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Several Large Indonesian Palm Oil Companies Also Have Risky Mining Businesses

August 2021

Indonesia is among the world's largest mining countries. It is also a country of conglomerate companies with interests in various businesses, including deforestation-related sectors such as oil palm, industrial trees and mining. This report aims to shed a light on overlapping company groups in the Indonesian palm oil and mining sectors. Some large palm oil companies, with leading fast-moving consumer goods companies (FMCGs) as their customer, may also have mining businesses that come with large environmental and social risks.

Key findings:

- Indonesia is the world's largest coal exporter, and it has the largest nickel production. Bauxite, copper, tin and gold are also main mining products.
- Mining in Indonesia comes with large environmental risks. The environmental and related social risks are tied to climate change due to the mining and burning of coal, managing toxic leftovers of mining and factories, the mining impact itself on forests and communities, flooding and landslides, abandoned mining pits, and the risk of worsening disasters.
- Mining companies and the Indonesian government are not transparent about mining risks. The approval of both the controversial 2020 Mining Law Amendment and Omnibus Law has decreased transparency for the public. Companies rarely account for how they have identified, prevented and mitigated adverse impacts of their mining operations.
- There is a substantial overlap in company groups conducting mining and/or palm oil businesses. Of the 10 largest oil palm growing companies in Indonesia, at least six also have mining businesses. Of the 10 largest coal mining company groups, at least five also have palm oil businesses. Thirteen groups, mostly conglomerates, were found to have large mining as well as palm oil businesses. The groups are listed with brackets for their palm oil business: Sinar Mas (Golden Agri-Resources), Keswick family (Astra Agro Lestari), Harita Group (Bumitama), Salim group (Indofood Agri Resources), KPN Corp (KPN/GAMA Plantation), Bakrie group (Bakrie Sumatera Plantations), Adaro Energy, Indika Energy (Teladan Prima Agro), the Indonesian government (PTPN), LG group, Rachmat family (Triputra Agro Persada), Chairil family (Palma Serasih) and Kayan Patria Pratama.
- Mining operations of conglomerates that have NDPE palm plantations do create reputational and financial risk for FMCGs and financers. Financiers of plantations and FMCGs, like Unilever, Nestlé, PepsiCo and P&G, could engage on ESG issues like deforestation by conglomerates.

Indonesia is among the world's largest mining countries

Indonesia ranks among the top global producers of coal, nickel, bauxite, tin and gold. In some Indonesian regions, mining is among the main land uses. In 2020, mining contributed <u>4.3 percent</u> to Indonesia's Gross Domestic Product, climbing to over 5 percent over the first half of 2021. The mining of coal, for export and internal use, is the main product.

Rankings

For coal, nickel, bauxite, tin and gold, Indonesia's position in the world is as follows:

- Of all countries in the world, only China and India <u>produced more coal</u> than Indonesia in 2020. Indonesia's coal mining production amounted to 561 million tonnes in 2020. It was the world's <u>largest</u> <u>exporter</u> of coal.
- It is the world's largest producer of nickel. With 760,000 tonnes, it accounted for 30 percent of world production in 2020. It is estimated that Indonesia will account for <u>45 percent</u> of global mining supply in 2030. Nickel is in high demand, especially due to batteries needed for the electrification of passenger vehicles.
- It is the world's fifth-largest producer of bauxite. With 23 million tonnes, it accounted for 6 percent of world production in 2020.
- It is the world's second largest producer of tin. With 66,000 tonnes, it accounted for 24 percent of world production in 2020.
- It produced 130 tonnes of gold in 2020, or 4 percent of world production.
- It is a large exporter of copper ore from the Grasberg mine in Papua and the Batu Hijau mine on Sumbawa Island of West Nusa Tenggara. The government's announced a ban on export of unrefined minerals from 2023 has led to <u>investment plans</u> for copper smelters on Java and Sumbawa island.

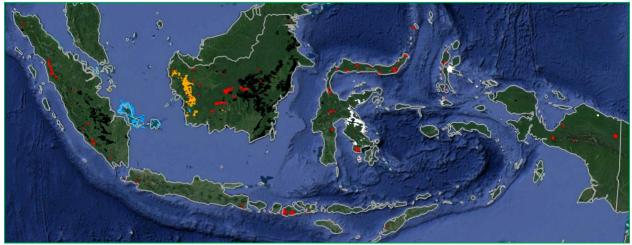
Land use for mining in Indonesia

Indonesia's preliminary mining permits amount to 9.1 million hectares for coal, gold, tin, nickel and bauxite. For comparison, Indonesia has about 15 million hectares of <u>planted oil palm trees</u> and about 5 million hectares of planted industrial trees. The mining permits amount to 4.6 million hectares for coal, 1.7 million hectares for gold, 1.0 million hectares for tin, 0.9 million hectares for nickel and 0.9 million hectares for bauxite. Not all these preliminary mining permits will be materialized, and eventually, the operational permits are often for smaller areas. The mining-affected area likely has the size of one to two million hectares (official figures are not available). In some Indonesian regions mining is among the main land uses.

The figure below provides an overview of the locations of Indonesia's preliminary mining permits for coal, gold, nickel, bauxite and tin. Coal mining concessions (marked in black) are mainly located in the eastern part of Kalimantan and to a lesser extent in Sumatra. Gold mining concessions (marked in red) are spread all over Indonesia. Nickel concessions (marked in white) are mainly in Sulawesi and Maluku. Bauxite concessions (marked in yellow) are predominant in West Kalimantan province. Tin mining concessions (marked in blue) are mainly located in Bangka Belitung province, off the southeast coast of Sumatra.



Figure 1: Mining concessions for coal, gold, nickel, tin and bauxite in Indonesia.



