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Global Context of Critical Minerals Supply Chain and Processing

By

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The views expressed are those of the author and do not necessarily reflect the views of UNCTAD.



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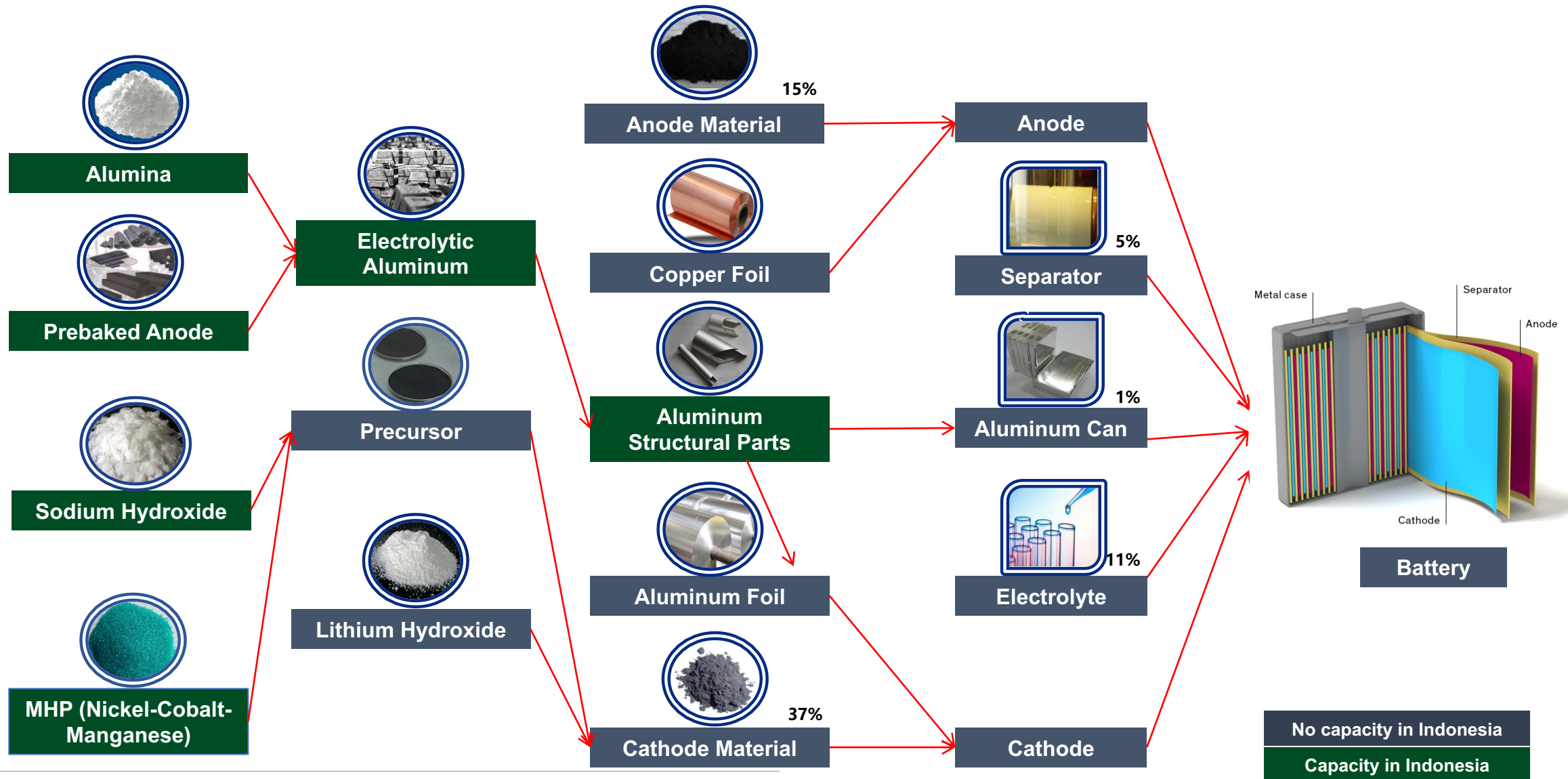
Global Context of Critical Minerals Supply Chain and Processing

