www.bmo.com/pyrford/disclaimer>
- 118 CalPERS (2019). CalPERS' governance and sustainability principles <https://www.calpers.ca.gov/docs/forms-publications/governance-and-sustainability-principles.pdf>
- 119 Robeco (2020). Sustainable Investing Memberships, Statements, and Principles <https://www.robeco.com/docm/docu-relevant-codes-and-memberships.pdf>
- 120 Robeco (2021). Exclusion Policy Robeco <https://www.robeco.com/docm/docu-exclusion-policy.pdf>
- 121 Friends of the Earth/Profundo (2020). Doubling down on deforestation <https://foe.org/resources/doubling-down-on-deforestation/>
- 122 BlackRock's Big Problem (2020). In surprise move, BlackRock votes for Procter & Gamble to disclose on deforestation <https://blackrockbigproblem.com/in-surprise-move-blackrock-votes-for-procter-gamble-to-disclose-on-deforestation/>
- 123 Amazon Watch (2021). Investing in Amazon Crude II <https://amazonwatch.org/news/2021/0603-investing-in-amazon-crude-ii>
- 124 Puipui v Pat [2016] PGNC 326; N6538 (25 August 2016). Accessed 19 August 2020 at <http://www.paclii.org/cgi-bin/sinodisp/pg/cases/PGNC/2016/326.html?stem=&synonyms=&query=east%20new%20britain%20palm%20oil>
- 125 Ibid.
- 126 Ibid.

- 127 PNGExposed (2016). Malaysian company destroying cocoa blocks and evicting landholders in East New Britain <https://pngexposed.wordpress.com/2016/03/16/malaysian-oil-palm-company-destroying-cocoa-blocks-and-evicting-landholders-in-east-new-britain/>
- 128 The World Bank (updated 2021). Development Projects PNG Productive Partnerships in Agriculture - P110959 <https://projects.worldbank.org/en/projects-operations/project-detail/P110959>
- 129 The United Nations defines forced evictions as “the permanent or temporary removal against their will of individuals, families and/or communities from the homes and/or land which they occupy, without the provision of, and access to, appropriate forms of legal or other protection”. See: <https://www.ohchr.org/Documents/Publications/FS25.Rev.1.pdf>
- 130 Puipui v Pat [2016] PGNC 326; N6538 (25 August 2016). Accessed 19 August 2020 at <http://www.paclii.org/cgi-bin/sinodisp/pg/cases/PGNC/2016/326.html?stem=&synonyms=&query=east%20new%20britain%20palm%20oil>
- 131 PNG Report (2015). New mill for ENB palm oil <https://www.pngreport.com/png/news/1110796/new-mill-for-enb-palm-oil>
- 132 The Star (2015). CBIP wins RM60mil deal to supply another mill in PNG <https://www.thestar.com.my/business/business-news/2015/12/04/cbip-wins-rm60mil-deal-to-supply-another-mill-in-png>
- 133 Puipui v Pat [2016] PGNC 326; N6538 (25 August 2016). <http://www.paclii.org/cgi-bin/sinodisp/pg/cases/PGNC/2016/326.html?stem=&synonyms=&query=east%20new%20britain%20palm%20oil>
- 134 Charge document on file with Global Witness.
- 135 Global Witness (2017). Stained Trade: how U.S. imports of exotic flooring risk driving the theft of indigenous land and deforestation in Papua New Guinea. <https://www.globalwitness.org/en/campaigns/forests/stained-trade/>; Hambloch, C. Land formalization turned land rush: the case of the palm oil industry in Papua New Guinea. Paper prepared for presentation at the “2018 World Bank Conference on Land and Poverty” (2018). <https://actnowpng.org/sites/default/files/publications/Land%20Formalisation%20Turned%20Land%20Rush%20Hambloch%202018.pdf>
- 136 Radio New Zealand (2019). PNG govt told to act now <https://www.rnz.co.nz/international/pacific-news/398165/png-govt-told-to-act-now-on-sabls>
- 137 Papua New Guinea Today (2019). PNG Government must publish full list of SABL Lease <https://news.pngfacts.com/2019/01/png-government-must-publish-full-list.html>
- 138 Earthsight (2017). Papua New Guinea’s government resurrects zombie ag licenses <https://www.earthsight.org.uk/news/idm/papua-new-guinea-government-resurrects-zombie-ag-licenses>
- 139 Act Now/War on Want (2018). The SABL landgrab: Papua New Guinea’s ongoing human rights scandal https://waronwant.org/sites/default/files/SABL_PNG_LANDGRAB.pdf
- 140 Global Witness (2017). Stained Trade: how U.S. imports of exotic flooring risk driving the theft of indigenous land and deforestation in Papua New Guinea. <https://www.globalwitness.org/en/campaigns/forests/stained-trade/>
- 141 Ibid.
