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ASEAN Strategies and Partnerships in the Critical Minerals Sector

Opportunities and challenges for Germany and the EU

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Contents

Abbreviations

AEC	ASEAN Economic Community
AMDV	ASEAN Minerals Development Vision
AMCAP	ASEAN Minerals Cooperation Action Plan
AMMin	ASEAN Ministerial Meeting on Minerals
AMS	ASEAN Member State
ASEAN	Association of Southeast Asian Nations
BRI	Belt and Road Initiative
CBAM	Carbon Border Adjustment Mechanism
CM	Critical Minerals
CRMA	Critical Raw Materials Act
EU	European Union
ESG	Environmental, Social and Governance
EV	Electric Vehicle
FDI	Foreign Direct Investment
FTA	Free Trade Agreement
GVC	Global Value Chain
IGF	Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development
IRA	Inflation Reduction Act
JETP	Just Energy Transition Partnership
MoU	Memorandum of Understanding
RCEP	Regional Comprehensive Economic Partnership
REE	Rare earth elements
WTO	World Trade Organisation

1 Introduction

In October 2025, the European Union (EU) reinforced its push to secure access to critical raw materials amid rising "confrontational geoeconomics", especially China's growing weaponisation of trade dependencies. At the Berlin Global Dialogue, Commission President Von der Leyen underscored this shift, unveiling the RESourceEU initiative warning that the EU could no longer afford to treat critical raw materials as a distant concern.[1]

Supply chains for key inputs such as nickel, cobalt, and rare earth elements remain highly concentrated, with China dominating every stage of the value chain from extraction to manufacturing. This dependency threatens Europe's green and digital transitions as well as its production of defence and other critical technologies. To strengthen its strategic autonomy, Europe has made diversifying supply chains and reducing import dependencies central to its raw materials strategy. **External partnerships are indispensable** to this effort. As complete self-sufficiency is neither geologically feasible nor achievable in the near term, third countries will continue to be the EU's main suppliers of critical raw materials for the foreseeable future.[2]

Resource-rich Southeast Asia holds significant potential as a partner in addressing Europe's supply chain vulnerabilities. Yet, it has so far remained largely absent from diversification efforts through the EU's Critical Raw Materials Act, as well as Germany's own raw materials strategy. This is a missed opportunity. Others have already recognised the region's potential: at the October Summit of the Association of Southeast Asian Nations (ASEAN), for example, US President Donald Trump inked new deals with Malaysia, Thailand, Cambodia, and Vietnam to strengthen cooperation on critical mineral supply and investment.[3] Indeed, Southeast Asia is rapidly emerging as a key strategic partner for countries like South Korea, Australia, the US, and others seeking to diversify and secure their critical minerals supplies. ASEAN, the region's central multilateral organisation and the EU's long-standing institutional partner, is also looking to position itself as a strategic actor in this space.

This working paper aims to provide actionable insights into the opportunities and challenges for strengthening Europe's cooperation with ASEAN by examining regional strategies and partnerships in the critical minerals sector. It begins by outlining the key drivers of deeper engagement with Southeast Asia, including the region's resource abundance, shared interest in resilient and secure supply chains, and long-standing

[1] European Commission, "Speech by the President: 2025 Berlin Global Dialogue", Berlin, 25 October 2025, https://ec.europa.eu/commission/presscorner/detail/en/speech_25_2515. (accessed 31 October 2025)
[2] Inga Carry et al., *The EU's External Raw Materials Strategy: Key Fields for Action*, Berlin: Stiftung Wissenschaft and Politik (SWP), August 2025, Research Division Africa and Middle East WP 1.
[3] In October 2025, the US signed trade agreements with Vietnam and Cambodia, and Memorandums of Understanding (MoU) with Malaysia and Thailand on critical minerals cooperation. The Vietnam framework focuses on balanced trade and stronger supply chain resilience, while the Cambodia agreement grants US investors rights to explore, extract, and export critical minerals. The Malaysia MoU promotes diversification of critical minerals trade through information sharing, regulatory cooperation, and sustainable project development. The Thailand MoU similarly supports supply chain diversification and resource assessment but also references price floors and a first-access investment provision.

institutional ties. The paper then explores ASEAN's strategies and priorities, illustrating how the region aims to enhance its role in global supply chains. As the following section highlights, deeper cooperation still faces significant constraints. Europe must navigate not only substantial policy and regulatory fragmentation within ASEAN but also Southeast Asia's distinct strategic outlook and its continued engagement with China. Moreover, ambivalent perceptions of EU investment patterns and sustainability policies further hinder closer cooperation. Indonesia, Southeast Asia's leading mining economy and a traditionally influential voice within ASEAN, is presented as a case study to illustrate how national critical minerals strategies and push to move up the value chain shape international cooperation. The paper concludes with policy recommendations for stakeholders in Germany and the EU aimed at fostering a more robust and mutually beneficial critical minerals partnership with Southeast Asia.

2 Why ASEAN? Drivers of Greater EU-ASEAN Cooperation

Intensifying geopolitical competition over critical raw materials (CRMs) and its heavy dependence on China are driving Europe to seek new, reliable partners to advance its climate and digital ambitions and secure the production of defence and critical technologies. As a long-standing institutional partner with abundant mineral reserves and a shared commitment to secure and resilient supply chains, Southeast Asia represents a valuable partner for the EU and Germany to diversify CRM supplies and deepen strategic cooperation in the critical minerals sector.

Southeast Asia as Important Supplier

The twin ambitions of climate neutrality and digital leadership, as outlined in the **European Green Deal**, rely heavily on secure and sustainable access to **critical raw materials (CRMs)**. These materials, ranging from lithium and cobalt to rare earth elements, are essential for the development of technologies across sectors such as energy, transport, digital infrastructure, healthcare, defence, and space. However, the EU currently produces only a small fraction of these raw materials domestically and is highly dependent particularly in refined (processed) minerals. Supply chains remain highly concentrated and geopolitically sensitive, with **China dominating important stages** of many strategic mineral supply chains — from mining to processing and manufacturing. For instance, China supplies over **90 per cent of the EU's rare earths, gallium, and magnesium**, and controls more than **50 per cent of the global capacity** to refine critical minerals like lithium and cobalt.[4]

Recognising this strategic vulnerability, the EU has made the **diversification of supply chains** and **reduction of import dependencies** a central goal of its raw material strategy. **External partnerships are indispensable** to this effort. The **Critical Raw Materials Act (CRMA)** has to date established thirteen strategic partnerships with third countries and identified strategic projects outside of the EU to secure diversified and reliable sources of supply. However, no ASEAN country is currently on the list of the EU's (or Germany's) critical material partners, nor are any of the strategic projects outside approved by the CRMA located in Southeast Asia.[5]

[4] Meike Schulze, *Security of Supply in Times of Geo-economic Fragmentation*, SWP Comment 15/2024 (Berlin: Stiftung Wissenschaft und Politik [SWP]). doi:10.18449/2024C15.

[5] "Selected Strategic Projects under CRMA", *European Commission*, 2025, https://single-market-economy.ec.europa.eu/sectors/raw-materials/areas-specific-interest/critical-raw-materials/strategic-projects-under-crma/selected-projects_en (accessed 30 October 2025).

