Wellington Perspective

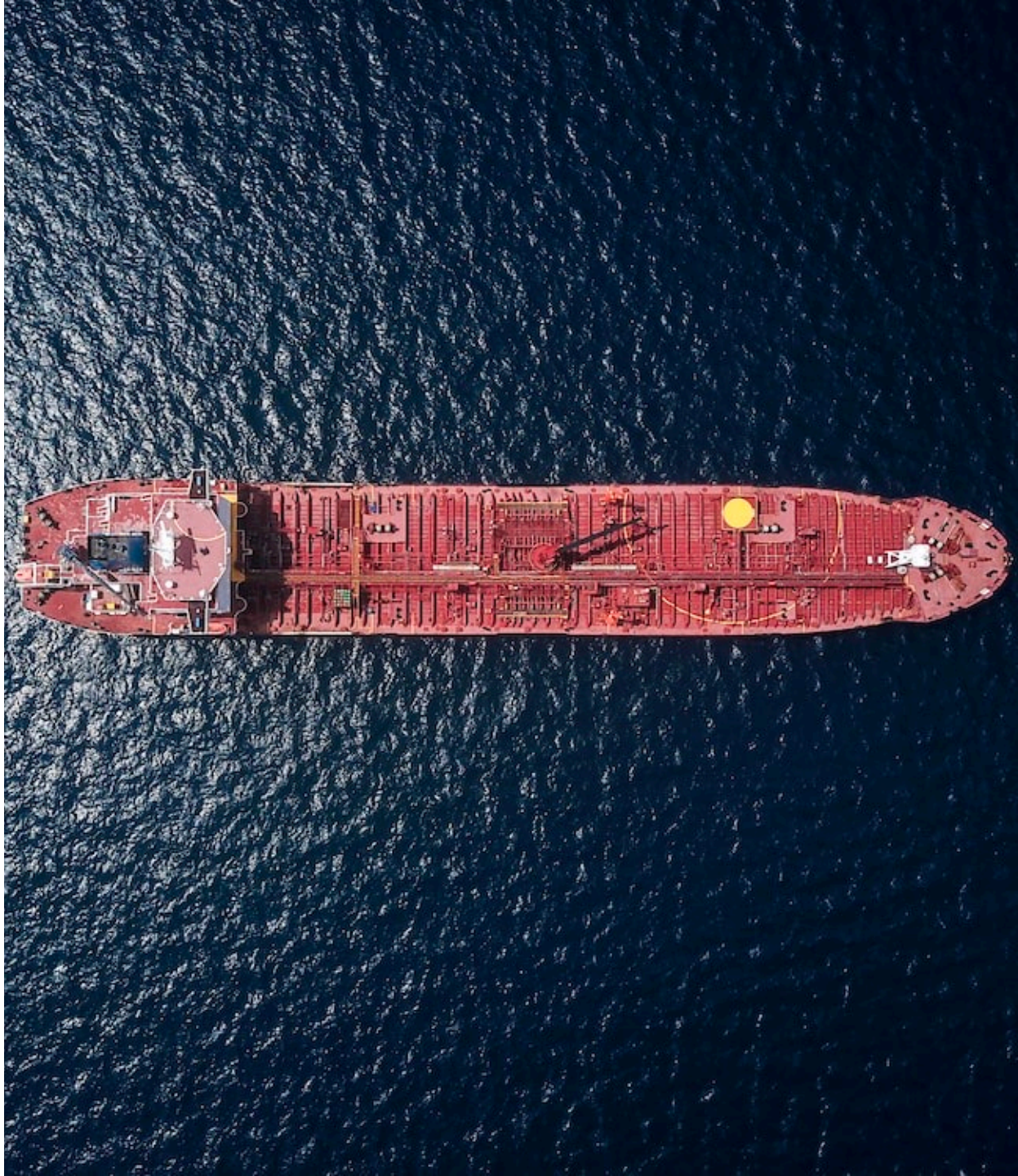
Indonesia: Mining Sector

September 2023



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Industry Overview and Current Trends