- 142 Filer, C. with J. Numapo. *In Kastom*, property, and ideology: land transformations in Melanesia <https://press.anu.edu.au/publications/series/state-society-and-governance-melanesia/kastom-property-and-ideology>
- 143 Rimbunan Hijau Group (undated). Executive Chairman’s Profile & Sharing http://rhg.com.my/rhg_v2/en/executive-chairmans-profile-sharing/
- 144 Rimbunan Hijau Group (undated). Forestry - Upstream & Downstream Timber Operations http://rhg.com.my/rhg_v2/en/forestry-upstream-downstream-timber-operations/
- 145 Rimbunan Hijau Group (undated). About Us http://rhg.com.my/rhg_v2/en/welcome/#
- 146 Bloomberg Markets (undated). Rimbunan Hijau Group - Company Profile and News <https://www.bloomberg.com/profile/company/2266745Z:MK>
- 147 Forbes (2021). Tiong Hiew King & family <https://www.forbes.com/profile/tiong-hiew-king/?sh=704813171fb0>
- 148 Gabriel, J. and Wood, M. (2015). Rimbunan Hijau in the Forests of Papua New Guinea. *Journal of Pacific History* https://www.researchgate.net/publication/279942791_The_Rimbunan_Hijau_Group_in_the_Forests_of_Papua_New_Guinea
- 149 The National (2016). The Stanley a class of Hotel – its own <https://www.thenational.com.pg/stanley-class-hotel/>
- 150 SGS (2021). Log export monitoring monthly report December 2020 to the Papua New Guinea Forestry Authority.
- 151 Global Witness (2017). Stained Trade: how U.S. imports of exotic flooring risk driving the theft of indigenous land and deforestation in Papua New Guinea. <https://www.globalwitness.org/en/campaigns/forests/stained-trade/>
- 152 PNGi (2019). Rimbunan Hijau abuses court system to deny landowners justice <https://pngicentral.org/reports/rimbunan-hijau-abuses-court-system-to-deny-landowners-justice>
- 153 Australian Conservation Foundation and Centre for Environmental Law and Community Rights (2003). Bulldozing Progress: human rights abuses and corruption in Papua New Guinea’s logging industry. <https://pngforests.files.wordpress.com/2013/05/bulldozing-progress-celcoracf-report-august-2006.pdf>
- 154 Global Witness (2017). Stained Trade: how U.S. imports of exotic flooring risk driving the theft of indigenous land and deforestation in Papua New Guinea. <https://www.globalwitness.org/en/campaigns/forests/stained-trade/>
- 155 Ibid.
- 156 Radio New Zealand (2018). PNG villagers count huge cost of damage from logging <https://www.rnz.co.nz/international/pacific-news/361006/png-villagers-count-huge-cost-of-damage-from-logging>
- 157 Communities of Atu, Bairaman, Gugulena, Kaiton, Lau, Malmaltalie, Manginuna, Mauna, Meinge, Mu, Polo, Pomai, Porosale, Puapal, Rano, Rovani, and Tontongpal (2018). West Pomio Community Damage Assessment <https://actnowpng.org/sites/default/files/publications/West%20Pomio%20Community%20Damage%20Assessment.pdf>
- 158 Myzabella, N., et al. (2019). Occupational health and safety in the palm oil industry: a systematic review. *Int J Occup Environ Med*; 10(4); 159-173. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6820316/#>
- 159 Al Jazeera (2020). Rape, abuses in palm oil fields linked to top cosmetic brands: AP <https://www.aljazeera.com/news/2020/11/18/rape-abuses-in-palm-oil-fields-linked-to-top-cosmetic-brands-ap>
- 160 Roundtable on Sustainable Palm Oil (undated). National Interpretations <https://rspo.org/certification/national-interpretations>
- 161 Global Witness interview with Mr Felix Tau (2021).
