European Energy Research Alliance (EERA) aisbl
72 rue de Namur, 1000 Brussels, Belgium

Concept note for the SUPEERA Webinar

Paving the way for strategic autonomy: The role of R&I on materials for the clean energy transition

Thursday 01 December – 10:00 to 11:30 CET - Online

As Europe and the rest of the world struggle to cope with the crisis unfolding in the energy markets, the urge to accelerate the clean energy transition (CET) has never been so strong. However, a serious hurdle to rise to the challenge is represented by the increasing troubles affecting global supply chains of the critical materials needed for the transition.

Critical materials are a key component for most clean energy technologies that will need to be developed in the future. To only mention a few, wind energy, solar energy and batteries are all highly dependent on them through their value chains. Mineral demand for use in Electric Vehicles (EVs) and battery storage is a major variable, potentially growing at least thirty times by 2040[1]. In this context, while the EU is a vocal proponent of clean energy solutions, it lacks both the supply and the processing facilities for most necessary materials, with China[2] playing the lion's share in these areas of activity.

To tackle this critical issue and lessen the bloc materials' dependency on third states, several initiatives have multiplied over the years, particularly on circularity and resource efficiency. Seen the urge to scale up action, a "Raw Materials Act" is also currently in the making on the policy side aiming to stimulate the EU's production. Among the ideas put forward are the designation of strategic projects for accelerated permitting, the creation of a one-stop shop for project authorisations, or the development of measures to speed up national legal processes, drawing on EU regulations to expedite permits for electricity infrastructure.

In light of this, research plays a fundamental role in informing policies and helping businesses make the right decisions. R&I will be needed across the technology and value chain spectrum, from sustainable mining solutions to end-of-life recycling processes. In particular, it will be essential to develop the most strategic technologies in Europe, helping to bring back the supply and value chains to the continent, and support companies and workers in the endeavour to strengthen the continent's raw materials sector.

The webinar will explore clean energy research contribution in tackling this most topical challenge in combination with extensive input from policy and industry – the "knowledge triangle" - with the view of shedding light on the way forward to a more sustainable and innovative clean energy technology materials environment.

[1] IEA, 2021, "The Role of Critical Materials in Clean Energy Transitions"
[2] IEA, 2022, "Securing Clean Energy Technology Supply Chains"

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Time	Title	Speaker
10:00 – 10:05	Welcome & Introductory remarks	Rosita Zilli, Senior Policy Officer - **EERA**
10:05 – 11:05	Panel Discussion *Moderates*: Adel El Gammal, Secretary General - **EERA**	Daniel Cios, Policy Officer, Energy Intensive Industries and Raw Materials - **DG GROW, European Commission**
		Dumitru Fornea, Rapporteur "Opinion on Critical Raw Materials" – **European Economic and Social Committee**
		Amada Montesdeoca Santana, Director of Open Innovation – **UMICORE**
		Sawako Nakamae, Coordinator of the Joint Programme on Advanced Materials and Processes for Energy Applications (AMPEA) – **EERA**
11:05 – 11:25	Q&A Session	
11:25 – 11:30	Concluding remarks	Ivan Matejak, SUPEERA Project Coordinator - **EERA**