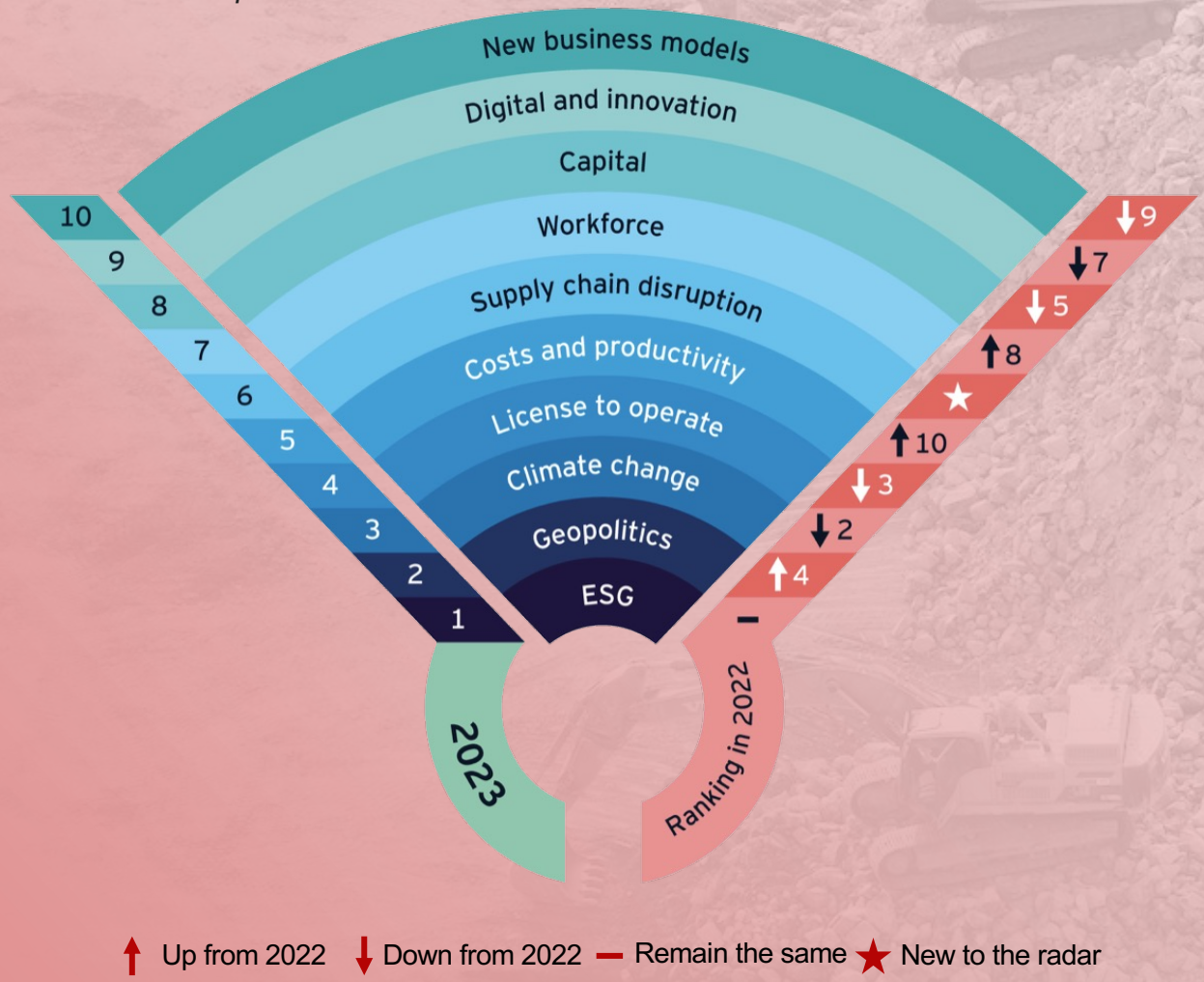


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ESG-compliance is a top priority for Mining and Metal companies in 2023

‘Top 10’ Priorities for Mining Companies

The ‘Top 10’ ranking of risks and opportunities for the Mining and Metals sector in 2023 reflects both the opportunities and challenges that companies face in a rapidly-evolving business landscape.



Key Takeaways

- Geo-political risks have become the second most pressing concern for mining companies - after ESG compliance - due to the continuing global conflicts.
- As underlying inflation continues to escalate, operating costs and productivity levels are now a ‘top-of-mind’ issue for mining companies - in order to sustain output and margin performance
- Supply chain disruptions - precipitated by the COVID-19 pandemic - have become an increasing concern or mining companies as they seek to mitigate the associated cost and risk exposure. .
- Mining companies are increasingly seeking to ‘Go Green’ as they face the challenge of meeting their respective Environmental, Social, and Governance (ESG) targets.
- Exploring renewable energy sources, improving energy efficiency and adopting sustainable mining practices are the primary focus areas for the ‘greening’ of the sector.

Sources:
EY Analysis;

The Mining sector will remain a significant contributor to the Indonesian economy in 2023

Note to Investors

*Key sectors that are expected to exhibit significant growth in 2023 and beyond - aside from Downstream Mining - are **Healthcare** and **Infrastructure Development.***

Sources:
Bank Indonesia; BKPM; ASEAN Briefing.

Indonesia: 2022/23

Economic Outlook

Bank Indonesia (BI) forecasts that the domestic economy will grow in the range of **4.5% to 5.3%** in 2023, with GDP in 2Q-2023 showing an uplift of 5.17% (YoY). The current 'leading indicator' sectors - commodities, infrastructure development, tourism and added-value manufacturing - are each exhibiting positive trends. This expansion marks out Indonesia as one of the fastest-growing economies within the 'Group of 20' (G20).