Coal: Indonesia's main mining product

Indonesia's coal production stood at <u>560.7 million tonnes</u> in 2020, accounting for nearly 43 percent of its Gross Domestic Product (GDP) from mining. The main mining provinces were East Kalimantan (48 percent), South Kalimantan (32 percent), South Sumatra (9 percent) and North Kalimantan (4 percent). Indonesia <u>exported</u> 407 million tonnes of coal in 2020, or 73 percent of its production. Most were <u>exported</u> to China (31 percent), followed by India (24 percent). The Philippines, Japan, Malaysia and South Korea each accounted for some six or seven percent of the exports. The <u>value</u> of all coal exports amounted to USD 16.4 billion. Major <u>domestic coal consumers</u> are coal-fired power plants (85 percent of domestic coal use) and the cement industry (12 percent of domestic coal use). Coal accounted for 50.7 percent of the <u>electricity generation capacity</u> in Indonesia in 2019.

Mining in Indonesia comes with large environmental and related social risks

The environmental and related social risks of Indonesia's mining sector are various and often interlinked. Mining has a unique risk profile. For Indonesia, a major risk is the mining and burning of coal, causing global climate change. Another risk is specifically how toxic leftovers of mining and further processing are managed. Mining itself may also affect river ecosystems, cause deforestation, flooding, landslides, and bring communities into gloom. Children drown in abandoned mining sites. Rehabilitation of these sites may not be enforced. Indonesia has large risks of earthquakes, tsunamis, landslides and floods.

Below, the environmental risks of Indonesia's mining sector are described more in length:

- Coal is an energy source that, when burned, leads to enormous CO₂-emissions and therefore **climate change.** Coal mining companies facilitate or even encourage the use of coal. Some large coal mining companies in Indonesia also have their own coal power plants and/or cement and steel industries.
- Mining may cause deforestation, and roads built to the mining sites also disrupt ecosystems and open up the area for deforestation-related activities. Mining's impact on deforestation is however generally lower than the impact of large-scale monoculture plantations. The Indonesian central government has also <u>limited</u> the size of areas where new mining activities are allowed in designated forestland, as a measure to curb deforestation.
- Over the last few years, several <u>NGOs</u> and <u>researchers</u> have reported about the problem of abandoned mining pits, often citing East Kalimantan as the main example. There are <u>around 1,700</u> abandoned pits in this coal mining province. Many of them fill up with rainwater. Since 2011, <u>36</u>

people, mostly children, drowned in these pits in East Kalimantan. Companies are obliged to restore mining areas to their original state once the mining operations have finished. In practice, many companies <u>do not deposit</u> post-mining fund guarantees. The reclamation fund itself lacks transparency. There is <u>very limited room</u> for the public to monitor reclamation, and the system is vulnerable to corruption. The Indonesian NGO Mining Advocacy Network (Jatam) has estimated that, across Indonesia, <u>at least 168 people</u> have died after falling into abandoned mining pits from 2014-2020.

- The pollution of natural river systems is another problem of mining. Mining and abandoned mining pits may render the water of rivers unusable for farmers, fishermen and as drinking water for communities. Toxic leftovers of mining and further processing are another risk. The massive pollution legacy of the Grasberg mine (one of the world's largest gold and copper mines) in Papua is only one example. For many years, the Grasberg mine discharged enormous amounts of tailings (the refuse material resulting from processing ore) directly into a natural river system. The large Batu Hijau gold and copper mine in West Nusa Tenggara still disposes of the mining waste in the ocean. In February 2021, Indonesia announced that it will not issue new permits that allows disposal of mining waste into the ocean, a practice that was planned by new nickel smelters in Sulawesi and Maluku. The companies now have to contain the waste on land, which also creates environmental risks. Another critical environmental risk for water systems is acid mine drainage (AMD). AMD is the outflow of acidic water from metal or coal mines, which may lead to considerable and long-lasting pollution of groundwater and water systems.
- Mining operations can also worsen disasters, especially when the operations are located in a disasterrisk area. In an April 2021 preliminary report called <u>Inviting Disasters</u>, the authors of Jatam, Trend Asia, and the NGO-coalition #BersihkanIndonesia (Clean Up Indonesia) found multiple mining operations located in risk areas for earthquakes, tsunamis, landslides and floods. Their findings were that 131 mining concessions are in earthquake risk areas, 2,104 mining concessions are in high-risk areas for flooding, and 744 mining concessions are located in high-risk landslide areas.
- South Kalimantan province experienced severe floods due to <u>overflowing rivers</u> in early January 2021. The humanitarian organization <u>Indonesian Red Cross</u> noted that the floods took the lives of 46 people, and that about 60,000 people had to be brought to evacuation centers. Environmental organisations, such as Jatam, Walhi and Greenpeace, pointed to the presently dominating oil palm and mining operations in the area as contributing to the floods. The issues raised by the NGOs included sedimentation in rivers, the loss of watershed areas, and the lack of (water absorbing) forests. The Indonesian government <u>attributed</u> the disaster to weather anomaly, yet it also took some overdue <u>sustainability measures</u> on mining companies. The city of <u>Samarinda</u>, East Kalimantan's provincial capital, also has experienced many floods related to deforestation and coal mining.
- **Illegal mining**, often for gold, is practiced on a <u>large scale</u> throughout Indonesia, causing landslides, <u>fatal accidents</u>, forest loss, and health problems due to the use of mercury and cyanide by workers.

Mining companies and the Indonesian government are not transparent about

mining risks

Last year's approval by Indonesia's parliament of the 2020 Mining Law Amendment and the Omnibus Law has decreased transparency to the public on mining risks and protects companies against NGOs. The government does not publish information on disaster risks and its efforts for reclamation by companies of abandoned mining pits. Companies provide little information on how they address the human rights risks of their mining operations. On 12 May 2020, the Indonesian parliament <u>approved</u> the 2020 Mining Law Amendment, amending the 2009 Mining Law. Together with the Omnibus Law on Job Creation that was approved later in 2020, the new mining law was the subject of mass protests. The new mining law aimed to provide more certainty for investors, and was especially beneficial for the <u>existing</u> large coal mining companies. In June 2021, the Indonesian NGOs Forum for the Environment (Walhi) and JATAM, together with two victims of mining activities, filed an application for a <u>judicial review</u>, alleging that the new law will lead to unbridled exploitation by a mining industry that already operates with impunity over environmental and social violations. Indeed, the new law is not about getting more control on the environmental and social risks of mining and not about bringing companies to account for misdeeds.