- 162 Oakland Institute (2016). The Great Timber Heist: The Logging Industry in Papua New Guinea <https://www.oaklandinstitute.org/great-timber-heist-logging-industry-papua-new-guinea>
- 163 Filer, C. with J. Numapo. *In Kastom*, property, and ideology: land transformations in Melanesia <https://press.anu.edu.au/publications/series/state-society-and-governance-melanesia/kastom-property-and-ideology>
- 164 Page, B., and S. Lord (undated). The Oil Palm Industry’s approach to the use of pesticides in Papua New Guinea https://www.nbpol.com.pg/wp-content/uploads/downloads/2011/02/Pesticides_in_Papua_New_Guinea.pdf
- 165 Bradberry, S., Proudfoot, A.T., and J.A. Vale (2004). Glyphosate poisoning. *Toxicol Rev.* <https://pubmed.ncbi.nlm.nih.gov/15862083/>
- 166 Centers for Disease Control and Prevention (2018). Facts about Paraquat <https://emergency.cdc.gov/agent/paraquat/basics/facts.asp>
- 167 United States Environmental Protection Agency (undated). Paraquat Dichloride: One Sip Can Kill <https://www.epa.gov/pesticide-worker-safety/paraquat-dichloride-one-sip-can-kill>
- 168 Global Witness interview with Mr Felix Tau (2021).
- 169 Papua New Guinea Employment Act, section 121 http://www.paclii.org/cgi-bin/sinodisp/pg/legis/PG-consol_act_1986/ea666/index.html?stem=&synonyms=&query=employment%20act
- 170 NiuGini Environment Management Services (2021). Palm oil producer safety and health review prepared for Global Witness.

- 171 Food and Agriculture Organization of the United Nations (1999). Guidelines for the management of small quantities of unwanted and obsolete pesticides http://www.ipcinfo.org/fileadmin/user_upload/obsolete_pesticides/docs/small_qties.pdf
- 172 Global Witness interview with Mr Felix Tau (2021).
- 173 Global Witness interview with Lawrence Lapuli (2021).
- 174 Anton Kelal witness statement, on file with Global Witness.
- 175 Anton Kelal death certificate, on file with Global Witness.
- 176 Global Witness interview with Lawrence Lapuli (2021).
- 177 Charles Sai medical records, on file with Global Witness.
- 178 Global Witness interview with Charles Sai (2020).
- 179 Cedars-Sinai (undated). Burst Fracture <https://www.cedars-sinai.org/health-library/diseases-and-conditions/b/burst-fracture.html>
- 180 Papua New Guinea Workers Compensation Act, sections 42 and 45 http://www.paclii.org/pg/legis/consol_act/wca1978255.pdf
- 181 Global Witness interview with Anthony Salmang (2019). Global Witness has previously documented downstream pollution from logging and clearance activities at other sites in Papua New Guinea.
- 182 Mongabay/Gaworecki, M. (2016). Papua New Guinea activist receives prestigious award for protecting forests <https://news.mongabay.com/2016/10/papua-new-guinea-activist-receives-prestigious-award-for-protecting-forests/>
- 183 The National (2019). Plans in place to upgrade Pomio airstrip <https://www.thenational.com.pg/plans-in-place-to-upgrade-pomio-airstrip/>
- 184 Email from Paul Pavol to Global Witness (2020).
- 185 Global Witness interview with Anthony Salmang (2019).
- 186 Sarawak Report (2020). Malaysian Colonialism in Papua New Guinea <https://www.youtube.com/watch?v=zmlQ5Yo561A>
- 187 Global Witness interview with Anthony Salmang (2019).
- 188 Mongabay/Hance, J. (2012). Police hired by loggers in Papua New Guinea lock locals in shipping containers <https://news.mongabay.com/2012/04/police-hired-by-loggers-in-papua-new-guinea-lock-locals-in-shipping-containers/>
- 189 Independent fact finding mission (2013). Investigation of police brutality – West Pomio, ENBP <https://pngexposed.files.wordpress.com/2014/11/investigation-of-police-brutality-west-pomio.pdf>
- 190 Ibid.