Indonesia's GDP reached pre-Pandemic levels with a 5.31% growth in 2022, representing a nine-year high. This was driven by buoyant domestic consumption, as well as commodity exports including coal, palm oil, and iron – with the added stimulus of rising global market prices. Indonesia also attained a significant milestone by attracting a record-breaking **USD 43 billion** in Foreign Direct Investment (FDI) funding.

In 2023, the top priority for the Indonesian government is to maintain retail price inflation at **3.0%**. While a decline in global economic activity and a softening of prevailing commodity price levels may exert downward pressure on GDP growth, strong domestic consumption and the continuing demand for commodities will sustain the underlying resilience of the Indonesian economy.

Market Briefing

Downstream Mining Potential

Indonesia possesses vast mineral deposits and is the largest global exporter of tin, palm oil, and thermal coal - in addition to significant exports of nickel, copper, bauxite, rubber, manganese, zinc, and lead. The mining sector plays a critical role in the national economy, contributing >10% of aggregate GDP and supporting overall economic development.
The Grasberg mine, located in Indonesia, is one of the world's largest gold and copper mines, with estimated reserves of 275 Bn. ounces of copper and 14.2 Mn. troy ounces of gold.

Nickel

- Indonesia possesses the largest nickel reserves in the world
- The value of Indonesia's processed nickel exports have surged from USD 1 Bn (2015) to USD 30 Bn (2022). They are projected to contribute c. 50% of the global increase in production in nickel through 202a5.
- Indonesia has set a goal of being one of the 'Top 3' producers of EV batteries in the world by 2027.

Thermal Coal

- Indonesia is the world's third-largest exporter of coal - after China and India.
- In 2022, Indonesia produced 687 million tons of coal – with an export volume of 494 million tons and earnings of c. USD 3 Bn. per month. Major export destinations include China, India, South Korea and Japan.
- The Government is prioritizing the development of the downstream coal industry in Indonesia, which in turn requires significant upfront investment and the deployment of advanced technology.

Indonesia's mineral downstream processing initiatives are progressing at pace

According to Ministry of Energy and Mineral Resource, it is expected that there will be 17 new fully-operating smelters in 2023

*The Government is targeting an increase in the proportion of Downstream production from **30% to 60%** of total mining output by 2025*

Source:
BKPM;
Ministry of Industry;
Ministry of Energy and Mineral Resource;
CNN Indonesia.

Indonesia
Mineral Downstream Processing
Current Focus

Nickel

- EV Batteries
- Aircraft Manufacturing
- Electronic Components
- Construction

- Indonesia is the **world's largest producer of nickel ore**, accounting for approximately 30% of global supply.
- Nickel mining and processing is a significant contributor to the Indonesian economy, accounting for c. 10% of aggregate GDP.
- The Indonesian government has set a target to produce 2.5 million MT tons of refined nickel by 2025, up from around 800,000 MT in 2020.

Bauxite

- Aluminum Processing

- Indonesia is the **world's fifth-largest producer of bauxite**, with an estimated output of 11 million tons in 2021.
- In recent years, the Indonesian government has implemented a ban on the export of unprocessed minerals, including bauxite, in an effort to encourage local processing and value-added downstream processing.
- As a result, Indonesia has seen a rise in investments in alumina refining and aluminium smelting facilities, which are expected to create downstream opportunities and generate economic growth.

Tin

- Food Processing
- Electronic Components

- Indonesia is the **world's second-largest tin producer** - after China.
- The development of downstream tin industries, such as the production of tin alloys and tinplate, is seen as a potential area for growth for the Indonesian mining sector.

Smelter Recap Progress
February 2023

91 **Total Smelters**

48 Fully Operational

43 Under Construction

Fully Operated

- **Nickel** : **38 x** Smelters
- **Iron/Steel** : **6 x** Smelters
- **Cooper** : **2** x Smelters
- **Aluminum** : **4** x Smelters

Cross-industry downstream processing: A key component of President Jokowi's intended legacy

In addition to his focus on infrastructure development, a significant aspect of Jokowi's planned post-Presidential legacy is his unwavering commitment to "Resource Nationalism," which emphasizes the sovereignty and responsible management of all natural resources for the benefit of the nation.



Jokowi's Economic Legacy

- Both the new Capital City - *Ibu Kota Nusantara (IKN)* - in E. Kalimantan and the downstream processing industry programs call for early and sustained foreign investment.
- Over time, supported by domestically-sourced capital injections and diversified foreign investment across the target sectors, any downside risks associated with discrete projects are manageable.