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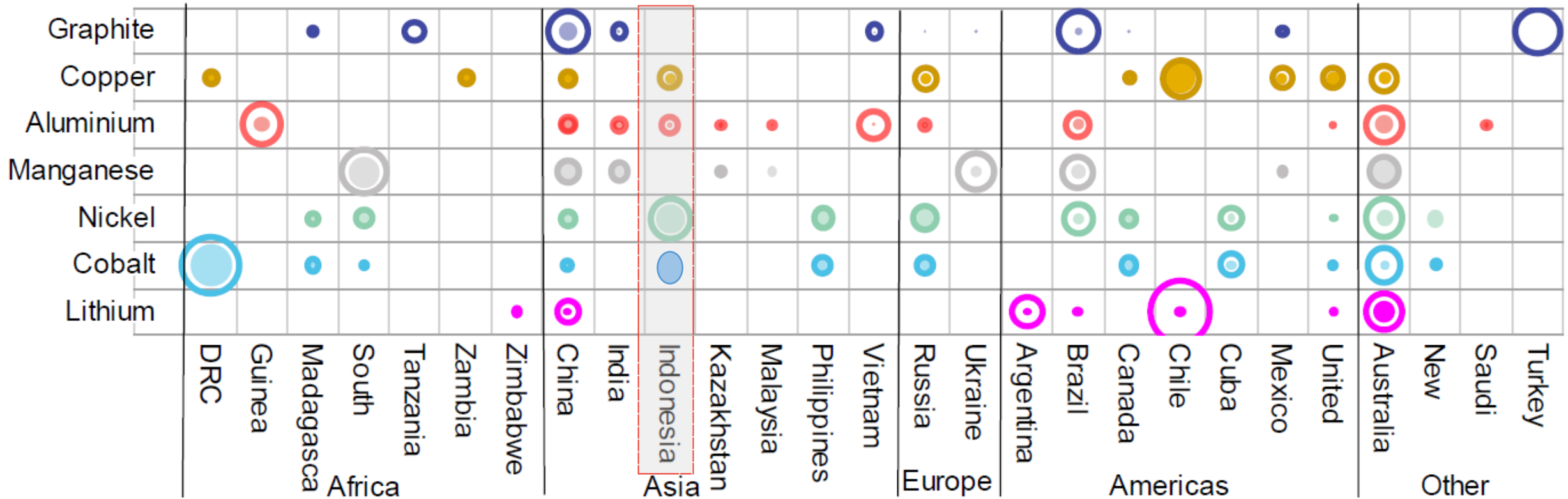
The Lithium Battery Supply Chain Ecosystem Is Quite Complex and Involves Many Minerals Other Than Nickel





Global Critical Materials Resources Map: No Single Country Can Supply All Critical Minerals Needed for Energy Transition