The Omnibus Law that passed parliament in October 2020 has <u>restricted public participation</u> in the environmental decision-making processes. Only those who are directly affected by the impact of business plans or activities, can now engage in the process of an Environmental Impact Assessment (AMDAL). This means that environmental organisations, important in their role of <u>closing information gaps</u> by advocating for communities, are no longer accepted as a party. Access to information has also been curtailed under the Omnibus Law.

The government has not provided a <u>risk profile</u> on how mining may affect disaster-prone Indonesia. <u>Weak</u> <u>supervision and law enforcement</u> have led mining companies to not fulfill their commitments to reclaim mines once the permit has expired.

Coal businesses are often closely connected to politics in Indonesia, including the funding for elections. Presently, Mr. Erick Thohir is Indonesia's <u>Minister of State-Owned Enterprises</u>. He is a brother of Garibaldi Thohir, the CEO of coal giant Adaro Energy that produced 54.8 million tonnes in 2020. Mr. Luhut Pandjaitan is <u>Coordinating Minister for Maritime and Investment Affairs</u>. He owns the coal mining company PT Kutai Energi in Kutai Kartanegara district, East Kalimantan province. It produced <u>2.6 million</u> tonnes of coal in 2020. The <u>entanglement</u> of mining businesses with politics makes it hard to perceive how the government will address the environmental and social impacts of mining.

With regard to companies, the <u>United Nations Guiding Principles on Business and Human Rights</u> emphasize the need to carry out human rights due diligence. Carrying out due diligence means that a company should identify, prevent and mitigate any actual or potential adverse human rights impacts related to their activities. Moreover, a company needs to account for and be transparent about how it addresses the issues. In Indonesia, however, even the larger mining companies provide little public information on how they address the environmental and social risks of their mining operations. Examples on the company groups Jardine Matheson/Astra and Harita show this:

- NGOs and communities have <u>raised concerns</u> over the tailings ponds of the gold mining company PT Agincourt Resources in North Sumatra. There is a risk that after an earthquake its tailings leak into surrounding villages and rivers. PT Agincourt Resources is owned by United Tractors, which is part of Jardine Matheson/Astra. In its sustainability reports <u>2019</u> and <u>2020</u>, the company does not account for whether and how it has addressed the risk.
- In a joint venture with a Chinese company, the Harita Group owns two nickel smelters in North Maluku province: <u>PT Halmahera Jaya Feronikel</u> and <u>PT Halmahera Persada Lygend (HPAL)</u>. Nickel smelters also produce large amounts of tailings. HPAL mentions on <u>its website</u> that it has conducted a Human Rights Risk and Impact Assessment for better understanding the risks and impacts of the project for all stakeholders and to ensure implementation of human rights principles. The assessment is however not available on the website, so the company is not transparent about how it addresses the issues.

On the other nickel smelter, PT Halmahera Jaya Feronikel, no information could be found online with regard to due diligence on human rights.

Out of the 10 largest oil palm growers in Indonesia, six are involved in mining

Three private company groups stand out, because of their huge interests in mining: Sinar Mas, Astra and Harita Group.

The figure below shows the top-10 of company groups having the largest oil palm planted areas in Indonesia, and whether they are present in mining sectors. For four out of the 10 oil palm growers, no information could be found on mining businesses. For two out of the 10, Salim roup and KPN Corp, information could be found on coal/iron and cement businesses, respectively. The four remaining entities are the Indonesian government, Sinar Mas, Astra and the Harita Group. The Indonesian government owns the majority of shares in several mining businesses, such as <u>Bukit Asam, Aneka Tambang, Timah and the Grasberg mine of PT Freeport Indonesia</u>. Sinar Mas, Astra and the Harita Group are private companies. All four entities have extensive mining operations.

Except for the Salim Group that does not want to be compliant with RSPO and NDPE policies, the main oil palm growers are all supplying palm oil to main consumer goods companies, such as Unilever, Nestlé, PepsiCo and Procter & Gamble.

The figures on oil palm planted areas in Indonesia include plasma for smallholders. The planted area figures for <u>Salim Group</u> and <u>Fangiono family</u> are based on the oil palm grower as mentioned in the figure below. These two company groups are alleged/known to have some so-called shadow companies, oil palm growers closely connected to their official business.

Company group	Name as an oil palm grower	Oil palm planted area (ha)	Name as a mining company	Mining sector
Government of Indonesia	PT Perkebunan Nusantara (PTPN)	<u>580,000</u>	Bukit Asam, Aneka Tambang, Timah, PT Freeport Indonesia	Coal, nickel, gold, copper, bauxite, tin, iron
Widjaja family (Sinar Mas)	Golden Agri-Resources	<u>536,000</u>	PT Dian Swastatika Sentosa; PT Berau Coal	Coal
Salim group	Indofood Agri Resources	<u>343,000</u>	Nusantara Berau Coal, various iron mining	Coal, iron
Keswick family (Jardine Matheson/Astra)	Astra Agro Lestari	<u>288,000</u>	United Tractors	Coal, gold
Fangiono family	First Resources	<u>213,000</u>	Not known	Not known
Government of Malaysia	Sime Darby	<u>201,000</u>	Not known	Not known
KPN Corp	KPN Plantation	<u>200,000</u>	PT Cemindo Gemilang, mining cement components	Cement
Gunawan family	Incasi Raya	200,000 (estimate)	Not known	Not known
Wilmar International	Wilmar International	198,000 (estimate)	Not known	Not known
Lim family (Harita Group)	Bumitama Agri	<u>188,000</u>	Harita Nickel, PT Cita Mineral Investindo Tbk (bauxite)	Bauxite, nickel, coal

Figure 2: The main oil palm growers in Indonesia and their mining operations

Sources: Company websites, concession maps Aidenvironment, company registry files.