This is a notable gap given Southeast Asia potential role in addressing choke points in Europe's critical minerals supply. The region is an important supplier of several critical minerals (CM) the EU depends on (see ANNEX A). To name only a few, Indonesia and the Philippines together account for around 72 **per cent** of global nickel output and 14 **per cent** of global cobalt production. Myanmar is the second-largest global producer of rare earth elements (REE) after China.[6] Vietnam is the second-largest producer of tungsten and holds approximately 17 **per cent** of global REE reserves.[7] In addition to extraction and raw material production, the region is home to strategic processing and manufacturing capacities. Malaysia, for example, is the world's largest processor of rare earths after China, playing a crucial role in global REE supply chains.[8]

Shared Interest in Secure and Resilient Supply Chains

Moreover, ASEAN aligns with Europe in its interest in building secure and resilient supply chains. The bloc's minerals sector offers great economic potential for the region. According to one ASEAN study, two-way minerals trade (within ASEAN and with external partners) grew by 9 per cent in 2018 compared to the previous year, amounting to almost US$ 250 billion in value and accounting for 8.9 per cent of ASEAN's total trade.[9]

At the same time, the region is vested in secure supply chains as a growing consumer of these resources. Southeast Asia is projected to become the world's fourth-largest economy by 2040 and is on track to account for 25 **per cent** of global energy demand within the next decade.[10] Renewable energy will be central to meeting this growing demand while achieving emissions reduction targets. Indeed, several ASEAN member states (AMS) are already major consumers of critical minerals, serving as manufacturing hubs for clean energy technologies. Vietnam and Malaysia, for instance, have rapidly scaled up solar panel production—growing from 32 MW to 1,787 MW and 5 MW to 16,660 MW, respectively, between 2011 and 2021.[11] Thailand, the region's largest automotive producer, has successfully entered the electric vehicle (EV) sector, while other countries like Indonesia and the Philippines are developing integrated EV supply chains. Singapore is a major importer to support its high-tech manufacturing and R&D sectors.

However, significant dependencies have made Southeast Asia vulnerable to disruptions in the global critical minerals market. ASEAN's role in CM supply chains remains heavily skewed toward the export of unprocessed or minimally processed materials. Beijing is a pivotal market for Southeast Asia's minerals, and **continues to dominate higher-value processing activities**, especially for critical raw materials. In 2022, for example, **over 95**

[6] IEA, *Global Critical Minerals Outlook 2025* (Paris: International Energy Agency, 2025), https://www.iea.org/reports/global-critical-minerals-outlook-2025. (accessed 15 September 2025).
[7] Ji Won Moon, *2022 Minerals Yearbook - Vietnam* (Washington D.C.: US Geological Survey, October 2024), https://pubs.usgs.gov/myb/vol3/2022/myb3-2022-vietnam.pdf (accessed 15 September 2025).
[8] Pavel Bilek, *ASEAN-IGF Minerals Cooperation: Scoping Study on Critical Minerals Supply Chains in ASEAN* (Ottawa: International Institute for Sustainable Development, 2023), https://asean.org/book/asean-igf-minerals-cooperation-scoping-study-on-critical-minerals-supply-chains-in-asean/ (accessed 15.09.2025).
[9] Ian Satchwell et al., *Development Prospects of ASEAN Minerals Cooperation (DPAMC)* (Jakarta: ASEAN Secretariat, 2022), https://asean.org/wp-content/uploads/2022/04/Development-Prospects-of-ASEAN-Minerals-Cooperation-DPAMC.pdf (accessed 15 September 2025).
[10] IEA, *Southeast Asia's Role in the Global Energy System Is Set to Grow Strongly over next Decade* (Paris: *International Energy Agency*, 21 October 2024), https://www.iea.org/news/southeast-asias-role-in-the-global-energy-system-is-set-to-grow-strongly-over-next-decade (accessed 15 September 2025).
[11] Emily Burlinghaus, *Challenges and Opportunities for the Southeast Asian Solar Market: Lessons From Vietnam and Malaysia* (Potsdam: Research Institute for Sustainability (RIFS), 2023), doi: 10.48481/rifs.2023.003 (accessed 15 September 2025).

per cent of nickel exports (both ore and refined) from **Indonesia and the Philippines** were directed to China. Similarly, **Myanmar exported nearly all of its manganese, REEs, and tin ores to China**.[12]

This leaves the region exposed to great power competition, which increasingly shapes the critical minerals market. For example, the 2022 United States' Inflation Reduction Act (IRA) excluded EVs, and EV battery materials processed by "foreign entities of concern," such as China, from eligibility for federal tax credits. This could severely impact Southeast Asia's emerging EV sector, as none of the ASEAN Member States (except Singapore) currently have FTAs with the US and would need to negotiate separate agreements.[13] This is why countries like Indonesia, which stands to be particularly affected by these regulations, have sought limited critical minerals agreements with the US.[14]

Against this backdrop, Europe could serve as an important partner for Southeast Asia in mitigating these risks while diversifying the region's investment partners and export markets – particularly as it is already Southeast Asia's "preferred and trusted strategic partner" in hedging against the uncertainties of US-China competition.[15] The EU is also a long-standing institutional partner of ASEAN with dialogue relations established as early as 1977. Trade and investment have long formed the mainstay of these ties. As of 2024, the EU was ASEAN's third-largest trading partner, while ASEAN ranked as the EU's fifth largest.[16] Uncertainty over US global engagement and tariffs imposed by US President Donald Trump is already providing new momentum to deepen ties on both sides. After nearly a decade of delays, Indonesia and the EU have recently concluded a free trade agreement and negotiations with the Philippines, Thailand, and Malaysia are taking place with renewed force.[17]

In the critical minerals space, however, Europe must deepen its engagement. Among materials with a very high or high supply risk, for example, only a few ASEAN countries are currently represented among the EU's imports.[18] As the ASEAN region is rapidly emerging as an important partner for the US, South Korea, Australia, and other actors looking to diversify their CM supply chains, Europe risks losing its relevance.

[12] Ryan W. Bhaskara, *Cooperate, Not Compete: ASEAN's Critical Mineral Strategy for Energy Transition* (Jakarta: Economic Research Institute for ASEAN and East Asia (ERIA), 10 January 2025), https://www.eria.org/news-and-views/cooperate--not-compete--asean-s-critical-mineral-strategy-for-energy-transition (accessed 15 September 2025).

[13] Mandy Meng Fang, "Climbing up the Critical Mineral Value Chains: The Global South and Green Industrialization in an Era of Disruption", *Vanderbilt Journal of International Law* 57, no. 3 (2024), https://ssrn.com/abstract=4800350.

[14] Stefanno Sulaiman, "US, Indonesia Discussing Strategic Management of Critical Minerals Trade, Minister Says", *Reuters*, 24 July 2025, https://www.reuters.com/world/asia-pacific/us-indonesia-discussing-strategic-management-critical-minerals-trade-minister-2025-07-24/ (accessed 3 October 2025).

[15] ISEAS, *The State of Southeast Asia: 2025 Survey Report* (Singapore: ISEAS-Yusof Ishak Institute, 2025), https://www.iseas.edu.sg/centres/asean-studies-centre/state-of-southeast-asia-survey/the-state-of-southeast-asia-2025-survey-report/ (accessed 15 September 2025).

[16] Ulrich Jochheim, *Trade Negotiations between the EU and ASEAN Member States* (Brussels: European Parliament, 2023), https://www.europarl.europa.eu/thinktank/en/document/EPRS_BRI(2023)754629 (accessed 24 September 2025).

[17] "EU Advancing in Trade Agreement Talks with Philippines, Thailand, Malaysia, Trade Chief Says", *Reuters*, 25 September 2025, https://www.reuters.com/world/asia-pacific/eu-advancing-trade-agreement-talks-with-philippines-thailand-malaysia-trade-2025-09-25/ (acccessed 6 October 2025).