Global battery metal reserves and production

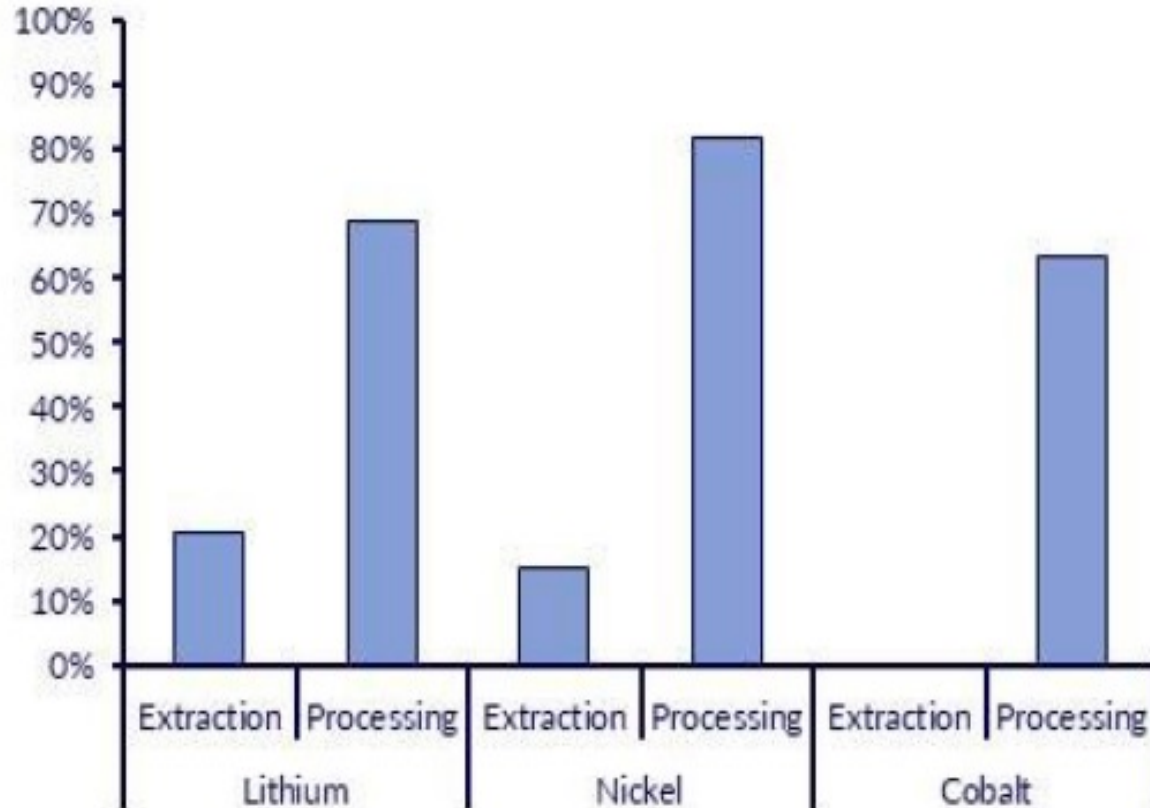


Source: US Geological Survey 2019, BloombergNEF. Note: The solid spheres represent production, the outer circle represents the total reserves. Size of spheres and circles denote proportionality of the resource between countries.

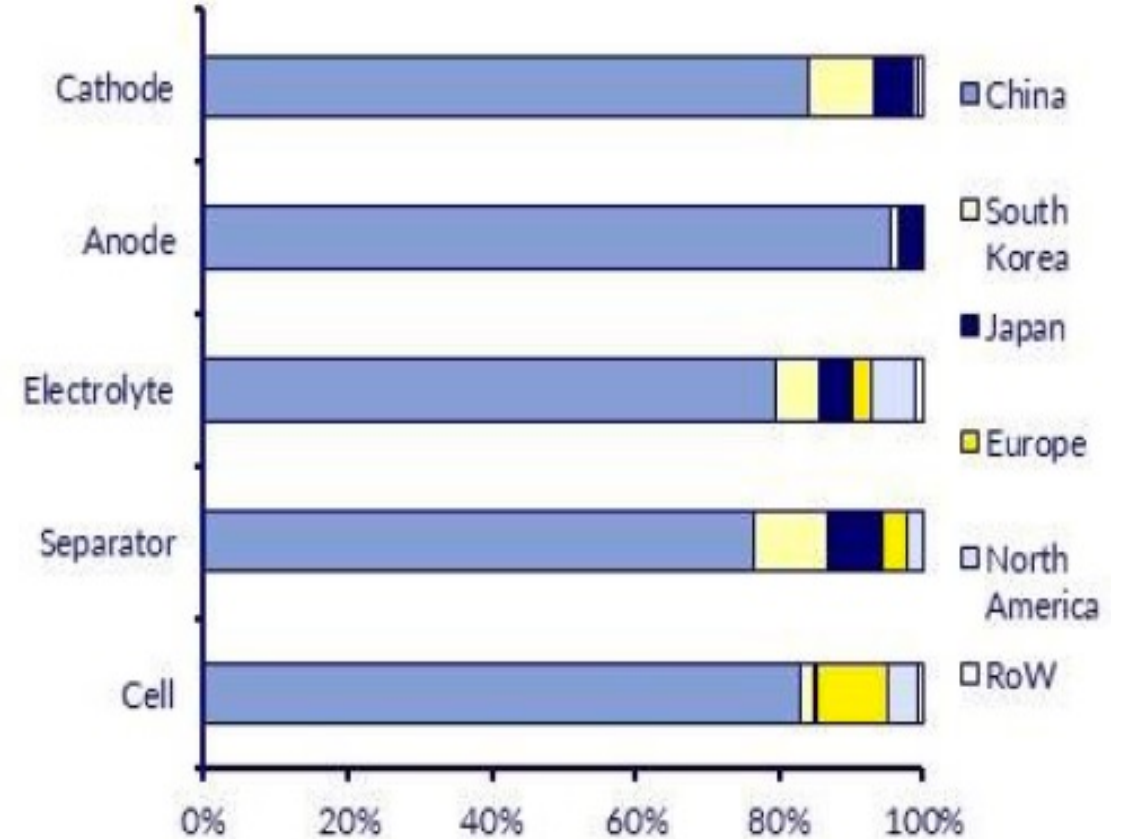


China Has Domination on Battery Materials Processing Technology Due to Significant Investment on R&D