- 191 NBC News PNG (2020). Manning stops police at logging sites <https://www.facebook.com/NBCNewsPNG/posts/manning-stops-police-on-logging-sites-all-police-personnel-operating-at-logging-1038257933194460/>
- 192 The Guardian/Doherty, B. (2020). Papua New Guinea police accused of gun running and drug smuggling by own minister <https://www.theguardian.com/world/2020/sep/18/papua-new-guinea-police-accused-of-gun-running-and-drug-smuggling-by-own-minister>
- 193 Colgate-Palmolive (undated). About Us <https://www.colgatepalmolive.com/en-us/about>
- 194 Tunama, D. (2014). An Exploration of the Impact of Oil Palm Development on Women in Pomio, East New Britain Province, Papua New Guinea <https://core.ac.uk/download/pdf/35469649.pdf>
- 195 Mongabay/Cannon, J. (2020). Gender-based violence shakes communities in the wake of forest loss <https://news.mongabay.com/2020/05/gender-based-violence-shakes-communities-in-the-wake-of-forest-loss/>
- 196 The World Bank (2013). Women in Papua New Guinea to Play Stronger Role in Agriculture <https://www.worldbank.org/en/news/feature/2013/09/16/women-in-papua-new-guinea-to-play-stronger-role-in-agriculture>
- 197 Mikhailovich, K., Pamphilon, B., Chambers, B., Simeon, L., and J. R. Zapata (2016). Exploring the lives of women smallholder farmers in Papua New Guinea through a collaborative mixed methods approach; Cogent Social Sciences <https://www.tandfonline.com/doi/full/10.1080/23311886.2016.1143328>
- 198 The World Bank (undated). Water Supply and Sanitation Development Project (P155087) <http://documents1.worldbank.org/curated/en/784941468064130050/pdf/PID-Print-P155087-10-12-2015-1444702535073.pdf>
- 199 The World Bank (2018). Papua New Guinea clean water access to end the walk for water for women and girls <https://www.worldbank.org/en/news/feature/2018/03/20/papua-new-guinea-clean-water-access-to-end-the-walk-for-water-for-women-and-girls>
- 200 Notice for registration of charge on file with Global Witness.
- 201 Global Witness (2017). Stained Trade: how U.S. imports of exotic flooring risk driving the theft of indigenous land and deforestation in Papua New Guinea. <https://www.globalwitness.org/en/campaigns/forests/stained-trade/>
- 202 Kina Securities Ltd (2020). Investor Centre <https://investors.kinabank.com.pg/Investors/?page=company-history>
- 203 Ibid.
- 204 OCBC (2021). Group Business Overview <https://www.ocbc.com/group/about-us/group-business>
- 205 OCBC (2021). Being environmentally and socially responsible <https://www.ocbc.com/group/sustainability/sustainability-framework/environmentally-and-socially-responsible.page>
- 206 Ibid.
- 207 Ibid.
- 208 OCBC (undated). OCBC's ESG Risk Assessment Process <https://www.ocbc.com/iwov-resources/sg/ocbc/gbc/pdf/sustainability/ocbc%20esg%20risk%20assessment%20process.pdf>
- 209 RHB Bank (2021). Group Corporate Structure https://www.rhbgroup.com/files/others/about-us/RHB%20Bank_Grp%20Corp%20Structure.pdf
- 210 RHB Bank (2020). Building a sustainable future: our approach to sustainability https://www.rhbgroup.com/files/others/sustainability/RHB_Our_Approach_to_Sustainability_Mar_2020_v3_1_.pdf
- 211 Ibid.
- 212 RHB Bank Berhad and OCBC Bank shareholder reports accessed via Refinitiv, June 2021
- 213 Global Witness (2019). Money to Burn: how iconic banks and investors fund the destruction of the world's largest rainforests <https://www.globalwitness.org/en/campaigns/forests/money-to-burn-how-iconic-banks-and-investors-fund-the-destruction-of-the-worlds-largest-rainforests/>
- 214 Global Witness (2020). Beef, Banks and the Brazilian Amazon <https://www.globalwitness.org/en/campaigns/forests/beef-banks-and-brazilian-amazon/>
- 215 BlackRock (2021). BlackRock Investment Stewardship Global Principles <https://www.blackrock.com/corporate/literature/fact-sheet/blk-responsible-investment-engprinciples-global.pdf>
- 216 Norges Bank Investment Management (2021). Climate change <https://www.nbim.no/en/the-fund/responsible-investment/principles/expectations-to-companies/climate-change/>
- 217 Amazon Watch (2020). Complicity in Destruction <https://amazonwatch.org/assets/files/2020-complicity-in-destruction-3.pdf>
- 218 Norges Bank Investment Management (2020). Responsible Investment Government Pension Fund Global https://www.nbim.no/contentassets/aaa1c4c4557e4619bd8345db022e981e/spu_responsible-investments-2019_web.pdf
- 219 BSP Financial Group Limited (2021). BSP shareholders approve company name change to BSP Financial Group Limited <https://www.bsp.com.pg/about-us/media-centre/news-announcements/bsp-shareholders-approve-company-name-change-to-bsp-financial-group-limited/>
- 220 PNG security interest # 1003795383, on file with Global Witness.
- 221 BSP shareholder report accessed via Refinitiv, June 2021.