[18] "Statistics Explained - International Trade in Critical Raw Materials", *Eurostat*, 2025, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=International_trade_in_critical_raw_materials (accessed 30 October 2025).

3 ASEAN's Critical Minerals Strategy

Recognising their shared strategic interests and complementary resource strengths, Southeast Asian countries have turned to ASEAN as a platform for collaboration on critical minerals, aiming to strengthen regional supply chains and enhance their collective global competitiveness. These goals have been supported by robust regional frameworks. However, limited strategic alignment stemming from significant differences in economic structures, resource endowments, and industrial development priorities across the region has undermined their implementation.

ASEAN's CM Strategies

Initial ASEAN cooperation on minerals was primarily approached through the lens of economic development, given the considerable potential of the sector. Member states came together as early as 2005 to coordinate their approaches and have consolidated their cooperation through a series of ASEAN Minerals Cooperation Action Plans (AMCAP). The development and implementation of these plans is overseen by the ASEAN Ministerial Meeting on Minerals (AMMin) and funded through a dedicated ASEAN Minerals Trust Fund.[19]

In October 2025, AMMin adopted two new frameworks to guide the implementation of regional cooperation plans. The ASEAN Minerals Cooperation Action Plan (AMCAP-IV) 2026–2030 outlines action items across four program areas: trade and investment, sustainable critical minerals development, capacity-building and establishing an ASEAN Minerals Information Database. It also sets out to implement a new monitoring and evaluation system to measure the impact and outcomes of ASEAN activities.[20] AMCAP-IV aims to support the long-term ASEAN Minerals Development Vision (AMDV), which envisions ASEAN as "a leading destination for minerals investment, including in critical minerals" by 2045 (see ANNEX B).[21]

The strategies outlined in these documents aim to address persistent obstacles to harness the region's geological potential, namely lack of investment across all stages of the supply chain and the limited availability of geological and investment-related data. Despite the region's rich endowment of critical minerals, investment in the mining sector—particularly in early-stage exploration—has been in persistent and concerning

[19] Inga Carry et al., *Elemente Einer Nachhaltigen Rohstoffaußenpolitik: Partnerschaften Für Lokale Wertschöpfung in Mineralischen Lieferketten*, Berlin: Stiftung Wissenschaft and Politik (SWP), June 2023, Forschungsgruppe Afrika/ Mittlerer Osten AP 1.

[20] ASEAN, *ASEAN Minerals Cooperation Action Plan (AMCAP-IV) 2026-2030* (Jakarta: ASEAN Secretariat, 17 October 2025), https://asean.org/book/asean-minerals-cooperation-action-plan-amcap-iv-2026-2030/ (accessed 17 October 2025).

[21] ASEAN, *ASEAN Minerals Development Vision* (Jakarta: ASEAN Secretariat, 17 October 2025), https://asean.org/book/asean-minerals-development-vision/ (accessed 17 October 2025).

decline. This trend is largely driven by investor concerns over policy uncertainty, regulatory frameworks, and governance conditions. Additionally, limited availability of reliable and standardised data across the region continues to constrain the sector's development and deter potential investors.[22]

At the same time, ASEAN has increasingly come to view minerals not only as a development opportunity but also as strategic assets, particularly in light of CM's role in the twin digital and energy transitions - a perspective that entered the regional policy discourse in 2019.[23] This recognition has spurred initiatives such as plans for a regional EV ecosystem and has been formalised in the most recent ASEAN frameworks. The ASEAN Economic Community (AEC) Strategic Plan 2026-2030 identifies technological transformation and climate change impacts as "megatrends" that will shape ASEAN's future economic integration.[24] "Embracing digital transformation and decarbonisation" is also included as one of the foundational principles of the AMDV.[25]

ASEAN's External Partnerships

Given limited expertise and resources in the region, external partnerships have been pivotal to realise ASEAN's ambition of becoming a more strategic player in critical mineral supply chains. Dialogue partners like the ASEAN Plus Three (ASEAN+3), China, Japan, and the Republic of Korea (ROK) have played a pivotal role in capacity-building through seminars, workshops, and training programs. Other active supporters include Australia, which funded measures to support the development of ASEAN's recent cooperation frameworks, including the AMDV and AMCAP-IV as well as the ASEAN Principles for Sustainable Minerals Development, and pledged to help position ASEAN as a major global exporter of critical minerals and metals under the framework of the Australia–ASEAN Comprehensive Strategic Partnership this year.[26] In addition, ASEAN has benefitted from institutional partnerships such as with the World Bank and Intergovernmental Forum on Mining, Minerals, and Sustainable Development (IGF) to conduct joint research and convene a variety of dialogue formats.

In the context of growing geo-economic competition over CRM supply chains, international donor interest in cooperation with ASEAN has significantly expanded in recent years, since about 2021. For example, Seoul launched a US$5.6 million project aimed at expanding knowledge of critical minerals, enhancing exploration capabilities, and developing a real-time data platform to support sustainable development in ASEAN.[27] The US has been involved since 2024 in supporting an ASEAN-wide minerals strategy and,

[22] Satchwell et al., *Development Prospects of ASEAN Minerals Cooperation (DPAMC)* (see note 9).
[23] Sharon Li-lian Seah and Mirza Sadaqat Huda, *Enhancing ASEAN's Role in Critical Mineral Supply Chains* (Singapore: ISEAS-Yusof Ishak Institute, 2024), https://www.iseas.edu.sg/wp-content/uploads/2024/01/TRS3_24.pdf (accessed 15 September 2025).
[24] ASEAN, *ASEAN Economic Community Strategic Plan 2026-2030* (Jakarta: ASEAN Secretariat, 26 May 2025), https://asean.org/wp-content/uploads/2025/05/07.-AEC-Strategic-Plan-2026-2030_adopted.pdf (accessed 8 October 2025).
[25] ASEAN, *ASEAN Minerals Development Vision* (see note 21).
[26] ASEAN, *Plan of Action to Implement the ASEAN-Australia Comprehensive Strategic Partnership (2025-2029)* (Jakarta: ASEAN Secretariat, 2025), https://asean.org/wp-content/uploads/2024/07/Adopted-ASEAN-Australia-POA-2025-2029.pdf (accessed 24 September 2025).
[27] AKCF, *ASEAN – Korea Collaborative Initiative: Critical Minerals Management and Strategy for Sustainable Environment in ASEAN* (Jakarta: AKCF - ASEAN Korea Cooperation Fund, 2 July 2024), https://www.aseanrokfund.com/our-works/asean-korea-collaborative-initiative-critical-minerals-management-and-strategy-for-sustainable-environment-in-asean (accessed 15 October 2025).

more recently, the development of a monitoring and evaluation system as well as corporate incentives to encourage high sustainability standards in the sector.[28]

Nonetheless, AMS have largely prioritised national interests through separate agreements and collaborative projects. Engagements are primarily taking place at the bilateral level, ranging from a joint Australian-Korean venture on rare earth magnet production to US technical assistance to build out the Philippines' critical minerals sector, over a coherent regional approach. Vietnam in particular has emerged as an attractive partner for supply chain diversification, owing to its substantial rare earth element (REE) reserves and strategic efforts to strengthen its role in the global semiconductor supply chain - including for Germany.[29] These differing priorities have hindered ASEAN from achieving meaningful integration and policy alignment in the minerals sector and, at times, fostered competition rather than cooperation. For example, in response to Indonesia's success in attracting Chinese investment into its nickel sector (discussed in section 5), the Philippines has floated the idea of a "China-free" nickel supply chain to attract investment from Western partners.[30]

[28] ASEAN, *The Tenth ASEAN Ministerial Meeting on Minerals (10th AMMIN) - Joint Media Statement* (Jakarta: ASEAN Secretariat, 2 October 2025), https://asean.org/wp-content/uploads/2025/10/JMS-of-the-10th-AMMin-FINAL3-Oct-10-AM-002.pdf (accessed 6 October 2025).

