General

UMPSA Round Table opens national discourse on Malaysia rare earths and green future

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KUANTAN, 8 December 2025 – Strategic discussions on the future of the national rare earth industry received significant attention when Universiti Malaysia Pahang Al-Sultan Abdullah (UMPSA), together with Friends of Sustainable Malaysia and CONFEXHUB, organised a Round Table Discussion themed ‘Malaysia’s Rare Earth Crossroads: Powering A Green Future, Protecting Our Natural Heritage’ at UMPSA Holdings Hall, Gambang.

This programme brought together influential leaders, research figures, policymakers, and industry players in efforts to strengthen the national rare earth ecosystem through a more responsible, sustainable, and future-oriented approach.

The Deputy Vice-Chancellor (Research and Innovation) of UMPSA, Professor Ts. Dr Aida Mustapha outlined Malaysia’s important position in the global rare earth landscape, particularly as the world actively accelerates the transition towards green technology.



According to her, Malaysia is currently at a critical crossroads where economic potential and technological capacity must be mobilised in tandem with environmental conservation.

“The need to strengthen a stable and ethical global supply chain becomes a shared responsibility to ensure that the country does not merely pursue commercial opportunities but also safeguards social

and ecological interests," she said.

She also touched on global market developments, which show that China continues to dominate more than 60 per cent of global rare earth production, while the United States, Australia, and Russia strengthen their respective positions.

"Dependence on a single producing country poses risks in terms of geopolitics, supply security, and market uncertainty, making the presence of new responsible players such as Malaysia increasingly important in shaping a safer and more sustainable global supply chain.

"Malaysia has bright prospects through early discoveries of rare earth deposits in Pahang, Perak, Kelantan, Terengganu, and Penang with potential value estimated in the tens of billions of ringgit," she explained.

However, she also reminded that history, such as the Blue Lake incident, serves as evidence that any development without strict environmental control can bring long-term consequences.

"Therefore, every national step must be anchored on the principles of transparency, integrity, and conservation.

"In the context of technological development, the UMPSA SMARRT Centre of Excellence, established in 2014, functions as the main catalyst for national rare earth technology development.

"This centre not only conducts exploration and extraction research, but also develops value-added technologies such as permanent magnet materials, catalysts, and electronic components," she said.

She added that with support from SRF funding amounting to RM7 million for the development of the EYE THREE separation process, as well as an endowed chair with Advanced Super Magnet Sdn. Bhd., SMARRT is positioning Malaysia more firmly within the global value chain.

"Approaches based on native flora remediation, circular economy, as well as exploration of carbon capture and storage technologies further reflect UMPSA's commitment to sustainability and environmental conservation," she explained.

The programme continued with a keynote presentation by the Vice-President of Malaysia Lynas Rare Earth Ltd., Dato' Sri Mashal Ahmad, who delivered a keynote address titled 'Scene Setting of World Development of Rare Earths Industry'.

He comprehensively outlined global trends, market demand, the positions of major producing countries, and the need for Malaysia to build technical capacity and infrastructure to ensure that the country is not merely a raw material supplier but a strategic player in a high-value industry.

He also touched on sustainability issues, compliance with international regulations, and opportunities for Malaysia to develop a cleaner and more responsible supply chain to meet the demands of the global green technology industry.

The forum session featured distinguished panel members from various disciplines and backgrounds, including Lecturer of UCSI University Kuala Lumpur, Professor Dato' Dr Ahmad Ibrahim, Vice-President of Malaysia Lynas Rare Earth Ltd., Dato' Sri Mashal Ahmad, Executive Technical Director of UDPS Sdn. Bhd., Dato' Ir. Ts. Dr Badhrulhisham Abdul Aziz, and Lecturer of the Faculty of

Chemical and Process Engineering Technology (FTKKP) UMPSA, Associate Professor Ts. Dr Syarifah Abd Rahim.

The forum covered in-depth discussions on mechanisms for rare earth industry development, safety standards, biodiversity conservation, research and development directions, challenges of public acceptance, as well as the need to establish more comprehensive and integrated national policies.

The programme proceeded with a closing address by the Advisor of Friends of Sustainable Malaysia, Dato' Seri Mustapa Mohamed, who concluded that Malaysia needs to move forward with a bold yet cautious approach, ensuring that economic opportunities are translated into tangible benefits for the people without sacrificing natural heritage that forms the nation's identity.

The programme was also interspersed with a laboratory visit in conjunction with the Open Day for REE Tech Expo, allowing participants to directly observe demonstrations of rare earth technologies, processing methods, environmental monitoring platforms, and the latest research conducted at UMPSA and by industry partners.

This visit also opened space for further discussions on research collaboration, talent development, and future investment opportunities.

Discussions throughout the day further emphasised that Malaysia possesses great capacity to become a regional leader in a rare earth industry that is sustainable, principled, and high-impact.

With the integration of research expertise, science-based policies, continuously advancing technology, and commitment to environmental stewardship, Malaysia is capable of navigating this critical crossroads with confidence towards a safer and more resilient green future.

Also present were the Chief Executive Officer of Pahang Mining Corporation, Dato' Haji Ahmad Rizal Ali, the Director of Akademi Mineral Malaysia Pahang (AMMP), Rashdan Abdul Manaf, the Director of the Pahang Department of Environment (DOE), Zakaria Ahmad@Mohd, the Deputy President of MIGHT, Ts. Dr Mohd Muzzammil Ismail, and the Chief Executive Officer of CONFEXHUB Sdn. Bhd., Paul Yeo.

UMPSA representatives included the Senior Director of the Centre for Research Excellence Management, Professor Ts. Dr Abdul Adam Abdullah, the Senior Director (Industry and Community Networking) of the Department of Research and Innovation, Professor Ir. Dr Chin Sim Yee, the Director of the Centre for Industry Relations, Associate Professor Doh Shu Ing, the Director of the Centre for Community Relations, Dr Daing Mohamad Nafiz Daing Idris, the Senior Director of the Center for Rare Earth and Critical Mineral, Associate Professor Ts. Dr Mohd Yusri Mohd Yunus, and the Director of the Centre for Sustainability of Mineral and Resource Recovery Technology, Associate Professor Dr Mohd Yuhyi Mohd Tadza.

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