In the next paragraphs, the operations of Sinar Mas, Astra and Harita Group are described. Sinar Mas is among the largest coal mining company groups in Indonesia. Astra is among the largest coal mining contractors in Indonesia, yet it also has coal and gold mines on its own. The Harita Group is prominently present in the nickel and bauxite mining sectors, and also has interests in some coal mining companies.

wiajaja jamily (Sinar Was)	
Controlling shareholder	Widjaja family
Coal production in 2020	56.7 million tonnes
Coal mining companies	PT Dian Swastatika Sentosa PT Berau Coal
Largest producing mines in 2020	PT Borneo Indobara: <u>30 million tonnes</u> ; Tanah Bumbu, South Kalimantan PT Berau Coal: over <u>23 million tonnes</u> ; Berau, East Kalimantan
Stock exchange	Dian Swastatika Sentosa, Indonesia, ticker DSSA Berau Coal is not listed on a stock exchange

Widjaja family (Sinar Mas)

Sinar Mas' main coal mining companies are the IDX-listed and 60%-owned PT Dian Swastatika Sentosa and the 80%-owned PT Berau Coal. The company does not seem to have other mining interests in Indonesia.

The Sinar Mas company Golden Agri-Resources (GAR) is the largest private <u>palm oil grower</u> in Indonesia with 47 palm oil mills and an oil palm planted area of 536,000 hectares (including plasma smallholders).

GAR is also among the largest palm oil refiners in Indonesia, and it has a NDPE policy. The Sinar Mas company <u>Asia Pulp & Paper (APP)</u> is Indonesia's largest pulp and paper producer.

Sinar Mas' PT Berau Coal cleared at least 1,100 hectares of forests since June 2016, an overlay of satellite imagery with the forest cover map 2016 of the Ministry for Environment and Forestry shows. The deforestation took place at the <u>Binungan block 8</u> of PT Berau Coal.

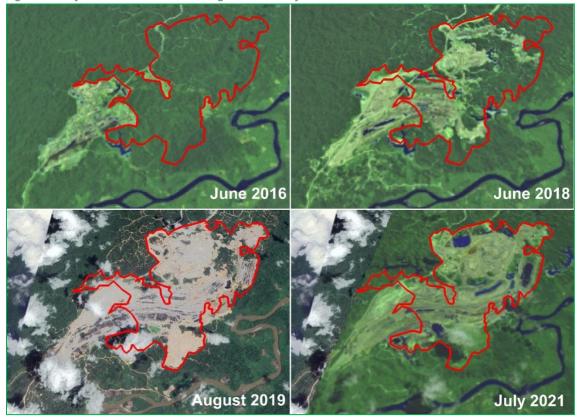


Figure 3: Deforestation at the Binungan block 8 of Sinar Mas' PT Berau Coal

Keswick family (Jardine Matheson/Astra)

Company structure

Jardine Matheson Holdings Ltd., incorporated in Bermuda, is the ultimate parent entity. Jardine Matheson, with a gross revenue of USD 91 billion over 2020, is controlled by the Scottish Keswick family. One of its subsidiary companies is <u>PT Astra International Tbk</u>, which is the direct parent entity of United Tractors and Astra Agro Lestari. United Tractors owns coal and gold mines in Indonesia and is among the largest contractors in the Indonesian coal mining business. Astra Agro Lestari is a large palm oil company. Equities in Astra Agro Lestari and United Tractors can be bought at four stock exchanges: Bermuda, London, Singapore and Jakarta.

Coal mining operations

Controlling shareholder	Keswick family
Coal production in 2020	6.6 million tonnes
Coal mining company	United Tractors
Largest producing mine in 2020	Asmin Bara Bronang: <u>4.1 million tonnes</u> ; Murung Raya and Kapuas, Central Kalimantan
Stock exchange	United Tractors, Indonesia, ticker UNTR

As of 31 December 2020, PT Astra International Tbk owned 59.5 percent of United Tractors' shares. United Tractors' majority-owned mines produced 6.6 million tonnes of coal in 2020. In its larger role as a mining contactor, United Tractors mined 115 million tonnes of coal in 2020. This is 20 percent of Indonesia's total coal production of <u>560.7 million tonnes</u> in 2020. The mining contracting is done by United Tractor's subsidiary <u>PT Pamapersada Nusantara</u>. United Tractors also has a 25%-stake in a consortium that is building a coal power plant of 2,000 MW in Central Java. The new plant will need <u>7.5 million tonnes of coal</u> per year.

Gold mining operations

United Tractors owns two gold mines: PT Agincourt Resources and PT Sumbawa Jutaraya. The mining operations of PT Agincourt Resources are the Martabe mine in North Sumatra. It overlaps with the habitat of the <u>critically endangered</u> Tapanuli orangutan. According to the NGO Mighty Earth, <u>tree cover loss</u> amounted to 100 hectares between January 2016 and December 2020 inside the concession. PT Agincourt Resources sold 320 thousand ounces of gold equivalent in 2020. It is the <u>largest gold mine</u> in Sumatra. Activists have pointed to the <u>potential</u> for tailings from Agincourt's Martabe mine to leak into surrounding villages and rivers if an earthquake hits the seismically active area. PT Sumbawa Jutaraya is located on Sumbawa Island of West Nusa Tenggara province. The permit area of 1,000 hectares is entirely covered with forests. United Tractor's annual report 2020 states that the mining company is in the <u>development</u> phase. Indeed, Planet satellite imagery of June 2021 shows that roads have been built, a camp is set up, and some other initial clearings have taken place.