New Capital City (Nusantara)

USD 34 Bn
Investment Needed till 2045

- 80% of financing will come from private sector

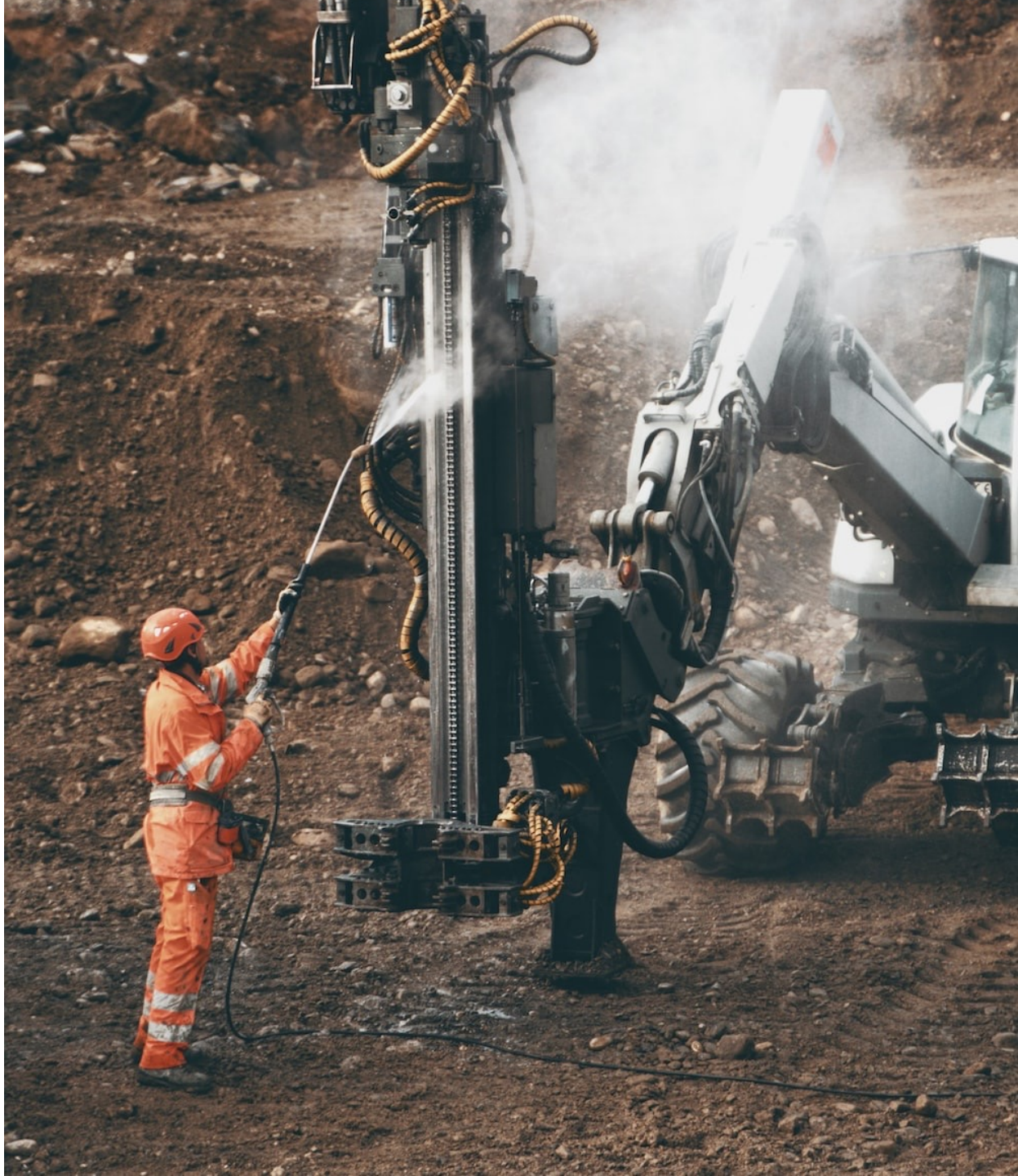
Cross-Industry Downstream Processing

USD 545.3 Bn
Investment Needed till 2040

- USD 431.8 Bn for Minerals and Coal Sectors
- USD 68.1 Bn for Oil and Natural Gas Sectors
- USD 45.4 Bn for Plantation, Marine, Fisheries and Forestry Sectors

Sources: *The Diplomat; Jakarta Globe; Bloomberg; Antara News;*

Risk Factors



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Inherent challenges within the Indonesian Mining Industry

'What Holds the Sector Back !!'

The Mining industry is amongst the most highly-regulated sectors within the Indonesian economy.

Mining operating companies - both domestic and international - are required to adhere strictly to the legal and regulatory framework imposed by the Government.

In turn, this obligation shapes their respective commercial, technical and financial strategies.