- 222 International Finance Corporation (2021). About IFC https://www.ifc.org/wps/wcm/connect/corp_ext_content/ifc_external_corporate_site/about+ifc_new
- 223 PNG Sustainable Development Program Limited (undated). Our Focus <https://www.pngsdp.org/>
- 224 FTI Consulting (2019). Illicit Tobacco in Papua New Guinea <https://www.jdsupra.com/legalnews/illicit-tobacco-in-papua-new-guinea-81981/>

- 225 Pacific Islands Report (2014). Smuggling Between PNG, Indonesia Becoming 'Lucrative' <http://www.pireport.org/articles/2014/04/22/smuggling-between-png-indonesia-becoming-%E2%80%98lucrative%E2%80%99>
- 226 The Guardian (2021). From a forest in Papua New Guinea to a floor in Sydney how China is getting rich off Pacific timber <https://www.theguardian.com/world/2021/jun/01/from-a-forest-in-papua-new-guinea-to-a-floor-in-sydney-how-china-is-getting-rich-off-pacific-timber>
- 227 PNGi Forest Portal (2020). Retrieved June 2021 from <https://pngiforests.org>
- 228 Ibid.
- 229 Chain Reaction Research (2019). The Chain: Bewani Oil Palm Plantation Divestment Increases Risks of Continued Deforestation in Palm Oil Supply Chains <https://chainreactionresearch.com/the-chain-bewani-oil-palm-plantation-divestment-increases-risks-of-continued-deforestation-in-palm-oil-supply-chains/>
- 230 Bewani Oil Palm Plantation Ltd information accessed via the Papua New Guinea Investment Promotion Authority.
- 231 Singh, U. (2018). Company owned by Malaysians clearing PNG forests <https://www.malaysiakini.com/letters/441422>
- 232 Greenpeace (2018). The final countdown <https://www.greenpeace.org/international/publication/18455/the-final-countdown-forests-indonesia-palm-oil/>
- 233 The Edge Markets (2019). East, Prosper group UMB's largest shareholders <https://www.theedgemarkets.com/article/far-east-prosper-group-umbs-largest-shareholders>
- 234 Far East Holdings Berhad (2020). Company profile <http://cms.fareastholdingsbhd.com/profile>
- 235 CI Resources Ltd (2015). <http://www.ciresources.com.au/index.phtml>
- 236 CI Resources Ltd (2015). Directors <http://www.ciresources.com.au/corporate/directors.phtml>
- 237 Surfing Association of Papua New Guinea (2021). Vanimo <http://www.sapng.com/surf-spots/vanimo>
- 238 The New York Times/Chandler, J. (2018). Papua New Guinea Is Rich in Resources but Poor in Health <https://www.nytimes.com/2018/11/13/world/asia/papua-new-guinea-apec-polio-health-crisis.html>
- 239 Global Witness (2017). Stained Trade: how U.S. imports of exotic flooring risk driving the theft of indigenous land and deforestation in Papua New Guinea. <https://www.globalwitness.org/en/campaigns/forests/stained-trade/>
- 240 Chain Reaction Research (2018). The Chain: Bewani oil palm mill in PNG may supply the palm oil leakage market <https://chainreactionresearch.com/the-chain-bewani-oil-palm-mill-in-png-may-supply-the-palm-oil-leakage-market/>
- 241 Unattributed (2018). Far East Holdings Berhad Monitoring report December 2018 [https://prosper.com.my/pdf/Grievance/\(GV2\)%20Far%20East%20Holdings%20December%202018.pdf](https://prosper.com.my/pdf/Grievance/(GV2)%20Far%20East%20Holdings%20December%202018.pdf)
- 242 Greenpeace (2018). The final countdown <https://www.greenpeace.org/international/publication/18455/the-final-countdown-forests-indonesia-palm-oil/>
- 243 Chain Reaction Research (2019). The Chain: Bewani Oil Palm Plantation Divestment Increases Risks of Continued Deforestation in Palm Oil Supply Chains <https://chainreactionresearch.com/the-chain-bewani-oil-palm-plantation-divestment-increases-risks-of-continued-deforestation-in-palm-oil-supply-chains/>
- 244 Mighty Earth (2019). The worst company in the world <http://www.mightyearth.org/wp-content/uploads/Mighty-Earth-Report-Cargill-The-Worst-Company-in-the-World-July-2019.pdf>
- 245 Unilever (2021). Palm Oil Grievance Tracker https://www.unilever.com/Images/unilever-palm-oil-grievance-tracker_tcm244-530071_en.pdf
- 246 Chain Reaction Research (2019). The Chain: Bewani Oil Palm Plantation Divestment Increases Risks of Continued Deforestation in Palm Oil Supply Chains <https://chainreactionresearch.com/the-chain-bewani-oil-palm-plantation-divestment-increases-risks-of-continued-deforestation-in-palm-oil-supply-chains/>
- 247 PNG Plantations Development information accessed via the PNG Investment Promotion Authority.
