

# 'Rare earths help sustainability — the world doesn't need geopolitical conflicts over them'

**Sophia Kalantzakos** is Global Distinguished Professor, Environmental Studies and Public Policy, NYU Abu Dhabi. She tells **Srijana Mitra Das** at *Times Evoke* about rare earths — and their seekers:

Photos: Getty Images & iStock

**What is the core of your research?**  
 ■ My work centres on the geopolitics of critical minerals, the transition to a net zero future and the fourth industrial revolution. I examine how resource competition in an era of fraught geopolitics has tilted the balance toward securitised assessments of global interdependence.

**What exactly are rare earths?**  
 ■ In 2010, 17 elements of the periodic table called 'rare earths' offered a glimpse of what resource competition over minerals might entail. Until then, these were largely unknown,



although indispensable for renewable resources and green tech, computers, smartphones and high-tech medical systems and the defence industry, with missile guidance systems, smart bombs and submarines.

But then, a trawler incident between China and Japan made headlines as China unofficially and briefly stopped the shipment of rare earths to Japan when it arrested their crew. Major industrial economies were alarmed to realise China was willing to use economic statecraft to settle a geopolitical dispute — and they were overly reliant on China's near-monopoly of rare earth exports and supply chains.

Importantly, at Paris in 2015, countries agreed greening of the world economy, especially energy and transport, was the best industrial response to the climate crisis. The rare earth elements (REEs) list grew — and China had a huge advantage.

**What are REE's geopolitical contours?**  
 ■ First, China has arrived, economically and militarily. While 'non-interventionist', China has developed



**SEAL VS SHIPS:** It's my landscape too



**TRULY A RARE EARTH...** Critical minerals lie both in the Amazon (L) and Greenland (R), which explains the new contest over the latter. But, as these are battled over and mined, indigenous people and animals lose control of their world

instruments of influence like the Asian Infrastructure Investment Bank (AIIB) and the Belt and Road Initiative (BRI), which is no longer just for infrastructure but covers education, media, digital connectivity, security, etc. It also offers a developmentalist narrative of growth with sustainability. Alongside, other countries, like India, have risen and become regional powers.

Second, the US has been trying to find its footing in this new power configuration — in his first term, President Trump took an aggressive approach to China, launching trade wars and critical minerals policies out of defence concerns. President Biden escalated this, rekindling relations with allies to 'restrict' China, launching initiatives like the Minerals Security Partnership, of which India is a member. Trump's second term will likely increase competition — but US allies will be told American support comes as a quid pro quo.

The Paris Agreement saw global consensus to overhaul energy and transport to mitigate the climate crisis. But Europe was still producing diesel cars and the US, mostly gas-guzzling SUVs — China was fully

invested in transport electrification. So, the US and Europe hit China with tariffs — they just aren't ready and must stall Beijing from overwhelming their markets.

Interestingly, the list of 'critical minerals' is also not static — industrial nations make their selection largely focusing on supply chains vulnerable to disruption and materials essential for applications, without which impacts on their economy and security would be high. As China's competitors seek to regain leadership in this comprehensive transition, they need critical minerals — and the omnivorous material diet of these technologies, produced at an unprecedented scale now, needs almost every element of the periodic table. So, these states are nearshoring, friendshoring, building new mining and supply chain capabilities at home and, for the US, trying to decouple from China — Biden wanted US allies to stand with America and coordinate new supply chains. In the chip wars, the US asked allies to limit exports to China and invest in America. This Sino-US hypercompetition is pushing for a bipolar world order — but most countries are unwilling to return to that. This situation is also not climate-informed.

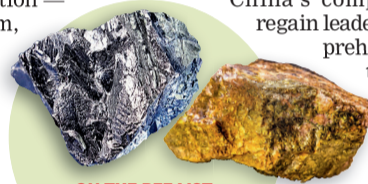
**Does such mining impact ecology?**

■ Yes. This impacts both societies and ecosystems. Europe has now produced the most advanced standards for mining and supply chain practices. The new Trump administration is not in favour of regulation though, denies the climate emergency and opposes ESG standards.

What we must avoid is this green transition becoming a scramble for materials and another missed opportunity for developing economies to participate in a just and meaningful way — today, Greenland is on the path to becoming a critical contributor to net zero supply chains while fostering a global best practice in embracing indigenous communities as the driver of this. Now, that is at risk. Such talk will only breed more geopolitical contention. The decarbonisation of the global economy must be equitable and inclusive. A revival of resource conflicts is not what the world deserves or needs.

*Views expressed are personal*

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**ON THE REE LIST:** Lutetium (L) and Uranium (R)



**T0?** Can Amazon tamarins relocate?

## READERS WRITE

Dear Times Evoke,

The TE Collector's Edition IV (28<sup>th</sup> December) was marvellous! Ami Vitale always brings a lump to my throat. I start thinking of how even my tiniest efforts can preserve species on the brink of extinction. The curated 'Vital Impacts' images were beautiful, thought-provoking and made you go back to them again and again. We readers are indebted to Times Evoke for bringing us such compelling articles that have positive implications for our planet and inspire younger people. Kudos, TE!

— **Rashi Beriwal**, Delhi

TE's Collector's Edition IV was just iconic. The art was both touching and challenging. It made me think, when will humans learn to protect and not harm these species? After seeing the incredible photographs and reading Ami Vitale's insights, I request all my peers to please help save these amazing beings.

— **Ashita Madkaikar**, Mumbai

TE's special edition was great! The interview was so in-depth while the wildlife images were stunning. Ami Vitale's words were extraordinary. She says, 'Photography creates a deep connection to the natural world, fosters empathy and cuts through the noise of false information.' Wonderfully put. Thanks, TE!

— **Sekar Sairam**, Aladu, Tamil Nadu

We cannot thank TE enough for its brilliant articles presented throughout the year, topped with the Collector's Edition! This year's photo page was just mesmerising. The entire family chose their favourite photos! We have kept the special page carefully. Thank you, TE, for these artistic and rare captures of nature from the famous Vital Impacts group.

— **Mohan V. Saranam**, Hyderabad

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