



Reconfiguring Regional Supply Chains and Logistics: Diversification, Intra-Regional Trade, and Economic Resilience

Ben Lawson

Energy, Mining, and Business Development Expert; Vice Chairman, Djakarta Mining Club, Australia

Abstract.

This paper examines Indonesia's strategic position within global mineral supply chains amid increasing geopolitical fragmentation and supply chain disruption. The presentation discusses downstream industrialisation, logistics, energy security, investment certainty, and technology transfer as key elements supporting economic resilience. It argues that Indonesia's abundant natural resources provide a strong foundation for long-term industrial development, provided they are supported by predictable regulations, competitive investment policies, and pragmatic government action. The presentation concludes that regulatory certainty, rather than resource availability, represents one of the most important determinants of Indonesia's ability to strengthen supply chain resilience and achieve its long-term development objectives.

Keywords: Economic resilience, Investment certainty, Logistics, Mineral supply chains, Technology transfer.

Corresponding Author:
Ben Lawson

Email:
blawson@dmc-cci.com

This article, authored by Ben Lawson, is published under the terms of the [Creative Commons Attribution-ShareAlike 4.0 International Licence](#), which permits unrestricted use, distribution, and reproduction in any medium, provided that proper credit is given to the original author(s), the title of the work, the journal citation, and the corresponding DOI. The selection and peer-review of this article were conducted under the responsibility of the JGF Conference Committee.



Published by Lemhannas Press.

Introduction

Recent global disruptions, including the COVID-19 pandemic and geopolitical tensions affecting international trade routes, have exposed the vulnerability of highly interconnected global supply chains. Disruptions occurring in one part of the world can rapidly propagate across production networks, affecting industrial output, logistics, energy security, and international trade. These developments have reinforced the importance of building more diversified, resilient, and adaptive supply chains capable of responding to geopolitical uncertainty while sustaining long-term economic growth.

Within this evolving environment, Indonesia occupies an increasingly strategic position in global mineral and energy supply chains. As one of the world's leading producers of nickel and an important supplier of cobalt, copper, bauxite, gold, and other critical minerals, Indonesia plays an essential role in supporting manufacturing, clean energy technologies, and industrial development worldwide. At the same time, the country's expanding downstream industries provide opportunities to increase domestic value creation while strengthening its position within regional and global production networks.

The presentation examined several strategic issues that influence Indonesia's future supply chain resilience. These include downstream industrialisation, logistics efficiency, regional trade integration, energy security, investment certainty, technology transfer, and regulatory consistency. Together, these issues demonstrate that strengthening Indonesia's competitiveness requires not only abundant natural resources but also supportive public policies capable of encouraging sustainable investment, industrial development, and long-term economic resilience.

Result and Discussion

Indonesia occupies a strategically important position within global mineral and energy supply chains. The country is the world's leading producer of nickel and one of the major producers of cobalt, copper, bauxite, and gold. Ongoing initiatives to develop lithium extraction technologies and programmes supporting rare earth minerals further strengthen Indonesia's contribution to manufacturing, energy transition technologies, and industrial development.

Downstream mineral industrialisation has strengthened Indonesia's ability to generate greater domestic value addition. Processing minerals domestically rather than exporting raw ores has increased industrial competitiveness while reducing dependence on commodity exports. This approach has also enabled Indonesia to avoid many of the characteristics commonly associated with the resource curse, while creating stronger foundations for long-term industrial development.

Growing geopolitical competition is increasingly reshaping global supply chains and encouraging producer countries to participate in competing economic arrangements. Within this environment, maintaining balanced economic engagement while preserving broad market access remains important for protecting Indonesia's long-term national interests and strategic flexibility.

Domestic logistics continue to represent one of the principal structural challenges affecting Indonesia's competitiveness. Relatively high transportation costs between Indonesian regions limit supply chain efficiency and regional economic integration. Improving logistics infrastructure, transport connectivity, and payment systems therefore remains essential for strengthening Indonesia's resilience within regional and global supply chains.

Energy security also remains an important component of Indonesia's industrial development strategy. Renewable energy development, cleaner utilisation of domestic coal resources, waste-to-energy technologies, and biodiesel production represent complementary approaches for supporting future energy demand. These approaches should remain aligned with Indonesia's resource endowment, economic conditions, and long-term national development priorities.

Regulatory certainty remains fundamental for attracting long-term investment. Stable regulations, transparent licensing procedures, predictable fiscal policies, and legal certainty provide important foundations for strengthening investment in the mining and energy sectors. Competitive exploration policies also remain necessary to encourage future mineral discoveries and sustain industrial expansion.

Technology transfer constitutes another essential component of sustainable industrial development. Beyond financial investment, international cooperation should facilitate the transfer of knowledge, technical expertise, and workforce capabilities to strengthen Indonesia's domestic industrial capacity while supporting the long-term objectives of *Indonesia Emas 2045*.

Several policy issues continue to influence investment competitiveness, including production quota arrangements, export proceeds regulations, taxation, royalty policies, commodity pricing mechanisms, and biodiesel implementation. Addressing these issues through pragmatic policymaking, regulatory consistency, and a supportive investment environment will strengthen Indonesia's competitiveness while enhancing resilience within an increasingly dynamic global economy.

Conclusion

Indonesia possesses significant strategic advantages within global mineral and energy supply chains through its abundant natural resources and expanding downstream industries. These strengths provide substantial opportunities to strengthen industrial development, economic resilience, and regional supply chain integration.

Realising these opportunities requires predictable regulations, efficient logistics, competitive investment policies, continued downstream industrialisation, and sustained technology transfer. Together, these elements provide an important foundation for strengthening industrial competitiveness, attracting long-term investment, and supporting sustainable economic development.

Pragmatic policymaking, balanced international engagement, and close collaboration between government, industry, and investors will remain essential for strengthening Indonesia's long-term competitiveness. Strengthening these foundations will support Indonesia's aspiration to achieve sustainable industrial transformation and realise the vision of Indonesia Emas 2045 amid an increasingly dynamic global economic environment.

Publication Note

This article presents an academic adaptation of the presentation delivered at the 10th Jakarta Geopolitical Forum (JGF X) 2026. Editorial revisions were limited to structure, language, and readability, while the speaker's original arguments, meaning, and policy recommendations remain unchanged.

References

1. Lembaga Ketahanan Nasional Republik Indonesia (Lemhannas RI). **Jakarta Geopolitical Forum X/2026: Strengthening Multilateralism: Survival Amid Global Turbulence and a Fragmented World** [video on the Internet]. Jakarta: Lemhannas RI; 2026 Jul 9 [cited 2026 Jul 17]. Available from: <https://www.youtube.com/watch?v=IbYayky-FmQ>