- 248 Chain Reaction Research (2019). The Chain: Bewani Oil Palm Plantation Divestment Increases Risks of Continued Deforestation in Palm Oil Supply Chains <https://chainreactionresearch.com/the-chain-bewani-oil-palm-plantation-divestment-increases-risks-of-continued-deforestation-in-palm-oil-supply-chains/>
- 249 Bewani Oil Palm Plantation Limited information accessed via the PNG Investment Promotion Authority.
- 250 Bewani Oil Palm Plantation Limited information accessed via the PNG Investment Promotion Authority.
- 251 Ocean Paradise Ltd filing accessed via the PNG Investment Promotion Authority.
- 252 Bewani Oil Palm Plantations Ltd (2019). Announcements <https://boppl.com/announcements/>
- 253 Bewani Forest Products shareholders report from the Papua New Guinea Investment Promotion Authority.
- 254 Ocean Paradise Ltd information accessed via the Papua New Guinea Investment Promotion Authority.
- 255 Operations in Plantations – Boppl <https://boppl.com/company-background/operations-plantations/>
- 256 Bewani Forest Products shareholders report accessed via the PNG Investment Promotion Authority.
- 257 Ocean Paradise Sdn. Bhd. corporate information report accessed via the Malaysian Companies Commission.
- 258 Prime Horizon Limited information accessed via the PNG Investment Promotion Authority.
- 259 Tago Maritime Services information accessed via the PNG Investment Promotion Authority.
- 260 Tago Maritime Services Ltd Foreign Enterprise Certificate accessed via the PNG Investment Promotion Authority.
- 261 The Hershey Company (2020). July through December 2020 Palm Oil Traceability - Mill listing <https://www.thehersheycompany.com/content/dam/The%20Hershey%20Company%20Palm%20Mill%20List.pdf>
- 262 Cargill (2020). Cargill Global Mill List ☒ Quarter 4, 2020 <https://www.cargill.com/doc/1432132443976/cargill-palm-mill-list.pdf>
- 263 Colgate-Palmolive (2020). https://www.colgatepalmolive.com/content/dam/cp-sites/corporate/corporate/en_us/corp/locale-assets/pdf/colgate-palmolive-list-of-mills-2020h1.pdf
- 264 Danone (2019). Palm oil suppliers & mills list <https://www.danone.com/content/dam/danone-corp/danone-com/investors/en-sustainability/en-policies/business-for-inclusive-growth/supply-chain/danone-palm-oil-suppliers-mills-list-update-2019-h2.pdf>
- 265 Kellogg (2019). Mill list 2019 <http://crrreport.kelloggcompany.com/download/Kellogg+Mill+List+2019.pdf>
- 266 Nestlé (2019). Nestlé supply chain disclosure: palm oil <https://www.nestle.com/sites/default/files/2019-08/supply-chain-disclosure-palm-oil.pdf>
- 267 RB (2020). RB overall master mill list 2020 https://www.reckitt.com/media/8883/rb-overall-master-mill-list-2020_external-final.pdf
- 268 RB (undated). Our Brands <https://www.reckitt.com/brands/>
- 269 Consumer Goods Forum (2021). Who We Are <https://www.theconsumergoodsforum.com/who-we-are/our-members/>
- 270 Global Witness (2020). A letter to the Consumer Goods Forum <https://www.globalwitness.org/en/press-releases/a-letter-to-the-consumer-goods-forum-its-time-to-stop-the-fires-and-deliver-on-no-deforestation-no-peat-no-exploitation-commitments/>
- 271 Ibid.
- 272 PZ Cussons (2020). Discover Brands <https://www.pzcussons.com/brands/discover-brands/>
- 273 PZ Cussons (2020). PZ Cussons Palm Oil Mill List – December 2020 https://www.pzcussons.com/wp-content/uploads/2020/02/PZC-December-2020-Mill-List-Final-Public-Version_FV.pdf

- 274 Grupo Bimbo (2014). Grupo Bimbo, Largest Bakery in the World, Signs Agreement with Invenery for 100 Percent Renewable Energy for U.S. Operations <https://www.grupobimbo.com/en/press-room/release/grupo-bimbo-largest-bakery-world-signs-agreement-invenery-100-percent-renewable>
- 275 Grupo Bimbo (2019). Mill list on file with Global Witness.