Palm oil

At the end of 2020, PT Astra International Tbk owned 79.7 percent of <u>Astra Agro Lestari</u>'s shares. Astra Agro Lestari (ticker AALI) is listed on the Indonesian Stock Exchange, has a NDPE policy, and is the thirdlargest private palm oil grower in Indonesia. Its oil palm planted area was 288,000 hectares on 31 December 2020, of which 72,000 hectares were dedicated to plasma smallholders. The company has 32 palm oil mills, 14 palm kernel crusher plants, a refinery complex in North Mamuju district (West Sulawesi province), and a 50%-owned refinery in Dumai (Riau province).

Lim family (Harita Group)

Coal mining operations	
Controlling shareholder	Lim Hariyanto Wijaya Sarwono and family
Coal production in 2020	2.9 million tonnes (51%-share PT Pesona Katulistiwa Nusantara and shares in other mining companies)
Coal mining company	PT Pesona Katulistiwa Nusantara
Largest producing mine in 2020	PT Pesona Katulistiwa Nusantara: <u>3.1 million tonnes</u> ; Bulungan, North Kalimantan
Stock exchange	No

Coal mining operations

Lim Hariyanto Wijaya Sarwono and his family are 51%-owner of PT Pesona Katulistiwa Nusantara. The remainder of the shares is owned by the Rachmat and Subianto families. The family also has shares in the mining companies PT Lanna Harita Indonesia (35 percent) and PT Singlurus Pratama (12 percent). Based on these shares and the production of these mining companies in 2020, another 1.3 million tonnes of coal were allocated to the Harita Group.

Bauxite and nickel mining operations

Harita Group's bauxite mining operations are conducted by PT Cita Mineral Investindo Tbk, which is listed on the Indonesian stock exchange (ticker: CITA). CITA's revenue amounted to <u>IDR 4.34 trillion</u> (equivalent to USD 230 million) in 2020. In 2020, it mined bauxite from permit areas <u>totalling 40,000 hectares</u> in the Ketapang district of West Kalimantan province. CITA sold 8 million tonnes of Metallurgical Grade Bauxite, of which 85 percent was exported and 15 percent was sold to its associate PT Well Harvest Winning Alumina Refinery (WHW). WHW is the only producer of Smelter Grade Alumina (SGA) in Indonesia. SGA is the raw material for aluminium smelters, while Metallurgical Grade Bauxite is the raw material for alumina refineries. The Harita Group has a <u>30%-interest</u> in WHW. WHW produced 1.0 million tonnes of SGA in 2020, yet at the end of 2021 it predicts to have its production capacity increased to 2 million tonnes of SGA per year.

Since 2016, Harita Group's bauxite and nickel mining business has not caused significant deforestation, though obviously an unnatural landscape was created. On Obi Island, South Halmahera district, North Maluku province, the Harita Group has two majority-owned nickel concessions. In addition, a joint venture with the Chinese Lygend Group, it has invested in two nickel smelters: <u>PT Halmahera Jaya Feronikel</u> and <u>PT Halmahera Persada Lygend</u>. The latter is the first electric vehicle battery raw material factory to operate in Indonesia. Both are located inside Harita's concession area. The Harita Group also owns two nickel mining concessions under the name of PT Gema Kreasi Perdana on Wawonii island in Southeast Sulawesi, yet after protests of island residents the mining company <u>suspended</u> its preliminary operations and withdrew its heavy equipment.

Figure 4: Harita Group's nickel concessions and smelters on Obi Island



Source: Planet.com, June 2021, coordinates: 1°32'12.17"S; 127°25'0.70"E.

Palm oil

The palm oil operations of the Harita Group take place under the name Bumitama Agri, which is listed on the Singapore Stock Exchange. Bumitama is estimated to be the tenth largest oil palm grower in Indonesia. It has an oil palm planted area in Indonesia of <u>188,000</u> hectares as of 31 December 2020, of which 55,000 hectares are dedicated to plasma smallholders. Bumitama has a NDPE policy.

Out of the 10 largest coal mining companies in Indonesia, 5 also have palm oil

businesses

The ten largest coal mining company groups accounted for 59 percent of Indonesia's coal production in 2020. Five out of the ten companies also have palm oil businesses. Not all company groups were analysed for ties to deforestation.

The figure below shows the top-10 of largest coal mining companies in Indonesia over 2020, and whether they also have palm oil businesses. Of the five mining companies that also have palm oil businesses, the government of Indonesia and Sinar Mas stand out as being the largest and second-largest oil palm growers of Indonesia. The other three mining companies have medium-large palm oil operations. PT Teladan Resources (related to Indika Energy) has six palm oil mills. Bakrie Sumatera Plantations (like Bumi Resources controlled by the Bakrie group) has five palm oil mills. Adaro Energy has one palm oil mill.



Controlling shareholder	Million tonnes of production in 2020	Palm oil business?
#1 Widjaja family (Sinar Mas)	56.7	Yes
#2 Bakrie group (Bumi Resources)	51.4	Yes
#3 Garibaldi Thohir (Adaro Energy)	54.8	Yes
#4 Agus Lasmono and Wiwoho Basuki Tjokronegoro (Indika Energy)	34.3	Yes
#5 Low Tuck Kwong (Bayan Resources)	30.2	No
#6 Government of Indonesia (Bukit Asam)	24.8	Yes
#7 Tata Power	20.1	No
#8 Banpu Public Company Limited	18.2	No
#9 Suharya family	15.0	No
#10 Gajah Tunggal Group	13.8	No
Total 10 largest coal mining companies	319.3 (59%)	
Other company groups	241.4 (41%)	
Total coal production Indonesia 2020	560.7 (100%)	

Figure 5: Top-ten of coal mining company groups in Indonesia

Source: Annual reports 2020 of IDX listed coal mining companies; Indonesian company registry files; Indonesian Ministry of Energy and Mineral Resources, 2020 Performance Report.