[29] Bundesregierung, "Pressekonferenz von Bundeskanzler Scholz zum Besuch des Bundeskanzlers in der Sozialistischen Republik Vietnam in Hanoi", Press release (Hanoi, 13 November 2022), https://www.bundesregierung.de/breg-de/service/archiv-bundesregierung/pressekonferenz-von-bundeskanzler-scholz-zum-besuch-des-bundeskanzlers-in-der-sozialistischen-republik-vietnam-am-13-november-2022-in-hanoi-2142532 (accessed 16 October 2025).

[30] Bhaskara, 'Cooperate, Not Compete' (see note 12).

4 Challenges for Deeper EU-ASEAN Cooperation

As German Foreign Minister Johann Wadephul underscored during his visit to Indonesia in August 2025, ASEAN plays a critical role to both Berlin and Brussel's efforts to reduce "critical economic dependencies".[31] Still, cooperation between the EU, Germany and ASEAN in the critical minerals sector remains underdeveloped. This gap can be attributed to several factors. For Europe, ASEAN's heterogeneity poses a major challenge for interregional cooperation. For Southeast Asia, Europe's divergent strategic outlook – particularly its increasing assertiveness against China – may constrain possibilities for deeper engagement in a region that is wary of becoming entangled in great power rivalry. At the same time, ASEAN member states are looking for partners that support their push for domestic value-addition and downstream industrialization – areas where China has, to date, delivered more consistently than Europe. Doubts over Europe's credibility as a reliable partner in the minerals sector are further compounded by ambivalent views on EU sustainability standards and regulatory strategies in the region.

ASEAN Heterogeneity

Heterogeneity in ASEAN poses challenges not only for intra-regional cooperation but also for engagement with external partners. Member states vary significantly in terms of their domestic development, ranging from advanced economies like Singapore to least developed countries such as Laos and Cambodia. This diversity also extends to the CM sector, where AMS vary widely in terms of economic structures, resource endowments, and industrial development goals. For instance, there is currently no ASEAN-wide definition of what constitutes critical or strategic minerals.[32]

Past experiences suggest that Europe will have to adeptly navigate these intraregional regional differences to forge lasting partnerships. For example, diverging national priorities and negotiation positions undermined ASEAN's ability to engage as a unified counterpart in the EU-ASEAN Free Trade Agreement (FTA) negotiations launched in 2007.[33] Disparities among ASEAN member states in their approaches to foreign trade and

[31] Auswärtiges Amt, "Speech by Foreign Minister Johann Wadephul at the Foreign Policy Community of Indonesia", Jakarta, 20 August 2025, https://www.auswaertiges-amt.de/en/newsroom/news/2730776-2730776 (accessed 30 October 2025).

[32] Pavel Bilek, *ASEAN-IGF Minerals Cooperation* (see note 8).

[33] David Camroux, "Interregionalism or Merely a Fourth-Level Game? An Examination of the EU-ASEAN Relationship", *East Asia* 27, no. 1 (2010): 57–77, doi: 10.1007/s12140-009-9096-x.

in the depth of their trade relations with the EU resulted in what one senior EU official described as an "ambition gap" between the two sides.[34]

Both sides have since pursued bilateral agreements as building blocks toward a future comprehensive deal instead.[35] The EU has recently finalized a trade deal with Indonesia (2025) and relaunched negotiations with Thailand (2023), the Philippines (2024), and Malaysia (2025) - with objectives that include removing obstacles to trade in energy and raw materials. To support ASEAN coherence and institutional capability, it will be important to ensure that these agreements advance regional critical minerals objectives rather than contribute to further fragmentation.

Divergent Strategic Outlooks

Perceptions of Europe's alignment with US-style zero-sum approach toward China may further discourage ASEAN from deepening its engagement with the EU and Germany. While Europe has traditionally pushed back against the US model of bipolar competition embodied in policies like the IRA and continued to pursue engagement with China on energy and climate challenges, Brussels has recently resorted to more a more assertive stance. China's expanding use of export restrictions, illustrated by Beijing's decision to introduce export bans for five more REEs in October 2025, has prompted the adoption of new trade protection measures.[36] The recent introduction of a new RESourcEU plan, for example, was a direct response to the "significant risk" posed by China's trade policy to key European industries.[37]

This approach diverges from ASEAN's collective commitment to strategic autonomy and persistent efforts to avoid taking sides amid hardening great power rivalry. China remains a **pivotal economic and diplomatic partner for Southeast Asia**. Indeed, according to the *Southeast Asia Influence Index*, China ranks **first in both economic relationships and overall diplomatic influence** across the region, maintaining a **consistent presence in nearly every ASEAN member state**.[38]

Beijing has also been a critical supporter of Southeast Asia's resources sector through substantial investments since the early 2000s. Chinese investment in the mining and processing of critical minerals has surged since 2020, particularly in countries like Indonesia, underscoring China's pivotal role in developing the region's nickel- and cobalt-rich industries to meet growing global demand for EVs and batteries.[39] Furthermore, no ASEAN country or other international actor currently matches China's midstream processing capacity or its ability to offer comprehensive investment packages to Southeast Asia. Alienating Beijing could therefore entail significant costs for the region's developing

[34] "What's Next For EU-ASEAN?", *The ASEAN Post*, 29 December 2016, https://theaseanpost.com/article/exclusive-whats-next-eu-asean (accessed 24 September 2025).
[35] "EU Trade Relations with Association of South East Asian Nations (ASEAN)", *European Commission*, https://policy.trade.ec.europa.eu/eu-trade-relationships-country-and-region/countries-and-regions/association-south-east-asian-nations-asean_en (accessed 31 October 2025).
[36] Carry et al., *The EU's External Raw Materials Strategy* (see note 2).
[37] European Commission, "Speech by the President" (see note 1).
[38] Susanna Patton et al., *Southeast Asia Influence Index - Key Findings Report* (Sydney: Lowy Institute, 2025), https://www.lowyinstitute.org/publications/southeast-asia-influence-index-key-findings-report (accessed 3 October 2025).
[39] ASEAN, *ASEAN Investment Report 2024* (Jakarta: ASEAN Secretariat, 2024), https://asean.org/wp-content/uploads/2024/10/AIR2024-3.pdf (accessed 6 November 2025).

economies.[40] Accordingly, Southeast Asian governments have been cautious about joining initiatives perceived as part of a broader strategy to contain China—such as past US efforts to reduce supply chain vulnerabilities through the Minerals Security Partnership, sometimes described as a 'NATO of Metals and Minerals'.[41]

At the same time, the region seeks to capitalise on the economic opportunities generated by this rising global demand and is therefore deepening engagement with Western partners alongside ongoing engagement with Beijing. Recent MoUs signed by the United States with Thailand and Malaysia, for instance, underscore growing interest in diversified cooperation, especially to unlock access to additional investment and technical expertise.[42] In this context, Europe's ability to offer a compelling partnership model will depend not only on economic incentives, but also on its **capacity to align with ASEAN's priorities**, namely autonomy, regional stability, and inclusive development. By promoting a cooperation strategy that is more open to engagement with Beijing, Germany and the EU can clearly differentiate their approaches from those of the US and substantially strengthen their partnerships in the region that is wary of being drawn into hardening great power rivalry.