- 276 Mewah Oils Sdn Bhd. Sustainability and traceability report (2019). https://www.neste.com/sites/neste.com/files/attachments/corporate/sustainability/sustainable_supply_chain/traceability_dashboard_attachments_2h2019/mewah_oils_sdn_bhd.pdf; also see Neste (undated). PFAD residue from palm oil refining <https://www.neste.com/products/all-products/raw-materials/pfad-residue-palm-oil-refining>
- 277 Mewah Group (2020). Our company <https://www.mewahgroup.com/>
- 278 Mewah Oils Sdn Bhd. (2020). Year of 2020 CPO Traceability to Mill Declaration Document http://www.mewahgroup.com/upload/Sustainability/MOSB_CPO%20Traceability%20to%20Mill%20Declaration%20Document.pdf and Mewah Oleo Industries Sdn. Bhd. (2020). 2020 CPKO Traceability to Mill Declaration Document http://mewah-oils.com/upload/Sustainability/MOIPG_Imported%20CPKO%20Traceability%20to%20Mill%20Declaration%20Document.pdf
- 279 AAK (undated). Worldwide <https://aak-uk.com/about/worldwide>
- 280 AAK (2021). Mill list <https://www.aak.com/siteassets/sustainability/aak-public-mill-list-april-2021.pdf>
- 281 Stratas Foods LLC (2021). History <https://www.stratasfoods.com/history>
- 282 ADM Stratas (2019). Stratas Palm Oil Supply Chain Traceability July 2019 – September 2019 <https://assets.adm.com/Sustainability/2019-Reports/Stratas-2019-Q3.pdf>
- 283 Cargill (undated). Cargill Global Mill List Q4 Quarter 4, 2020 <https://www.cargill.com/doc/1432132443976/cargill-palm-mill-list.pdf>
- 284 The Business Journals/McCoy, D. (2020). Cargill loses top spot on Forbes private companies list to Koch Industries <https://www.bizjournals.com/twincities/news/2020/11/29/cargill-loses-top-spot-on-forbes-list.html>
- 285 Nestlé (undated). What is Nestlé doing to ensure palm oil is sourced sustainably? <https://www.nestle.com/ask-nestle/environment/answers/palm-oil-sourcing>
- 286 Food Navigator/Southy, F. (2019) Nestlé and Mondelez respond to Greenpeace palm oil report on fires in Indonesia <https://www.foodnavigator.com/Article/2019/11/12/Nestle-and-Mondelez-respond-to-Greenpeace-palm-oil-report-on-fires-in-Indonesia>
- 287 The Hershey Company (undated). Palm Oil Facts https://www.thehersheycompany.com/en_us/sustainability/shared-business/palm-oil-facts.html#supply-chain-traceability
- 288 The Hershey Company (2020). January through June 2020 Palm Oil Traceability - Mill listing, on file with Global Witness.
- 289 RB (undated). Brands that touch people's lives <https://www.reckitt.com/brands/>
- 290 RB (2020). RB overall master mill list 2020 https://www.reckitt.com/media/8883/rb-overall-master-mill-list-2020_external-final.pdf
- 291 RB (2019). Protecting ecosystems across our value chain <https://www.rb.com/media/5389/protecting-ecosystems-in-our-value-chain.pdf>
- 292 Ibid.