Risk Factors

which inhibit the growth trajectory of the Mining sector

Regulatory Uncertainty

Implications

- Difficulties for companies in interpreting and complying with new regulatory framework
- More risk and challenges for company to plan and invest in long term
- Additional cost and operational inefficiency

Infrastructure Readiness

Implications

- Creating higher operating cost
- Difficult to attract new investment
- Environmental degradation due to inadequate waste management policies and procedures

Environmental Challenges

Implications

- Additional resources required for compliance
- Changing requirements in certain product categories due to climate change obligations

Sources:
S&P Global; Pefindo;

Critical Success Factors

enabling Mining companies to prosper

Business Risk Management

- **Cost position** || Managing capex/opex requirements across the production life cycle
- **Diversification** || Ability to diversify product output
- **Operations management** || How company increase efficiency in its operational activities
- **Quality of Reserves/Replacement strategy** || Assessment of the company's probable reserves and associated replacement strategy

Financial Risk Management

- **Financial policy** || Ability to fulfill all financial obligations
- **Capital structure** || Management of liabilities
- **Cash Flow protection and liquidity** || Debt-servicing capability
- **Financial flexibility** || Comprehensive assessment of all financial risks

Indications from Mining and Metal Investment Deals

Case Study:
Prospective Tesla Deals Shanghai/Malaysia

- *Indonesia is still in the early stages of establishing an indigenous electric vehicle (EV) industry and the associated infrastructure/eco-system.*

  This quest is a personal mission for President Jokowi - evidenced by the ongoing discussions being staged with Tesla's CEO Elon Musk.

  The Indonesian Government has set a goal of becoming one of the 'Top 3' global producers of electric vehicle (EV) batteries by 2027.

  Two intermediate targets have been established for 2025 :

  - *Active user base of **400,000 electric four-wheelers** and **1.8 million battery-powered motorbikes***
  - *Export volume of **200,000 EVs** (representing c. 20% of total car exports annually).*

Sources: *BBC Indonesia; Bloomberg; Detik OTO; CNBC*

Despite a succession of high-level meetings and ongoing negotiations, Tesla has yet to finalize any binding agreements with Indonesia

On April 11, 2023, Tesla (TSLA.O) - the electric car company led by Elon Musk – announced a plan to construct a large-scale battery factory in China.

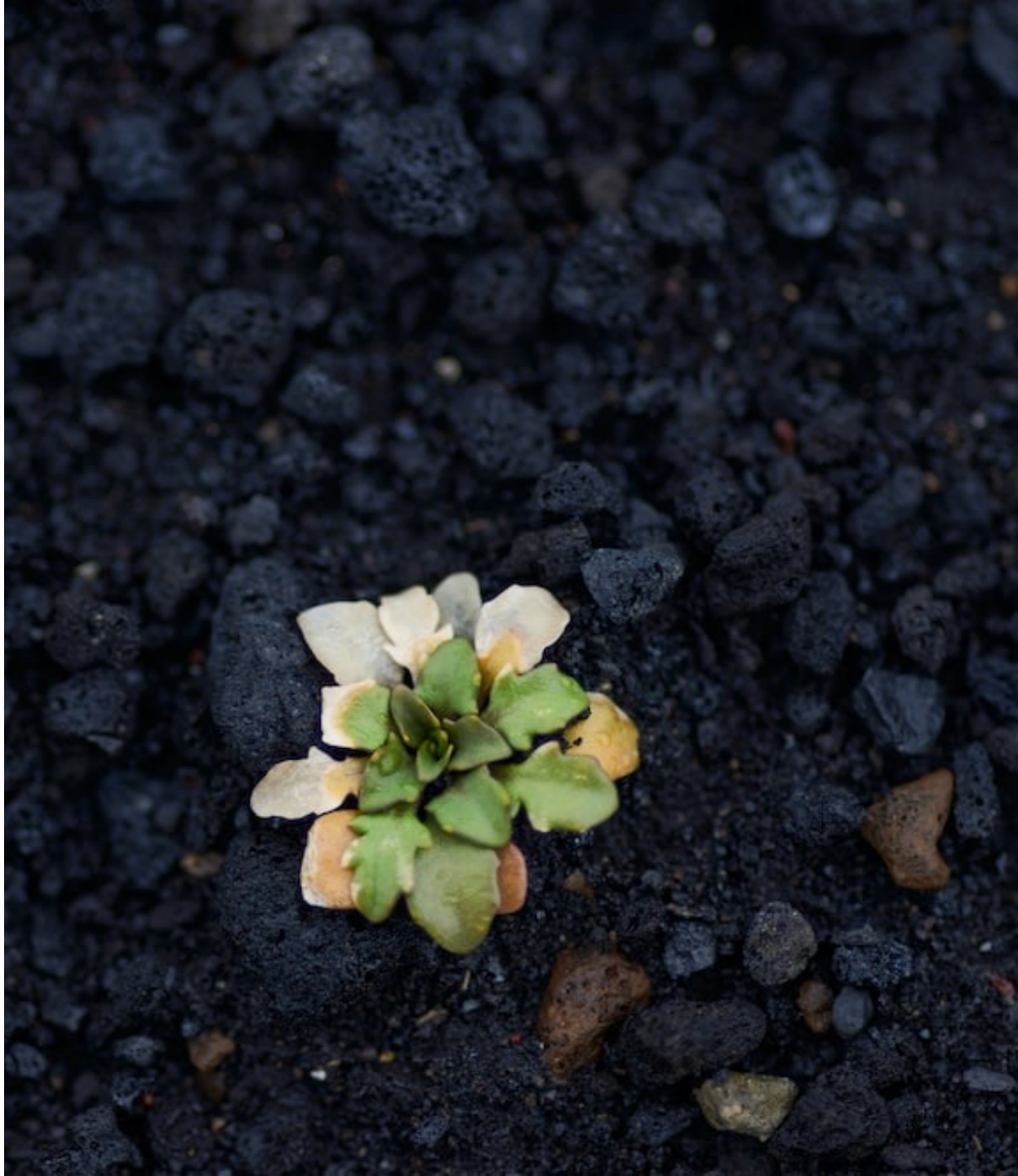
On July 24, 2023, The Malaysian Investment Development Authority declared Tesla's plan to develop an in-country HQ presence, Service Center, Experience Center, and Battery-charging Network ('Supercharger Network').