Emphasis on Local Value-Addition

Significant asymmetries in the value chain pose further obstacles to cooperation. Despite its resource wealth, much of the Global South - including Southeast Asia - has historically captured only a small fraction of the value derived from critical minerals. As the **global clean energy transition** drives up demand for critical minerals, AMS increasingly prioritise partners that provide capital, technology, and credible long-term commitments—areas where China has demonstrably delivered and where Europe has yet to show sustained, substantive engagement.

The historical mismatch between the region's mineral contributions and its economic benefits has spurred a wave of policy reform aimed at local value addition and down-streaming strategies, often through mechanisms such as local content requirements and investment incentives tied to in-country processing and manufacturing, with particular emphasis on developing integrated EV ecosystems.[43] With its 2020 nickel export ban, Indonesia has taken the lead in this effort to move domestic industries up the global value chain (discussed in section 5) but it is not the only stakeholder turning to such regulatory tools. **The Philippines**, which became China's top nickel ore supplier after Indonesia's ban, is considering its own restrictions to incentivize downstream processing and align with its National EV Roadmap. Malaysia implemented a moratorium on REE exports in

[40] Dylan Sibbitt, "Furthering US-Indonesia Ties Beyond Mining", *Wilson Center*, 15 August 2024, https://www.wilsoncenter.org/blog-post/furthering-us-indonesia-ties-beyond-mining. (accessed 6 October 2025).

[41] Mirza S. Huda, "Mineral Security Partnership and Southeast Asia: Forcing Countries to Choose?", *FULCRUM*, 30 April 2024, https://fulcrum.sg/mineral-security-partnership-and-southeast-asia-forcing-countries-to-choose/ (accessed 6 October 2025).

[42] Gracelin Baskaran and Meredith Schwartz, "Ahead of APEC, Trump Signs Flurry of Bilateral Minerals Agreements on Asia Tour", *Center for Strategic & International Studies*, 31 October 2025, https://www.csis.org/analysis/ahead-apec-trump-signs-flurry-bilateral-minerals-agreements-asia-tour (accessed 27 November 2025).

[43] Fang, "Climbing up the Critical Mineral Value Chains" (see note 13).

December 2023 to boost domestic processing and manufacturing toward its aspiration of a 'mine to magnet' ecosystem.[44]

Notably, these regional strategies do not adhere to a unified definition of 'value addition'. While, Malaysia, Indonesia, the Philippines, and Vietnam integrate aspects of refining and manufacturing into their broader industrial objectives, Laos focuses on expanding in-country processing capabilities and Cambodia's mining strategy primarily emphasizes the development potential of mineral extraction and further exploration.[45] CRM cooperation with the region must thus consider specific national contexts and industrial priorities.

China has been particularly successful in building such partnerships in the region by responding to these national priorities and building in-country capacities. Contemporary Amperex Technology Co. Limited (CATL) and other Chinese-owned companies have been providing crucial technology, capital, and infrastructure to promote the region's downstream industrialization and creating a cross-regional infrastructure network to enhance the efficiency and affordability of EVs.[46]

In contrast, the EU needs to overcome a reputation to 'overpromise and underdeliver' due to limited availability of public funding. The **Global Gateway**, the EU's connectivity strategy, could play a key role in operationalising closer raw materials cooperation and delivery of its external CRMA agenda. Under its climate and energy pillar, the initiative focuses on strategic projects in the critical minerals sector with 'likeminded' nations. However, only a limited share of funding is directed toward projects relevant to CRM supply chains so far.[47] In ASEAN, the initiative has also been met with mixed reviews. Of the promised €300 billion infrastructure investment between 2021 and 2027, only 10 billion have been earmarked for the region—far from sufficient to meet the region's substantial investment needs. Global Gateway has also been criticised as much of the funding includes pre-existing projects and lacks a coherent investment strategy, undermining its credibility as an alternative to China's BRI.[48] This lack of substantive commitments cast doubts on Europe's credibility as a robust and dependable partner for the region.

Sustainable Minerals Development and Rising International Expectations

Finally, sustainable minerals development has emerged major challenge for the region, with significant implications for its efforts to move up the global value chain - and its relationship with Europe. Environmental degradation and impacts on local communities pose one of the most urgent threats to ASEAN's critical minerals development, creating serious challenges in both the extraction and processing stages. Good governance and

[44] Tham Siew Yean, "Strategy and Sustainability Critical to Malaysia's Rare Earth Ambitions", *East Asia Forum,* 14 August 2025, https://eastasiaforum.org/2025/08/14/strategy-and-sustainability-critical-to-malaysias-rare-earth-ambitions/ (accessed 2 October 2025).

[45] Pavel Bilek, *ASEAN-IGF Minerals Cooperation* (see note 8); Jonas Werdes, *Regional Strategies to Promote Local Value Addition of Minerals in Asia*, (Berlin: Stiftung Wissenschaft and Politik (SWP), 2021), Research Division Africa and Middle East - Internal Paper.

[46] Akhmad Hanan, "Power Play: CATL Driving China's Foreign Policy in SE Asia", *Asia Times*, 27 August 2025, https://asiatimes.com/2025/08/power-play-catl-driving-chinas-foreign-policy-in-se-asia/ (accessed 15 September 2025).

[47] Carry et al., *The EU's External Raw Materials Strategy* (see note 2).

[48] Edmund Terence Gomez and Denis Suarsana, *The Economic Race in Southeast Asia - and Why Europe Is Falling Behind*, Monitor Innovation (Berlin: Konrad Adenauer Stiftung, 2024), https://www.kas.de/documents/d/guest/the-economic-race-in-southeast-asia (accessed 15 October 2025).

practices for sustainable minerals development have thus become a foremost priority for ASEAN, both in regional frameworks and in national strategies. However, these objectives ultimately depend on national-level enforcement, which is often undermined by historical struggles with corruption, political instability, and lack of transparency in the resources sector.[49]

Structural and governance concerns have constrained Europe's investment in ASEAN's minerals sector. Whereas Chinese investors have more readily overlooked (and in some cases worsened) shortfalls in ESG standards in the region, European companies have been reluctant to invest in operations deemed socially and environmentally risky. For example, German chemical giant BASF and French mining company Eramet withdrew from a planned US$2.6 billion nickel-cobalt refining complex in Weda Bay, Indonesia, citing such concerns.[50] Yet while poor ESG conditions deter European investment, Southeast Asian governments argue that such investment by leading practice partners is precisely what they need to strengthen environmental safeguards and meet higher sustainability standards.[51]

Indeed, EU sustainability and standards are being seen with ambivalence in Southeast Asia. **The EU is actively shaping international standards**, leveraging regulatory power to influence sourcing practices and industrial policy, with possible implications for ASEAN's competitiveness in global value chains. Efforts to enhance downstream industries in ASEAN are poised to be impacted by policies like the **Carbon Border Adjustment Mechanism (CBAM) or the EU Battery Regulation**, which set high ESG benchmarks. If unmet, these regulations can act as ***de facto* trade barriers for some Southeast Asian states and have, accordingly, been** viewed as misaligned with regional development realities.[52] The policies thus compound pre-existing perceptions of EU protectionism, as illustrated by disputes brought by Indonesia and Malaysia before the World trade Organisation (WTO) challenging the EU deforestation regulations related to palm oil and palm oil-based biofuels.[53] Indeed, CBAM is seen in a similar vein. An expert survey across several ASEAN countries indicates that there is apprehension in Singapore over the unilateral nature of the EU framework. In Thailand and Indonesia, the complexity of CBAM's rules and potential impact on the competitiveness of local industries has raised concerns.[54]

As most regional countries currently struggle to meet the EU's requirements, its approach thus risks being seen as inattentive to the structural transformations required to support a global energy transition. The EU-supported Just Energy Transition Partnership (JETP) is one key initiative to address this gap by supporting the transition to clean energy technologies in countries like Indonesia and Vietnam through equitable North-South cooperation. However, JETP has faced scrutiny due to significant financing gaps and

[49] Arif Rohman et al., "Illegal Mining in Indonesia: Need for Robust Legislation and Enforcement", *Cogent Social Sciences* 10, no. 1 (2024), doi: 10.1080/23311886.2024.2358158.