#1 Widjaja family (Sinar Mas)

The coal mining activities of the Sinar Mas group were already covered in this report.

Controlling shareholder	Bakrie group
Coal production in 2020	51.4 million tonnes (PT KPC included for 51%)
Coal mining company	Bumi Resources
Largest producing mine in 2020	PT Kaltim Prima Coal (PT KPC): <u>almost 60 million tonnes</u> ; East Kutai, East Kalimantan; 51%-owned
Stock exchange	Indonesia, ticker for coal BUMI, non-coal BRMS
Palm oil business	Yes

#2 Bakrie group (Bumi Resources)

The Bakrie group is the ultimate parent of Bumi Resources. Bumi Resources is 51%-owner of PT Kaltim Prima Coal (KPC), which is said to be the largest <u>open-pit mine</u> in the world. KPC produced almost 60 million tonnes of coal in 2020. The Indian conglomerate <u>Tata Power</u> holds a 30%-interest in PT Kaltim Prima Coal. The China Investment Corporation holds the other 19 percent.

The Bakrie group is also the ultimate parent of the company <u>Bumi Resource Mineral</u> that has three mining concessions in the early stages of development. Its subsidiaries PT Citra Palu Minerals and PT Gorontalo Minerals have gold mining concessions in Sulawesi. In addition, Bumi Resources Mineral has a 49 percent share in the zinc and lead mining company PT Dairi Prima Mineral, which is located in North Sumatra province. PT Dairi Prima Mineral's plans for a tailings dam have met <u>criticism</u> from international experts, as the design is <u>not considered disaster proof</u> and a serious threat for nearby communities and biodiversity. Bumi Resources Mineral ignores to mention these risks in its annual report of 2019 and 2020.

The palm oil company Bakrie Sumatera Plantations is also part of the Bakrie group. It has five palm oil mills and an <u>oil palm planted area</u> of over 51,000 hectares, spread over the provinces of North Sumatra, West Sumatra, Jambi, and South Kalimantan. The company does have a <u>NDPE</u> policy.

#3 Garibaldi Thohir (Adaro Energy)

Controlling shareholder	Garibaldi Thohir
Coal production in 2020	54.8 million tonnes
Coal mining company	Adaro Energy
Largest producing mine in 2020	PT Adaro Indonesia: <u>47 million tonnes</u> ; Tabalong and Balangan, South Kalimantan
Stock exchange	Adaro Energy, Indonesia, ticker ADRO
Palm oil business	Yes

Mr. Garibaldi Thohir is the CEO and controlling shareholder of the IDX-listed Adaro Energy. Next to Adaro Energy, he and his family hold some shares in other mining companies, such as a 20 percent stake in the mining company PT Bhumi Rantau Energi.

Adaro Energy has one palm oil mill (PT Alam Tri Abadi) and some oil palm plantations adjacent to the mining operations of PT Adaro Indonesia. In addition, Mr. Garibaldi Thohir holds a 12.5 percent share in PT Agro Maju Raya, a holding company of the Triputra Agro Persada-related Amara group.

" A Ngus Lusinono una Williono Busuki Ajoki onegoro (maika Litergy)		
Controlling shareholder	Agus Lasmono Sudwikatmono and Wiwoho Basuki Tjokronegoro	
Coal production in 2020	34.3 million tonnes	
Coal mining company	Indika Energy	
Largest producing mine in 2020	PT Kideco Jaya Agung: <u>33 million tonnes</u> ; Paser, East Kalimantan	
Stock exchange	Indika Energy, Indonesia, ticker INDY	
Palm oil business	Yes	

#4 Agus Lasmono and Wiwoho Basuki Tjokronegoro (Indika Energy)

The main shareholders of Indika Energy as of 31 December 2020 were PT Indika Inti Investindo (37.79 percent; owned by Agus Lasmono Sudwikatmono) and PT Teladan Resources (30.65 percent; owned by Wiwoho Basuki Tjokronegoro and family).

PT Teladan Resources is the majority shareholder of the palm oil company <u>PT Teladan Prima Agro</u> (TPA). TPA has an oil palm planted area of 60,000 hectares (including plasma) and six palm oil mills. They are in the East Kutai, Berau, Paser and Kutai Kartanegara districts of East Kalimantan province.

#5 Low Tuck Kwong (Bayan Resources)

#5 Low Tuck Rivong (Buyun Resources)	
Controlling shareholder	Low Tuck Kwong
Coal production in 2020	30.2 million tonnes
Coal mining company	Bayan Resources
Largest producing mine in 2020	PT Bara Tabang: <u>almost 20 million tonnes</u> ; Kutai Kartanegara, East Kalimantan
Stock exchange	Bayan Resources, Indonesia, ticker BYAN
Palm oil business	No

Mr. Low Tuck Kwong, also known as the <u>coal king</u>, is the majority-shareholder of Bayan Resources. No palm oil interests by Mr. Low Tuck Kwong could be found during the course of creating this report.

<u> </u>		
Controlling shareholder	Government of Indonesia	
Coal production in 2020	24.8 million tonnes	
Coal mining company	Bukit Asam	
Largest producing mine in 2020	PT Tambang Batubara Bukit Asam: <u>24 million tonnes</u> ; Muara Enim and Lahat, South Sumatra	
Stock exchange	Bukit Asam, Indonesia, ticker PTBA	
Palm oil business	Yes	

#6 Government of Indonesia (Bukit Asam)

As of 31 December 2020, Bukit Asam was 65,93%-owned by PT Indonesia Asahan Aluminium (Inalum). Inalum is 100%-owned by the Government of Indonesia, and presently renamed to <u>MIND ID</u> (Mining Industry Indonesia). MIND ID is also the holding company of Aneka Tambang (mainly bauxite, nickel and gold mining), Timah (tin mining) and the <u>Grasberg gold and copper mine</u> in Papua. The Indonesian government is also the largest oil palm grower of Indonesia. PT Perkebunan Nusantara (PTPN) has a planted area of approximately <u>580,000</u> hectares.