- With China being the world's leading producer of batteries, Tesla aims to leverage the local supply chain to boost production capacity and to reduce operating costs.
- The business plan for Malaysia does not include the construction of an in-country EV manufacturing plant. As such, Indonesia is still positioned to become Tesla's primary production base in SE Asia.

The Drivers Underlying the Decision of Tesla to Create a Presence in Malaysia

	(1) Market Demand	(2) Access to Suppliers	(3) Government Incentives	(4) Supporting Infrastructure	(5) Ease of Doing Business
China	China is the world's largest market for EVs, with sales expected to continue to grow rapidly in the coming years.	China has a well-developed supply chain for EV components, including batteries, motors, and electronics.	The Chinese government has implemented policies to promote the development of the EV industry and the associated eco-systems.	Shanghai has a well-developed transportation infrastructure, which facilitates cost-effective import and export activity.	China has made stringent efforts to improve the business environment, including streamlining regulatory processes and reducing bureaucracy.
Malaysia	Tesla joins Mercedes, BYD and many leading vehicle manufacturers entering Malaysia to market their EV offerings - reflecting the surge of EV demand in the country.	Tesla has orchestrated a direct sales model whereby the EV vendor is able to sell Shanghai-sourced electric vehicles without any import tariffs or 'Intermediary' mark-ups.	Tesla' is exempted from the requirement to hold a 30% equity stake in a local entity. The Malaysian Government is known to offer such incentives to high-growth enterprises.	The Malaysian Investment Development Authority (MIDA) has approved 58 EV investment projects (valued at USD 5.8 Bn) as a crucial component of their nation-building strategy.	Malaysia is supporting the development of an EV ecosystem through the easing of prior legal/regulatory conditions re employment, company taxation and subsidy allocation.

Regulatory Updates: Impact on Mining Sector



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Indonesia has enacted significant changes to prevailing Mining laws

Indonesia's Mining Law has now been ratified as Law No. 3 (2020), thereby amending Law No. 4 (2009) on Minerals and Coal Mining.

Key Changes

(1) Determination of mining areas

(2) Centralization of authority

(3) Licensing of mining business

(4) Divestment obligations

Fiscal Implications for Mining Companies

Additional levy of 10% on IUPK holder's net profit from the commencement of production activity. This levy will be split between the Central and Regional government, 4% and 6% respectively.

First-generation PKP2B holders are not subject to the existing VAT levies - but are obliged to pay a **Sales Tax (2.5%)** that is based on the prevailing regulation at the point when initial contracts were implemented.

The Corporate Income Tax rate on net taxable profit under the current regime is 22% and will be reduced to 20% from FY2022 onwards. Previously, Corporate Income Tax was set at 45%. However, it was offset with applicable allowance concessions.

Eradication of Exploration Fees that were previously paid to the Central Government **as an incentive** to stimulate exploration programs.

The law provides **greater certainty** on the extension of Mining Licenses (KK/PKP2B) in the form of an IUPK for the continuation of in-country operations (IUPK-CO)

The Mining Companies are obliged to pay Government leasing fees for the use of all goods acquired for coal operations (considered as Stated-owned assets). Meanwhile, the Royalty Rate ranges from 3% to 7% for IUP holders and 13.5% for holders of IUPK and PKP2B licenses.

Source:
Law No. 3 (2020)

i. KK/PKP2B: Contract of Work/Coal Mining Concession Work Agreement
ii. IUP: Mining Business License
iii. IUPK: Special Mining Business License

The new regulation is increasingly a source of concern for industry players

In addition to the significant fiscal implications for mining companies, the regulatory changes have also created two other challenges - namely the potential loss of revenue and increased business uncertainty.

Additional Costs and Potential Loss of Revenue

- **DMO (Domestic Market Obligation)** requires coal producers to sell **25% of their output** domestically at a capped price (USD 70/MT) to PLN as compared to the spot price around USD 400/MT in last year. Failure to meet the 25% quota is penalized with fines at USD 70-80/MT.
  - In 1H 2022, the Government collected IDR 1.83 trillion (USD 128 million) in fines from 240 Mining companies that failed to comply with the country's domestic market obligation (DMO) for coal. The Ministry of Finance projected that the total fines could reach IDR 2.37 tn. by the end of 2022.
- **Additional royalties to government.** While Corporation Tax is reduced, Government royalties have increased such that 80% of taxable income is remitted to the Government (compared to 66.6% under the prior tax legislation).