[50] David Hutt, "EU Faces Green Dilemma in Indonesian Nickel", *Deutsche Welle*, 16 July 2024, https://www.dw.com/en/eu-faces-green-dilemma-in-sourcing-nickel-from-indonesia/a-69681557 (accessed 8 October 2025).

[51] ASEAN, *ASEAN Minerals Cooperation Action Plan* (see note 20).

[52] Dipinder Singh Randhawa, *The Case for an ASEAN-EU Free Trade Agreement*, Singapore: S. Rajaratnam School of International Studies (RSIS), 2025), https://rsis.edu.sg/rsis-publication/rsis/the-case-for-an-asean-eu-free-trade-agreement/ (accessed 24 September 2025).

[53] Dhanasree Jayaram and Olivia Lazard, "EU-ASEAN Climate Diplomacy: Navigating Misperceptions, Interests and Opportunities", in *Reimagining EU-ASEAN Relations*, ed. Lizza Bomassi (Brussels, 2023), 6-14.

[54] KAS, *Perception of the Planned EU Carbon Border Adjustment Mechanism in Asia Pacific - An Expert Survey* (Singapore: Konrad Adenauer Stiftung, 2021), https://www.kas.de/documents/288143/288192/EU+Carbon+Border+Adjustment+Mechanism.pdf/1bec2a57-fdd7-7f98-b003-4c33fa63c314?version=1.0&t=1753191621856 (accessed 1 November 2025).

unattractive funding packages, as well as difficulties in aligning donor and recipient expectations among other factors.[55]

[55] Melinda Martinus, "Just Energy Transition Partnerships (JETPs) in Indonesia and Vietnam: Implications for Southeast Asia", *FULCRUM*, 9 July 2024, https://fulcrum.sg/just-energy-transition-partnerships-jetps-in-indonesia-and-vietnam-implications-for-southeast-asia/ (accessed 8 October 2025).

5 Case study: Indonesia's Nickel Ban and its Implications

Indonesia's abundant critical mineral resources including copper, bauxite, tin, and the world's largest nickel production – accounting for above 60 per cent of global output - make it not only Southeast Asia's leading mining country but a critical partner in Europe's green and digital transitions.[56] As the region's largest country and a founding member, Indonesia has traditionally played a leading role in ASEAN, and has increasingly taken on a prominent role in promoting sustainable and resilient critical minerals supply chains in international fora such as during its 2022 presidency of the G20.[57] The country thus constitutes a valuable case study for understanding how strategies to promote local value addition influence international cooperation - particularly the challenges posed by China's dominance in the country's minerals sector and the significant environmental and social impacts of Indonesia's push for downstream industrialisation.

Indonesia's CM Strategy

Export restrictions are a central feature of Indonesia's industrial playbook. In the mining sector especially, such measures are seen as pivotal to building refining infrastructure, creating jobs, and encouraging foreign investment to drive the development of domestic processing and manufacturing capacity.[58]

The 2020 nickel ban marked the most consequential and coordinated application of this strategy. Indonesia began experimenting with export bans as early as 2002. Under the leadership of President Joko Widodo (2014-2024), the country restricted the export of nickel ore from 2014 until a relaxation in 2017, intending for the full ban to be reinstated in 2022. Two years earlier than expected, however, the country reinstated the ban on nickel ore exports to encourage investment into its downstream manufacturing industry in January 2020 with the goal to establish itself as a hub for EVs and EV battery manufacturing. Today, Indonesia produces nearly half the world's refined nickel and two-

[56] IEA, *Global Critical Minerals Outlook 2025* (see note 6).
[57] Pia Dannhauer, *Elite Role Conceptions and Indonesia's Leadership in the Association of Southeast Asian Nations*, PhD Thesis (Brisbane: Griffith University, 2023); "Decade of Actions: Bali Energy Transitions Roadmap", *G20 Information Centre*, 2022, https://g20.utoronto.ca/2022/220902-energy-roadmap.html (accessed 28 November 2025).
[58] Ieva Barsauskaite et al., *International Trade and Investment Agreements and Sustainable Critical Minerals Supply* (Winnipeg: International Institute for Sustainable Development, 2025), https://www.iisd.org/publications/report/trade-investment-agreements-critical-minerals (accessed 15 September 2025).

thirds of its mined nickel. Its exports of processed nickel amounted to US$22 billion, or 9 per cent of total exports, in 2023.[59]

The transformation of Indonesia's nickel sector has been principally driven by an influx of Chinese capital and Chinese-owned companies. Before 2014, China primarily imported unprocessed nickel ore but begun buying more intermediate nickel products from Indonesia following the ban. China signed several BRI agreements with Indonesia to encourage Chinese companies to invest in Indonesia and promised preferential finance for these ventures. This included investments to build the necessary infrastructure for nickel processing such as coal-fired smelters and strategic projects such as the Morowali Industrial Park set up in 2013.[60] It has also included policies to promote the development of Indonesia's downstream industries, such as the construction of the region's largest integrated EV battery facility that will integrate multiple components of the supply chain from mining operations, a smelter, high-pressure acid leach (HPAL) processing, and production of precursors and cathodes.[61]

This investment has not come without costs, however. Involvement with China has caused political and social controversy relating to labour standards and safety, as well as negative impacts on the health and livelihoods of people living in the vicinity of mining operations. These problems are linked with broader impacts of the export ban on market dynamics. Since Indonesia's export ban prohibited domestic mining companies from selling to overseas buyers, Chinese players were able to pressure the country's domestic miners to sell at prices below the market average and led the Indonesian companies to cut corners on environmental and safety practices to make up for their profit loss.[62] Compounding the situation, policy changes such as Indonesia's Omnibus Law, introduced by the administration of President Joko Widodo (2014-2024) in 2020, have weakened environmental oversight by side-lining local governments and civil society from permitting processes.[63]

Implications for Indonesia-Europe Relations

Over the past years, and particularly since the launch of the IRA, Indonesia has grown increasingly wary of the implications of China's prominent role and engagement in its minerals sector. Chinese investment has created significant industrial dependencies that undermine Indonesia's strategic autonomy. Today, despite being the top global location for nickel refining, 75 per cent of Indonesia's operations are controlled by Chinese companies or shareholders.[64] As protectionism against China in the US, Europe and elsewhere is rising, this means Indonesia risks losing access to key markets.

