

## Critical Minerals and the Rise of Green Industrial Policy: South Korea in Comparative Perspective

Jewellord (Jojo) Nem Singh

Amidst dramatic shifts in the global political economy and changing power dynamics, industrial policy has returned in development studies and political economy as a way of understanding state responses to economic globalization. While countries have experimented on various green policies to respond to the climate emergency, South Korea's development strategy is known within the field for its immense capacity to combine export promotion, industrial competitiveness, and adaptation to external environment including the worldwide shift away from fossil fuels. A core feature of the Korean developmental state model is the conscious deployment of industrial policy not only as a means of generating economic growth but also to foster national unity and a sense of purpose to the state.

This presentation explores the use of industrial policy both as a means to maintain Korean industrial competitiveness and to respond to the clean energy revolution. At the core of new industrial policy in the 21<sup>st</sup> century is a technological competition and a race among industrialized countries to secure 'critical raw materials' (CRMs). As countries design policies on how to enlist and secure CRMs, the policy challenge becomes more apparent given the increasing control of China and developing countries to these metals. The presentation provides a global roadmap of the prospects and challenges in relation to the critical minerals-clean energy nexus.

The presentation does so in three steps. Firstly, I present a global picture on how the recent changes from 2010 onwards have impacted on domestic policies on resource security as well as in guiding the development of a rare metals supply chain in Korea. Secondly, I provide a survey of the initial responses of the Korean state to growing dependence on China for supplies of critical minerals since 2010. Finally, I explore and discuss the distinctive policy instruments used to reposition South Korea into an ever complex regional economic order. In so doing, I take note of growing divergence between business and state interests, but also the convergence towards shared problems—the lack of access to these minerals that could profoundly impact on the long-term industrial competitiveness of globalized Korean companies and national security concerns of the Korean state. In so doing, the presentation raises questions (as opposed to answers!) on the feasibility of green industrial policy as a competitiveness strategy in these challenging geopolitical contexts.

**GRIP-ARM Project** is a five-year research programme (2021-2026) focussed on drawing a trans-regional comparison to analyze both (1) resource-producing countries that deploy various industrial strategies to (re)shape world supply and production; and (2) resource-importing countries and manufacturing firms that seek to reduce supply vulnerability while also reducing socio-environmental costs of rare earth extraction. The project currently draws evidence from several cases, namely Brazil, China, Kazakhstan, the Philippines, European Union, Japan and South Korea, to examine the global political economy of critical minerals and clean energy transition.

**Jewellord (Jojo) Nem Singh** is the Principal Investigator of a five-year research programme *Green Industrial Policy in the Age of Rare Metals: A Trans-regional Comparison of Growth Strategies in Rare Earths Mining (GRIP-ARM)* funded by the European Research Council Starting Grant No. 950056 (2021-2026). He is an Assistant Professor (tenured) at the International Institute of Social Studies (ISS), The Hague and a Research Fellow at the International Institute for Asian Studies (IIAS), The Netherlands. Nem Singh is the author of *Business of the State: Why State Ownership Matters for Resource Governance* (Oxford University Press, Forthcoming) and *The Politics of Designing and Negotiating Industrial Policy in the 21<sup>st</sup> Century* (Routledge, Forthcoming), as well as 40 scientific papers, book chapters, edited collections, and special issues within the field of political economy and development studies.

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**Place: SNUAC Asia Square, 3<sup>rd</sup> Floor**