Increasing Business Uncertainty

- Changes in regulatory frameworks can have a considerable **impact on investment decisions and long-term planning for mining projects.** The presence of a stable and predictable regulatory environment can attract reputable players to the industry and maintain high standards. Conversely, regulatory uncertainty may discourage investment and lead to adverse outcomes for the mining sector.
- **Rent-seeking** behavior by small or illegal mining groups which disregard the law and sustainable mining practices.
  - A number of Mining companies have chosen to pay the applicable fine levies, thereby increasing their coal exports (at higher price levels).

Sources:
Ministry of Energy and Mineral Resource; Jakarta Post.

The New Environmental Legal Framework has significant implications for the Mining sector

The Law requires mining companies to a) carry out Environmental Impact Assessments and b) to secure an Environmental Permit before conducting any mining activities.

Permits

The acquisition of Environmental Permits has been identified as one of the major obstacles facing the mining industry - such as an Environmental Impact Assessment and an Environmental Management Plan

Forestry Permits

Holders of Mining and Non-Mining Business Permits with Lease Business Permits (IPPKH) are required to rehabilitate watersheds around their concession areas based on the Government Regulation. Forest reclamation activities have been carried out by PBPH Natural Forests, Mining and Non-Mining holders of lease permits.

Deforestation

The team behind the study examined the impact of large-scale mining in the tropical forest areas of 26 nations.

The resulting report found that Indonesia accounted for 58.2% of the deforestation occasioned by mineral extraction activities (Publication: 'Proceedings of the National Academy of Science')

The House of Representatives passed a revision of the **2009 Coal and Mineral Mining Law** in May, 2020. The law, jointly drafted by the House and the Government, mostly revises articles related to mining permits, such as their issuing authority,and the prevailing rights and obligations.

A minor portion of the bill addresses the environment, local communities and commodity pricing guidelines. The new law removes the limit on the size of mining operations and allows automatic permit extensions (for up to 20 years).

Environmental Management Effort: Environment Management Effort (Upaya Pengelolaan Lingkungan or "UKL") and Environment Monitoring Effort (Upaya Pemantauan Lingkungan or "UPL") documentation generally needs to be prepared in cases s where the AMDAL document is not required.

Source:
Ministry of Environment and Forestry; Mining.com.

Mining Operators and Green Initiatives



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International Companies

	AngloAmerican	BHP	RioTinto
Profile	Anglo American is one of the world's largest mining firms, with activities across a variety of commodities. Their Sustainable Mining Plan is built around three Global Sustainability Pillars designed to support the UN's Sustainable Development Goals.	BHP is an international resources corporation committed to sustainability and responsible resource development through environmental stewardship, health and safety, social responsibility, and ethical business practices. It is involved in the exploration, development, production, and sale of iron ore, copper, coal, petroleum, nickel, and potash.	Rio Tinto is a prominent worldwide mining and metals business with significant activities in Australia and other parts of the world. It is one of the biggest mining firms in the world, producing and exploring a variety of commodities, such as iron ore, aluminium, copper, diamonds, uranium, and industrial minerals.
Market Cap	35.9 billion GBP (47.1 billion USD)	233.3 billion AUD (144.3 billion USD)	171.3 billion AUD (110.8 billion USD)
Commitment	Net Zero Emissions by 2040	Net Zero Emissions by 2050	Net Zero Emissions by 2050
Initiatives	❑ Anglo American launches green hydrogen station and mine haul trucks, in 2021. ❑ 100% renewable electricity supply agreements are in place in South America from 2022 onwards. ❑ Anglo American will use a USD 100m.loan from the International Finance Corporation to support community development in rural localities.	❑ Industry must develop technologies to reduce emissions intensity in integrated steelmaking by 2030. ❑ Chile will transition to 100% renewable electricity by 2022, reducing up to 3 million tonnes of CO2-e per year. ❑ Support 40% emissions intensity reduction of BHP-chartered shipping of BHP products.	❑ Rio Tinto has developed partnerships to deploy more efficient autonomous haulage solutions and battery-powered trucks to increase safety on the road and at the mining site. ❑ Repurposing the Tellurium found in the mines to use as a replacement to the conventional silicon-based solar panels.
CSR Programs	Implementing a digital health strategy, which is aimed at transforming Anglo American into a 'Digital-First 'health organisation.	BHP has invested USD 681m. in program activity, emphasizing good governance, human capability, social inclusion and the environment.	BHP has established six formal agreements with Indigenous rights holders spanning the global footprint.
Leadership	 Stuart Chambers, Chairman	 Ken MacKenzie, Chairman	 Dominic Barton, Chairman