Controlling shareholder	Tata group
Coal production in 2020	20.1 million tonnes
Coal mining companies	Tata Power
Largest producing mine in 2020	PT Kaltim Prima Coal: <u>almost 60 million tonnes</u> ; East Kutai, East Kalimantan; 30%-owned
	Baramulti Suksessarana's Antang Gunung Meratus: <u>8.6 million tonnes;</u> Hulu Sungai/Tapin/Banjar, South Kalimantan; 20%-owned
Stock exchange	Baramulti Suksessarana, Indonesia, ticker BSSR The Tata Power Company Limited, India, 500400
Palm oil business	No

#7 Tata group

The Tata group is an Indian multinational conglomerate. In 2019-20, the total revenue of all Tata companies was <u>USD 106 billion</u>. One of Tata's divisions comprises Tata Power. In 2019/2020, Tata Power used <u>19.7 million tonnes of coal</u> in its four coal power plants in India. Most of the coal was sourced from Indonesia, likely from the mining companies in which it has a minority stake. No palm oil interests by the Tata group could be found during the course of this report.

#8 Banpu Public Company Limited (Indo Tambangraya Megah)

Banpu Public Company Limited		
18.2 million tonnes		
Indo Tambangraya Megah		
Indominco Mandiri: <u>8.9 million tonnes</u> , Kutai Kartanegara and East Kutai, East Kalimantan		
Indo Tambangraya Megah, Indonesia, ticker ITMG		
No		

Indo Tambangraya Megah's shares were held for 67.13 percent by the Thailand-registered <u>Banpu Public</u> <u>Company Limited</u> as of 31 December 2020. Banpu had a revenue of USD 2.3 billion in 2020. Its largest shareholder is the Vongkusolkit family with 9.5 percent of the shares. Mr. Chanin Vongkusolkit is the Chairman of the Board of Banpu's Directors. No palm oil interests by the Vongkusolkit family could be found during the course of creating this report.

#9 Suharya family

Controlling shareholder	Suharya family
Coal production in 2020	15.0 million tonnes
Coal mining company	- <u>Baramulti Suksessarana</u> - <u>Mitrabara Adiperdana</u> - Prima Mulia Sarana Sejahtera
Largest producing mine in 2020	BSSR - Antang Gunung Meratus: <u>8.6 million tonnes</u> ; Hulu Sungai (Tengah, Selatan)/Tapin/Banjar, South Kalimantan
Stock exchange	- Baramulti Suksessarana, Indonesia, ticker BSSR - Mitrabara Adiperdana, Indonesia, ticker MBAP
Palm oil business	No

The IDX-listed companies Baramulti Suksessarana and Mitrabara Adiperdana are owned for 50.001 percent and 60 percent by PT Wahana Sentosa Cemerlang, respectively. PT Wahana Sentosa Cemerlang is 70%-owned by Mrs. Ghan Djoe Hiang, who is the widow of Mr. Athanasius Tossin Suharya. The other 30 percent are also owned by members of the Suharya family. No palm oil interests by the Suharya family could be found during the course of creating this report.

#10 Gujun Tunggui Group	
Controlling shareholder	Mr. Syamsul Nursalim and relatives
Coal production in 2020	13.8 million tonnes
Coal mining companies	PT Indexim Coalindo, PT Khotai Makmur Insan Abadi, PT Bukit Baiduri Energi
Largest producing mine in 2020	Indexim Coalindo: 11.8 million tonnes; East Kutai, East Kalimantan
Stock exchange	Not for the coal mining businesses
Palm oil business	No

#10 Gajah Tunggal Group

The Gajah Tunggal Group is often referred as being owned by Mr. Syamsul Nursalim and his family. According to Indonesian company registry files, the mining companies PT Indexim Coalindo, PT Khotai Makmur Insan Abadi and PT Bukit Baiduri Energi are ultimately owned by Cherie Mikim Nursalim and William/Susanto Nursalim, relatives of Mr. Syamsul Nursalim. Together with the Gozali family, the Nursalim family has several other businesses than coal mining. PT Gajah Tunggal Tbk is <u>listed</u> on the Indonesian stock exchange (ticker GJTL). It is among the largest (rubber) tire manufacturers in Indonesia. The Singapore-listed <u>Tuan Sing Holdings</u> is mainly involved in property development. PT <u>Mitra Adiperkasa</u> is a large retail company in Indonesia that is listed on the Indonesian stock exchange (ticker MAPI). Its beneficial owner is Marisa Kolonas, who is related to the Gozali family.

Other company groups with overlapping oil palm and mining businesses

Four more company groups stand out for having at least medium-large mining and oil palm businesses: LG Group, Rachmat family (Triputra Group), Chairil family (Palma Serasih) and Kayan Patria Pratama (KPP) group.

In East and North Kalimantan there are quite some medium-large palm oil growers that are also large coal miners. Examples are Teladan Resources (large shareholder in the coal miner Indika Energy), Palma

Serasih, Kayan Patria Pratama (KPP) group and the Pipit group (owned by Kandi Saputro Kristando + Juliet Kristando). Striking is that none of these companies have NDPE policies, and seldom are an RSPO-member.