- 293 AAK (2021). Mill list <https://www.aak.com/siteassets/sustainability/aak-public-mill-list-april-2021.pdf> <https://www.aak.com/contentassets/a5bb91b203604ee2bae695050414fd15/aak-public-mill-list-sept-2020.pdf>
- 294 AAK (undated). Better sourcing of palm <https://www.aak.com/sustainability/responsible-sourcing/responsible-sourcing-of-palm/>
- 295 AAK (2018). AAK group policy: sustainable palm oil <https://www.aak.com/siteassets/sustainability/policies-and-codes/aak-group-policy-sustainable-palm-oil.pdf>
- 296 Chain Reaction Research (2019). AAK lags in implementation of NDPE best practices <https://chainreactionresearch.com/report/aak-lags-in-implementation-of-ndpe-best-practices/>
- 297 Mighty Earth (2019). The worst company in the world <http://www.mightyearth.org/wp-content/uploads/Mighty-Earth-Report-Cargill-The-Worst-Company-in-the-World-July-2019.pdf>
- 298 Rainforest Action Network (2010). Cargill's problem with palm oil: a burning threat in Borneo https://www.ran.org/wp-content/uploads/2018/06/cargills_problems_with_palm_oil_low.pdf
- 299 Cargill (2019). Cargill policy on sustainable palm oil <https://www.cargill.com/doc/1432076149492/palm-oil-policy-statement-pdf.pdf>
- 300 Mewah Group (2006). About us <https://mewahgroup.com/history.html>
- 301 Mewah Oils Sdn Bhd. (2020). Year of 2020 CPO Traceability to Mill Declaration Document http://www.mewahgroup.com/upload/Sustainability/MOSB_CPO%20Traceability%20to%20Mill%20Declaration%20Document.pdf and Mewah Oleo Industries Sdn. Bhd. (2020). 2020 CPKO Traceability to Mill Declaration Document http://mewah-oils.com/upload/Sustainability/MOIPG_Imported%20CPKO%20Traceability%20to%20Mill%20Declaration%20Document.pdf
- 302 Mewah Group (undated). Sustainable palm oil policy <http://www.mewahgroup.com/upload/Sustainability/Mewah%20Group%20Sustainability%20Palm%20Oil%20Policy.pdf>
- 303 Mewah Group (2006). About us <https://mewahgroup.com/history.html>
- 304 Mewah Oils Sdn Bhd. Sustainability and traceability report (2019). https://www.neste.com/sites/neste.com/files/attachments/corporate/sustainability/sustainable_supply_chain/traceability_dashboard_attachments_2h2019/mewah_oils_sdn_bhd.pdf
- 305 Neste (undated). PFAD residue from palm oil refining <https://www.neste.com/products/all-products/raw-materials/pfad-residue-palm-oil-refining>
- 306 Ibid.
- 307 Neste (undated). Supplier requirements <https://www.neste.com/sustainability/sustainable-supply-chain/supplier-requirements>
- 308 Neste (undated). Protecting biodiversity and forests <https://www.neste.com/sustainability/environment/protecting-biodiversity-and-forests>
- 309 Neste (undated). Neste Responsible Sourcing (Principle) https://www.neste.com/sites/neste.com/files/attachments/corporate/sustainability/managing_sustainability/neste_responsible_sourcing_principle_0.pdf
- 310 Colgate-Palmolive (2020). https://www.colgatepalmolive.com/content/dam/cp-sites/corporate/corporate/en_us/corp/locale-assets/pdf/colgate-palmolive-list-of-mills-2020h1.pdf
- 311 Statista (2021). Brands of toothpaste ranked by number of users in Great Britain from 2018 to 2020 <https://www.statista.com/statistics/304759/leading-brands-of-toothpaste-in-the-uk/>
- 312 Colgate-Palmolive (2020). CL Investor Presentation <https://investor.colgatepalmolive.com/static-files/a65490ac-2442-41e3-8751-e18a1471bd92>
- 313 Earthworm Foundation (undated). Member Handbook: A guide to working with Earthworm Foundation <https://www.earthworm.org/uploads/files/earthworm-member-handbook.pdf>
- 314 Earthworm Foundation (2019). Deeper deforestation insights pave the way for accelerating the fight against deforestation and call for greater company action - Earthworm <https://www.earthworm.org/news-stories/earthworm-foundation-deeper-deforestation-insights-pave-the-way-for-accelerating-the-fight-against-deforestation-and-call-for-greater-company-action>
- 315 See for instance <https://www.earthworm.org/members/colgate-palmolive>, <https://www.earthworm.org/members/nestle> and <https://www.earthworm.org/members/grupo-bimbo-1>
- 316 Earthworm Foundation (undated). Member Handbook: A guide to working with Earthworm Foundation <https://www.earthworm.org/uploads/files/earthworm-member-handbook.pdf>
- 317 Companies' membership dates are listed on their individual pages on Earthworm's website, e.g. <https://www.earthworm.org/members/hersheys>
- 318 Customs documents on file with Global Witness
- 319 Chain Reaction Research (2018). The Chain: Bewani oil palm mill in PNG may supply the palm oil leakage market <https://chainreactionresearch.com/the-chain-bewani-oil-palm-mill-in-png-may-supply-the-palm-oil-leakage-market/>
- 320 GS Global (2018). CEO's message <http://www.gsgcorp.com/En/Business/Greeting.aspx>
- 321 GS Global (undated). Investor Relations - Financial Statements <http://www.gsgcorp.com/En/IrInfo/FinancialInfo5Years.aspx>

**FIND THE FACTS
EXPOSE THE STORY
CHANGE THE SYSTEM**

Challenging abuses of power to protect human rights and secure the future of our planet.

globalwitness.org

ISBN: 978-1-911606-57-4
October 2021

Global Witness is a company limited by guarantee
and incorporated in England (No.2871809)

Global Witness 2021