[59] "Indonesia Nearly Has a Monopoly on Nickel. What Next?", *The Economist*, 1 September 2025, https://www.economist.com/asia/2025/01/09/indonesia-nearly-has-a-monopoly-on-nickel-what-next (accessed 7 October 2025).
[60] Angela Tritto, *How Indonesia Used Chinese Industrial Investments to Turn Nickel into the New Gold* (Washington D.C.: Carnegie Endowent for International Peace, 4 November 2023), https://carnegieendowment.org/research/2023/04/how-indonesia-used-chinese-industrial-investments-to-turn-nickel-into-the-new-gold?lang=en (accessed 15 September 2025).
[61] "Indonesia Begins $6 Billion CATL-Backed EV Battery Project", *AntaraNews*, 25 June 2025, https://en.antaranews.com/news/361757/indonesia-begins-6-billion-catl-backed-ev-battery-project (accessed 9 October 2025).
[62] Tritto, *How Indonesia Used Chinese Industrial Investments to Turn Nickel into the New Gold* (see note 60).
[63] Fang, "Climbing up the Critical Mineral Value Chains" (see note 13).
[64] Eli Miller, *Refining Power* (Washington D.C.:C4ADS, February 2025), https://c4ads.org/commentary/refining-power/ (accessed 9 October 2025).

Looking to reduce its trade dependence, Indonesia has made some moves to restructure and reduce Beijing's presence in its minerals sector, particularly since the announcement of the IRA.[65] Jakarta has also looked to new investment partners: it is pursuing a limited critical mineral trade agreement and - as part of tariff negotiations with President Trump - has both opened trade in critical minerals with the US and offered joint investment opportunities through its sovereign wealth fund Danantara.[66] Indonesia also recently agreed on a free trade agreement with Canada that includes provisions to support its EV ecosystem.[67] Against this backdrop, there is an opportunity for Europe to position itself as a reliable partner. To do so, however, it needs to navigate ongoing challenges in the relationship.

China's collaborative approach in the minerals sector differentiated it from other partners, including the EU, which has pushed back on Indonesia for imposing trade barriers.[68] Brussels filed a dispute to challenge Indonesia's nickel export ban and domestic processing requirement of all nickel ore before the World Trade Organization (WTO). When the WTO ruled in favour of the EU in 2022, Indonesia appealed the decision, which has been pending since due to the dysfunctional state of the WTO's appellate body.[69]

Due to this impasse, the EU launched consultations on the use of the EU Enforcement Regulation to propose countermeasures such as import duties or quantitative restrictions on trade in 2023 but ultimately opted instead to seek to open raw materials trade with Indonesia in talks for an economic partnership agreement, which was finalised in 2025.[70] The Indonesia-EU Comprehensive Economic Partnership enhances stability and predictability of CRM access for European manufacturers through provisions such as prohibiting export monopolies and dual pricing of raw materials, as well as ensuring transparent and fair licensing processes.[71] Although it remains uncertain if and how the new agreement will affect the existing WTO trade dispute, it marks an important step toward restoring trust and confidence in the relationship.

[65] Asia Watch, *Indonesia Looks to Lower Dependence on China for Nickel Production* (Vancouver: Asia Pacific Foundation of Canada, 2 August 2024), https://www.asiapacific.ca/asia-watch/indonesia-looks-lower-dependence-china-nickel-production (accessed 6 October 2025).

[66] "Indonesia invites U.S. investment in critical minerals for battery ecosystem collaboration", *Indonesia Business Post*, 6 August 2025, https://indonesiabusinesspost.com/4928/energy-and-resources/indonesia-invites-u-s-investment-in-critical-minerals-for-battery-ecosystem-collaboration (accessed 16 October 2025); Sulaiman, "US, Indonesia Discussing Strategic Management" (see note 14).

[67] "'Trade Pact with Canada to Supercharge Indonesia's EV Dream", *Jakarta Globe*, 29 September 2025, https://jakartaglobe.id/business/trade-pact-with-canada-to-supercharge-indonesias-ev-dream (accessed 23 October 2025).

[68] Weihuan Zhou et al., "Demystifying China's Critical Minerals Strategies: Rethinking "De-Risking" Supply Chains", *World Trade Review* 24, no. 2 (2025): 257 - 281, doi: 10.1017/S1474745624000193.

[69] For more information see for example Grieger, Gisela, *International Trade Dispute Settlement: World Trade Organisation Appellate Body Crisis and the Multi-Party Interim Appeal Arbitration Arrangement* (Brussels: European Parliament Think Tank, 17 June 2024), https://www.europarl.europa.eu/thinktank/en/document/EPRS_BRI(2024)762342 (accessed 16 October 2025).

[70] Gisela Grieger, *Understanding the EU Trade Defence Toolbox* (Brussels: European Parliamentary Research Service, September 2025), https://www.europarl.europa.eu/RegData/etudes/BRIE/2025/775919/EPRS_BRI%282025%29775919_EN.pdf?utm (accessed 31 October 2025).

[71] There has been no further update on this process at the time of writing. *Key Elements of the EU-Indonesia Trade Agreement and Investment Protection Agreement* (Brussels: European Commission, 23 September 2025), https://policy.trade.ec.europa.eu/eu-trade-relationships-country-and-region/countries-and-regions/indonesia/eu-indonesia-agreements/key-elements-eu-indonesia-trade-agreement-and-investment-protection-agreement_en (accessed 31 October 2025).

New EU policies looking to ensure sustainable, low-carbon supply chains pose an additional challenge to the relationship as they threat to undermine the long-term competitiveness of Indonesia's carbon-intensive industries.[72] Particularly the nickel industry faces increased scrutiny due to its heavy reliance on coal-powered energy. The high-pressure acid leaching (HPAL) process used to refine battery-grade nickel is both water-intensive and highly polluting. Moreover, the use of environmentally damaging practices such as deforestation from strip mining and inadequate waste management from mining and processing further exacerbates the impact of these operations.[73] The EU Battery Regulation, which outlines an extensive set of requirements to promote a circular economy and minimize environmental and social impacts at every stage of the battery life cycle, could thus curb Indonesia's aspirations to become a batteries manufacturing hub. Similarly, CBAM is poised to affect Indonesia's export of downstream products such as steel to the EU.[74] The Just Energy Transition Partnership (JETP), co-led by Germany and Japan, intends to address this issue by supporting Indonesia's renewable energy development but JETP does not cover the country's extensive financial needs – the funding gap amounts to as much as 70 per cent.[75]

Looking ahead, Europe must thus identify new avenues for engagement with Indonesia - especially as a policy shift in Jakarta appears unlikely in the near term. President Prabowo Subianto, who took office in 2024, has maintained strong policy continuity with his predecessor. Down-streaming remains a key priority of his administration, as outlined in his *Asta Cita* vision to achieve high-income status for Indonesia by 2045. Amendments to the mining law proposed by his administration would prioritise access to mining areas for enterprises intending to establish domestic processing facilities and favour the domestic use of minerals over exports. His administration has also issued a regulation requiring foreign exchange earnings from natural resources to be kept within the country for one year and increased royalties on mineral ores.[76]

[72] While CBAM and other carbon tariffs pose challenges for carbon-intensive industries, some have argued it could serve as a catalyst for structural transformation to favour cleaner production processes and diversified export portfolios in Indonesia. This will require significant strategic investments in cleaner production, policy alignment, and capacity building, however. See Bonifazi, Eugenia. *Leveraging Industrial Decarbonisation Options in Indonesia by Anticipating International Carbon Tariff* (Bangkok: ETP-UNOPS, 2025).

[73] Michaela G. Y. Lo et al., "Nickel Mining Reduced Forest Cover in Indonesia but Had Mixed Outcomes for Well-Being", *One Earth* 7, no. 11 (2024): 2019–2033, doi: 10.1016/j.oneear.2024.10.010.