LG group

Controlling shareholder	LG group
Coal production in 2020	6.0 million tonnes (based on 60%-ownership PT GAM)
Coal mining company	LX International
Largest producing mine in 2020	PT Ganda Alam Makmur: <u>10.0 million tonnes</u> ; East Kutai, East Kalimantan
Stock exchange	LX International, Korea, ticker 001120

PT Ganda Alam Makmur is 60%-owned by the LG group. The LG group is South Korea's <u>fourth-largest</u> <u>conglomerate</u>. It has recently been restructuring. The existing LG Corp. continues to have its electronics, telecommunications and chemicals units, while other companies are split off into the newly formed <u>LX</u> <u>Holdings</u>. Mining and palm oil operations now reside under LX International, a subsidiary of LX Holdings.

The company's three oil palm plantations and accompanying palm oil mills are all located in Sekadau district of West Kalimantan. The company names are PT Grand Utama Mandiri, PT Parna Agromas and PT Tintin Boyok Sawit Makmur.

Kuchinut junniy (Triputiu Group	
Controlling shareholder	The Rachmat family
Coal production in 2020	Around 3.6 million tonnes
Coal mining company	Triputra Group
Largest producing mines in 2020	PT Adaro Indonesia: <u>47 million tonnes</u> ; Tabalong and Balangan, South Kalimantan; 2.59% share PT Bhumi Rantau Energi: <u>6.2 million tonnes</u> ; Tapin district, South Kalimantan; 20% share
Stock exchange	No

Rachmat family (Triputra Group)

Taking into account its shareholdings in the mining companies, the Rachmat family produced around 3.6 million tonnes of coal in 2020. The family is involved in several coal mining businesses, while not being the majority-owner:

- It has a 20 percent share in the mining company PT Bhumi Rantau Energi that produced 6.2 million tonnes of coal in 2020. The Hasnur Group has a 51%-share.
- It has a 24.5 percent share in the mining company PT Pesona Katulistiwa Nusantara that produced 3.1 million tonnes of coal in 2020. The Harita Group has the 51%-share.
- Mr. Theodore Permadi Rachmat and Mr. Christian Ariano Rachmat are commissioner and director of <u>Adaro Energy</u>, respectively. Together, they owned 2.59 percent of the shares as of 31 December 2020.
- It has a 27.5 percent share in the mining company PT Hamparan Mulya that produced 0.6 million tonnes of coal in 2020.
- It has a 30.8 percent share in the mining group PT Bhakti Energi Persada. PT Bhakti Energi Persada owns seven subsidiary mining companies, yet all of them did not produce coal in 2020.

The Rachmat family has large shares in palm oil companies shared with other families. The palm oil company Triputra Agro Persada (TAP) is majority-owned by the Rachmat and Subianto families. Its CEO is <u>Arif Rachmat</u>. TAP has an oil palm planted area of <u>158,000 hectares</u> and 11 palm oil mills. The Rachmat and Subianto families are also the majority-owner of the palm oil company Amara group that owns two

palm oil mills (one in Aceh, one in South Kalimantan). In addition, Dharma Satya Nusantara (owned by the Rachmat/Oetomo families) has 9 palm oil mills. PT Union Sampoerna Triputra Persada (owned by Rachmat/Sampoerna families) has four palm oil mills.

Mr. Sohat Chairil and his family
Around 3 million tonnes
No umbrella name
Welarco Subur Jaya: <u>3.3 million tonnes</u> ; Kutai Kartanegara, East Kalimantan Multisarana Avindo: <u>2.8 million tonnes</u> ; Kutai Kartanegara, East Kalimantan
No

Chairil family (Palma Serasih)

Mr. Sohat Chairil and his family has shares in the mining companies PT Welarco Subur Jaya, PT Multisarana Avindo, PT Griya Sumber Setya and PT Gerbang Daya Mandiri. Taking into account its shareholdings in the mining companies, Mr. Sohat Chairil and his family produced around 3.0 million tonnes of coal in 2020. Mr. Sohat Chairil and his family are the majority-owners of the palm oil company <u>Palma Serasih</u>, which is listed on the Indonesian stock exchange. As of <u>31 December 2020</u>, Palma Serasih had an oil palm planted area of 35,000 hectares and two palm oil mills, all in East Kalimantan. The company does not have a NDPE policy.

Kay	/an	Pat	ria P	rat	ama	(KPP)	Grou	р	
-									

Controlling shareholder	Lauw Juanda Lesmana and family
Coal production in 2020	2.6 million tonnes
Coal mining company	Kayan Putra Utama Coal
Largest producing mine in 2020	Kayan Putra Utama Coal: <u>2.6 million tonnes</u> ; Malinau, North Kalimantan and Kutai Kartanegara, East Kalimantan
Stock exchange	No

Mr. Lauw Juanda Lesmana is the 51%-owner of PT Kayan Putra Utama Coal. In 2017/2018, he was involved in a corruption case concerning a former regent of Kutai Kartanegara district in East Kalimantan province. Juanda allegedly bribed the regent related to <u>mining permits</u>. The regent was found <u>guilty</u>.

In February 2021, PT Kayan Putra Utama Coal <u>spilled</u> coal-slurry into the Malinau River and other waterways, including the Sesayap River, home for the nearly extinct Irrawaddy dolphin (*Orcaella brevirostris*). The spill forced authorities to cut off water supplies to households for two days. Nearly a thousand dead fish were found floating on the surface, according to residents.

Next to coal mining, the Kayan Patria Pratama group (KPP) has interests in logging, industrial trees, rubber, and palm oil. All its operations are in the East and North Kalimantan provinces. KPP does not have a NDPE policy. Its subsidiary PT Kayan Plantation has started <u>operating</u> a palm oil mill in 2021. KPP has a permit area of 36,000 hectares for the development of oil palm or rubber plantations. Since 2016, the company has cleared 6,800 hectares of forest in these areas. In addition, the company cleared 6,700 hectares of forests in its industrial tree concessions. In total, the Kayan Patria Pratama (KPP) Group cleared 13,500 hectares of forests since 2016 for setting up plantations, making the group a significant contributor to forest loss in Indonesia.

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