National Companies (1)

	PT BUMI ResourceS Tbk.	ANTAM	adaro
Profile	PT Bumi Resources Tbk is an Indonesian mining corporation that is involved in the exploration, development, production, and selling of coal and other minerals. It is one of the biggest producers of coal in Asia and adheres to environmental laws and regulations by reclaiming land, planting trees, and monitoring the environment.	PT Aneka Tambang Tbk (ANTAM) is a state-owned mining and metals firm in Indonesia. It specializes in exploration, mining, processing, and selling of minerals and metals such as nickel, gold, silver, bauxite, coal, and precious metals. ANTAM seeks to incorporate sustainable practices into its operations and understands the importance of ESG concepts.	PT Adaro Energy Tbk is an Indonesian coal mining and energy firm with three primary commercial endeavors: coal mining, logistics, and electricity production. It is dedicated to social responsibility and sustainability, actively participating in neighborhood communities, running projects for improvement, and supporting environmental protection measures.
Market Cap	15.6 trillion IDR (1.0 billion USD)	50.2 trillion IDR (3.3 billion USD)	96.3 trillion IDR (6.3 billion USD)
Commitment	Net Zero Emissions by 2060	Net Zero Emission by 2060	Net Zero Emission by 2060
Initiatives	❑ PT Bumi Resources Tbk has been granted awards with an A+ rating for sustainable business practices.. ❑ BUMI supports the Government's GHG emission reduction target of 314 million tons of CO2 by 2030.	❑ ANTAM has an environmental policy and Green Standard.4 ❑ LG Energy Solution has signed a $9 billion investment agreement with PT Aneka Tambang and Indonesia Battery Corporation, and is building a $1.1 billion battery cell plant in Karawang Regency with Hyundai Motor Group.	❑ PT Adaro Indonesia prioritizes environmental sustainability through the management of environmental impact at both production and post-mining stages. ❑ On-site Waste Processing Technology processes organic waste into pellets for co-firing power plants.
CSR Programs	The chosen SDGs are expanded into seven sustainable CSR programs and are implemented by KPC and AI - based on ISO 26000.	Antam granted scholarships to students (with TNI and Polri connections) in N. Maluku and W. Kalimantan via the SOE's Service Collaboration Program.	The Adaro Foundation (YABN) is the not-for-profit pillar of the Adaro Group, established in 2009 to coordinate CSR activities of AEI subsidiaries.
Leadership	 Adika Nuraga Bakrie President Director	 Nicolas D. Kanter President Director	 Garibaldi Thohir President Director

National Companies (2)

	MEDCOENERGI	INDIKA ENERGY	VALE
Profile	PT Medco Energi Internasional Tbk is an integrated energy firm in Indonesia that produces, distributes, and explores oil and gas, electricity, and other energy-related services. It is committed to ethical business conduct and follows health, safety, and environmental laws and best practices.	Indika Energy is an integrated energy corporation located in Indonesia that specializes in coal mining, electricity production, and energy services. It is committed to ethical and sustainable business practices, with an emphasis on corporate governance, community outreach and environmental stewardship.	PT Vale Indonesia Tbk, (PTVI) is a subsidiary of Vale S.A., a global mining company headquartered in Brazil. In addition to mining and processing nickel ore, PTVI produces nickel matte, a semi-processed material used in the manufacture of stainless steel and related products.
Market Cap	26.6 trillion IDR (1.8 billion USD)	14.3 trillion IDR (938 million USD)	65.3 trillion IDR (4.3 billion USD)
Commitment	Net Zero Emissions by 2060	Net Zero Emissions by 2050	Net Zero Emissions by 2050
Initiatives	❑ At Bualuang, Medco Energi achieved zero waste to landfill by redirecting all combustible non-hazardous waste to the Chonburi Clean Energy Power Plant, which utilises waste to generate electricity. ❑ Medco Energi introduced an initiative to reduce costs and hazardous waste generation by replacing filters based on actual conditions.	❑ Indika Energy strives to reduce air pollution by avoiding, minimizing and reusing waste material and maintaining waste-disposal facilities according to regulations and guidelines. ❑ DBS funds a biomass power plant using wood pellets from Indika Energy industrial plantation forest concessions in East Kalimantan.	❑ Vale's hydropower plants can provide 94% of the electricity needed while reducing carbon emissions. ❑ 100% renewable energy in Brazil by 2025. ❑ The nickel processed by PT Vale will be adopted in products that reduce carbon emissions around the world.
CSR Programs	Plantation of Mangrove Trees and Mangroves	Donation of goods from the Indika Foundation through volunteer groups for health clinics and medical centers, orphanages and homes for the elderly.	PT Vale Indonesia PPM program provides coaching in organic farming techniques to farmers – via the PSRLB using the SRI method.
Leadership	 Hilmi Panigoro, President Director	 Mohammad Arsjad Mangkuningrat, President Director	 Febriany Eddy, President Director

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