China Share's on Extraction and Processing of Key Battery Metals



Regional Breakdown of Battery Cell and Component Capacity



Source: CLSA and BloombergNEF

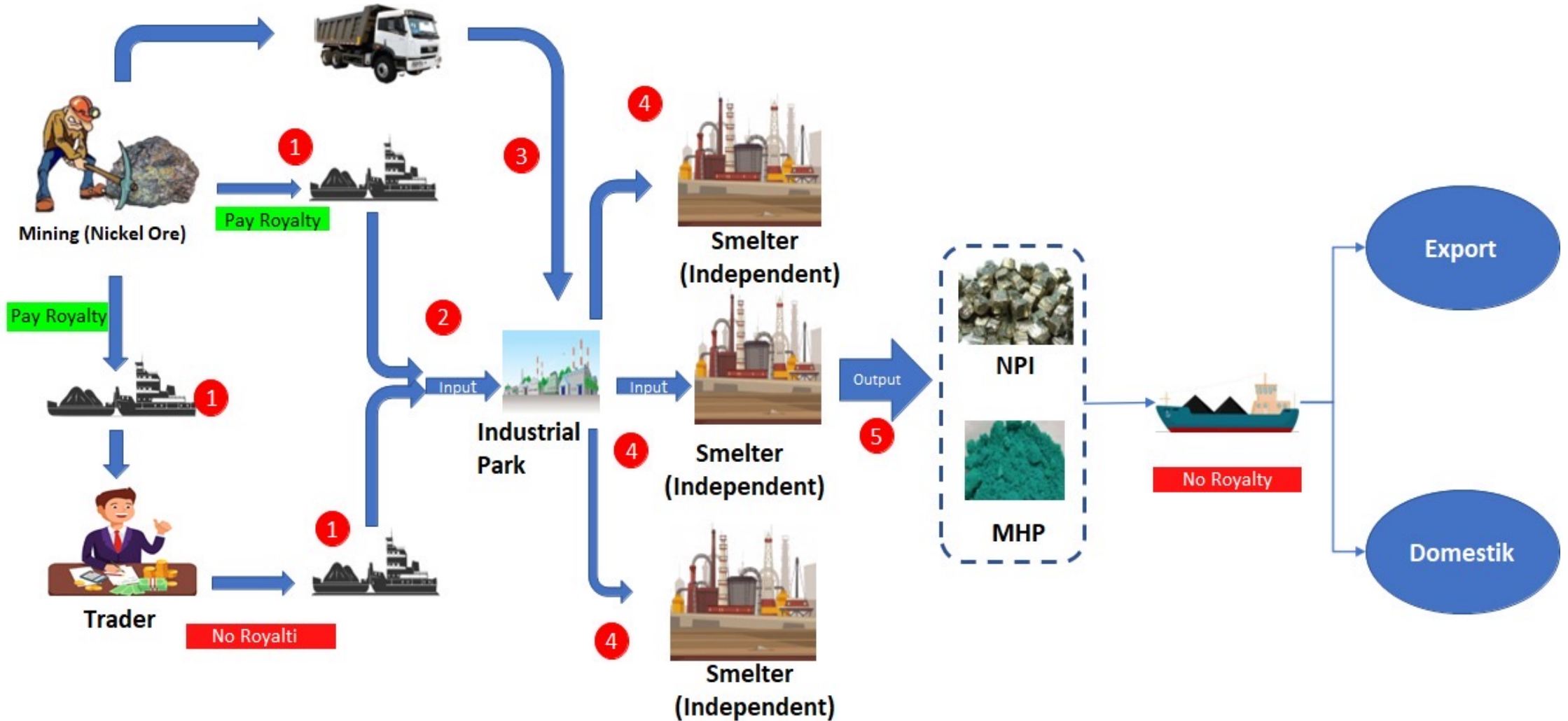


All Eyes on The US Inflation Reduction Act (IRA)

		Incentives	Requirement		
1	Cell	\$35/KWh	Cell and Pack Factory Located in US		
	Pack	\$10/KWh			
	Critical Mineral	Tax credit 10% of total production cost			
	Active Material Electrode				
Production Tax Credit (PTC)					
2	Critical Minerals (Li, Ni, Co, Mn, Graphite)	\$3,750	Extract, processed in US or its FTA allies including recycling in north america	Pre-2024 40% 2024 50% 2025 60% 2026 70% Post-2026 80%	No mineral coming from Foreign entity of concern after 2024
	Battery Materials	\$3,750	Produce or assembled in North America	Pre-2024 50% 2024/2025 60% 2026 70% 2027 80% 2028 90% Post-2028 100%	No mineral coming from Foreign entity of concern after 2023
Consumer Tax Credit (CTC)					



Implementing Traceability and Transparency System for Nickel Production in Indonesia for Monitoring and Evaluation for ESG Implementation



Thank You