[74] Melinda Martinus and Kanin Laopirun, *The EU's Carbon Border Adjustment Mechanism (CBAM): Implications for ASEAN-EU Relations* (Singapore: ISEAS–Yusof Ishak Institute, 2023), https://www.cambridge.org/core/books/eus-carbon-border-adjustment-mechanism-cbam/eus-carbon-border-adjustment-mechanism-cbam-implications-for-aseaneu-relations/78D69B2D18ACE4DEB198647B549B8061 (accessed 4 November 2025).

[75] Martinus, *Just Energy Transition Partnerships (JETPs) in Indonesia and Vietnam* (see note 55).

[76] IEA, *Global Critical Minerals Outlook 2025* (see note 6).

6 Conclusion

Although resource-rich Southeast Asia could play a key role in addressing chokepoints in Europe's critical minerals supply chains, cooperation in the critical minerals sector has so far remained underdeveloped. Yet growing geo-economic fragmentation makes cooperation increasingly urgent. Europe and Southeast Asia have an enduring relationship underpinned by shared interests in open trade and regional security. Highlighting this evolving partnership, the European Union participated for the first time in an ASEAN Summit this year - a clear signal of intensifying political and strategic engagement.[77] The EU and Germany can capitalize on this momentum to position themselves as a reliable, long-term partner for ASEAN and its members in the critical minerals sector, aligning economic opportunity with sustainability and strategic resilience. As this research shows, however, substantial challenges remain to deeper cooperation between Europe and ASEAN in this sector.

Diverse economic structures, resource endowments, and industrial development goals have prevented ASEAN from achieving meaningful integration and policy alignment in the minerals sector. This heterogeneity poses challenges not only for intra-regional cooperation but also for engagement with external partners. As Europe negotiates free trade agreements with several ASEAN member states, it must therefore ensure that bilateral initiatives are carefully aligned with ASEAN-level engagement to help advance the region's collective ambitions in the minerals sector in areas like data sharing, the promotion of high ESG standards, and the development of critical technical and institutional capacities.

Effective cooperation must also recognise that engagement with Southeast Asia cannot bypass China's influence, including in industrial projects and standards-setting. Beijing has been a critical supporter of Southeast Asia's resources sector through substantial investments since the early 2000s, particularly in countries like Indonesia where it has played a pivotal role over the past decade in developing nickel refining capabilities and advancing Jakarta's goal of an integrated EV supply chain. While the region seeks to harness economic opportunities generated by growing global demand for critical raw materials, therefore, ASEAN has been hesitant to join initiatives perceived as part of a broader containment effort toward China. This means that a successful and sustainable European approach must differentiate its strategic messaging from the zero-sum rhetoric of the US and build its cooperation around complementarity rather than confrontation.

Further, in the context of growing global demand for critical raw materials, ASEAN countries are prioritising partnerships that support their industrial policy objectives. Whereas China has demonstrably delivered in this area by offering capital, technology, and credible long-term commitments, the EU is yet to establish itself as a reliable long-term partner due to limited public and private investments. Engagement is further complicated by ambivalent views in ASEAN over EU sustainability standards and

[77] European Council, "'President Costa to Attend the 47th ASEAN Summit in Malaysia and to Travel to Abu Dhabi", Press release (Brussels, 24 October 2025), https://www.consilium.europa.eu/en/press/press-releases/2025/10/24/president-costa-to-attend-the-47th-asean-summit-in-malaysia/?utm (accessed 3 November 2025).

strategies such as the Carbon Border Adjustment Mechanism and Battery Regulation in the region, which are poised to impact ASEAN's future competitiveness. These concerns are heightened by ongoing environmental and social challenges associated with minerals development in Southeast Asia.

Looking ahead, Europe must thus develop new partnerships with important supplier countries like Indonesia, the Philippines and Vietnam that not only meet the needs of European industry but align with these countries' ambitions for local value addition and sustainable industrial development. Given the limited public funding available through major initiatives like Global Gateway, this may require a more active European role in promoting cooperative models between government and industry to mitigate regulatory risks and strengthen compliance with environmental, social, and governance (ESG) standards. Moreover, ASEAN members depend on external partners for capacity-building, technical training and joint research that support their industrial objectives —areas that offer significant potential for mutually beneficial collaboration.

ANNEX A - EU CRM and ASEAN Producers

Note: This table serves as an illustration of Southeast Asia's diverse critical mineral reserves and does not consider the relative size of reserves.

EU critical raw materials	Present in ASEAN	Countries
Antimony	✓	Vietnam, Myanmar, Laos
Arsenic*	✓	Malaysia
Bauxite	✓	Indonesia, Vietnam, Malaysia
Baryte	✓	Laos, Vietnam
Beryllium	×	
Bismuth	✓	Laos, Vietnam
Boron/Borate	×	
Cobalt	✓	Indonesia, Philippines
Coking Coal*	✓	Indonesia
Copper*	✓	Indonesia, Myanmar, Laos, Philippines, Vietnam
Feldspar*	✓	Thailand
Fluorspar	✓	Thailand, Vietnam, Myanmar
Gallium	×	
Germanium	×	
Hafnium	✓	Indonesia
Helium*	×	
Rare earth elements	✓	Myanmar, Malaysia, Thailand, Vietnam
Lithium*	×	
Magnesium	✓	Vietnam
Manganese*	✓	Malaysia, Myanmar, Thailand, Vietnam
Natural graphite	✓	Vietnam
Nickel*	✓	Indonesia, Philippines, Myanmar
Niobium	✓	Thailand
Platinum group metals	×	
Phosphate rock	✓	Vietnam
Phosphorus*	×	
Scandium	✓	Philippines
Silicon metal	✓	Malaysia
Strontium	×	
Tantalum	✓	Thailand, Malaysia
Titanium metal	✓	Malaysia, Vietnam
Tungsten	✓	Vietnam, Myanmar, Thailand
Vanadium	×	

*strategic raw material

By author based on *Area Reports International: Asia-Pacific. III. Minerals Yearbook* (Washington D.C.: US Department of Interior and US Geological Survey, 2019), https://pubs.usgs.gov/myb/vol3/2019/myb3-2019-asia-pacific.pdf (accessed 15 September 2025); *Mineral Commodity Summaries* (Washington D.C.: US Geological Survey, 2025), https://pubs.usgs.gov/periodicals/mcs2025/mcs2025.pdf (accessed 9 October 2025).

ANNEX B - Summary of ASEAN Minerals Development Vision

<table>
<tr><td>VISION</td><td colspan="2">ASEAN as a leading destination for minerals investment, including in critical minerals</td></tr>
<tr><td>STRATEGY</td><td>Minerals sector as pillar of the ASEAN Economic Community</td><td>Sound governance and leadership in minerals development</td></tr>
<tr><td>ACTION</td><td>• Promote investment, resource-efficient production, and trade while supporting the growth of ASEAN-based companies.
• Develop a vertically integrated supply chain.
• Support artisanal and small-scale miners.
• Leverage diverse financing and risk mitigation mechanisms.
• Forge strategic partnerships and cross-sectoral collaboration.</td><td>• Strengthen governance and engage industry stakeholders in the minerals sector.
• Pursue sustainable minerals development and drive responsible production.
• Engage with relevant stakeholders and empower communities.</td></tr>
<tr><td colspan="3">FOUNDATION
Deliver high-quality data | Market to investors | Develop human capital | Embrace digital transformation and decarbonisation</td></tr>
</table>

By author, adapted from ASEAN, *ASEAN Minerals Development Vision* (see note 21).

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