The International Institute for Asian Studies (IIAS) has announced the Chinese BRI/China’s global influence. A new addition in its Green Industrial Policy in the Age of Rare Metals (GRIP-ARM) - A trans-regional comparison of growth strategies in rare earth mining.

The GRIP-ARM programme is led by Dr Jewellord Nem Singh from the Institute of Social Studies at Erasmus University (Netherlands) and Associate Research Fellow at IIAS. This ERC-funded five-year project seeks to address three intricately connected questions:

1. How do state capacity, business power and consumer networks shape the design of industrial policies in resource-rich countries?
2. What explains the success of some countries in generating linkages between resource extraction and manufacturing, and what accounts for their failure?
3. How effective are the responses of importing countries and their manufacturing industries in securing a stable supply while reducing the socio-environmental costs of extraction?

The new global political economy is increasingly defined by ‘critical raw materials’ – of which rare earth elements (‘rare earths’) are a prime example. The urgent call of designing growth strategies in the realm of the BRI is escalating as several rare earth projects are being developed in Latin America, Africa and Asia to create an alternative supply chain outside China. By building an interdisciplinary bridge on rare earth-based growth strategies, GRIP-ARM contributes to scholarship on innovations in non-traditional manufacturing sectors as key to long-run economic development (Nem Singh & Chen 2018; Ovadia & Wolf 2018; Pares 2013).

Furthermore, GRIP-ARM aims to influence debates on international governance and targeting knowledge exchange activities towards key decision-makers involved in the Global Rare Earths Industry Association (GRIE), the World Business Council for Sustainable Development (WBCSD), and the International Convention on theRare Earths Industry Association (ICAS), which together bring the input of international policy practitioners and senior experts in the fields of political economy and development studies.

Another crucial element of the project is to create valuable knowledge for the Global Rare Earths Industry Association, which provides inputs on global efforts to create a cleaner, greener supply chain of critical raw materials. The study will add knowledge on how developing countries can seek to build industrial capacity to extract in less environmentally destructive ways. In these ways, the research contributes to the urgent quest of designing growth strategies compatible with ecological sustainability.

Relevance

Two important trends underline the urgency of this research. Firstly, low and middle-income countries joining the race for industrialization are making demands for competitive energy, ranging from computers, mobile phones, and flat screens, as well as for low-carbon consumer goods, such as energy-efficient cars, solar panels, wind turbines, and even lights – all of which constitute further pressures to accelerate the pace and breadth of natural resource exploitation. Secondly, growing demands for rare earths are currently suffering from a supply shortage that has been driven by China – the dominant market player in rare earth mining – having to impose export controls and reorient its mining policy to support domestic industrialization. The impending resource crunch creates incentives for mineral states to gain strategic and economic advantage.

GRIP-ARM’s agenda is especially salient as several rare earth projects are being developed in Latin America, Africa and Asia to create an alternative supply chain outside China. By building an interdisciplinary bridge on rare earth-based growth strategies, GRIP ARM contributes to the evolution of industrial policies in resource-rich countries.

Objectives and outputs

The project will produce a number of academic outputs including a monograph on ‘Transforming Rare Earths for Industrial Development’, articles authored by the project leader, articles co-authored with the PI researchers (on Brazil and Kazakhstan) and articles co-authored with the post-doc (on China’s Rare Earths policy, industrial policy and building innovation and linkages through China’s mining sector). On 9 March 2022, 14 researchers from China and Europe will convene to discuss their individual research projects in the context of the joint research programme between IIAS-EPA and CASS-IWEP, titled, ‘The challenges of energy transition: Comparing China’s Belt and Road Initiative and the European Union’. The aim is to publish the papers presented at this fourth research-oriented meeting in a special issue of a peer-reviewed journal and later as a book (2023).

The challenges of energy transition: Comparing China’s Belt and Road Initiative and the European Union

Speaker: Phill Wilcox (author)