



EUROPEAN COMMISSION
JOINT RESEARCH CENTRE
Sustainable Resources Directorate
Unit D3 – Land Resources & Supply Chain Assessments

JRC / HaDEA Technical Workshop

“Channeling knowledge from European projects into the Raw Materials Information System (RMIS)”

Addressing knowledge needs towards a secure and sustainable management of critical and strategic raw materials, and the substitution potential via advanced materials

Hybrid event, October 9th – 10th, 2024

Physical meeting room day 1 (October 9th):

ERCEA ROOM COV2 25/SDR1, Auditorium NOWOTNY

Physical meeting room day 2 (October 10th):

COV A2 building, room n° 4-15

Venue address (for both days):

European Health and Digital Executive Agency (HaDEA), Place Rogier 16,
1210 Brussels, Belgium

Recordings:

Day 1 – 09/10/2024

<https://webcast.ec.europa.eu/raw-materials-information-systems-workshop-24-10-09>

Day 2 – 10/10/2024

<https://webcast.ec.europa.eu/raw-materials-information-systems-workshop-24-10-10>

Context and purpose

The 2024 Critical Raw Materials Act (CRMA) emphasises specific groups of materials that the EC considers fundamental for EU competitiveness and sustainability. These include not only Critical Raw Materials (CRM), but also Strategic and Advanced materials. The CRMA highlights the necessity for knowledge in relation to three so-called “pillars”: developing the CRMs value chain; boosting the diversification of supply; and fostering sustainable sourcing and circularity.

Advanced materials can reduce supply risks by reducing reliance on CRM in the supply and value chains of technologies in strategic areas for EU’s policies. This will strengthen Europe’s autonomy and competitiveness in emerging technologies required for the green and digital transition. The Communication on ‘Advanced Materials for Industrial Leadership’ (COM (2024) 98) aims to create a dynamic, secure and inclusive ecosystem for advanced materials in Europe that ensures leadership in research and fast-tracks innovations to the single market. The Communication highlights a preliminary list of R&I priorities in 4 strategic areas: energy, mobility, construction and electronics.

The forthcoming Clean Industrial Deal is aimed at ensuring that the EU stays on the course for the simultaneous decarbonisation and industrialisation of our economy, and that the Green Deal legal framework is implemented in a simple, fair and cost-efficient way.

The successful implementation of the actions included (or foreseen) in these policy documents requires fulfilling knowledge needs related to a wide range of aspects: supply, demand, foresights, circularity, and environmental footprint of raw materials – among others. Towards this end to facilitate knowledge synthesis and foster the science to policy interface, the Raw Materials Information System (RMIS) plays a pivotal role.

RMIS – the EC’s reference knowledge platform on metals and minerals – in fact, supports the availability, coherence and coordination of raw materials knowledge at the EU level, involving a broad network of stakeholders, including EU funded projects. This workshop continues the well-established and essential annual dialogue among the EC, HaDEA and EU-funded projects.

The 2024 edition of the RMIS workshop is organised in two days:

- The first day brings together policy representatives and other key stakeholders to help knowledge and research needs to support policies related to critical and strategic materials and to explore how related knowledge outputs from EU projects can address them and be properly integrated into RMIS.
- The second day focuses on the opportunities presented by advanced materials to reduce reliance on critical and strategic raw materials, discussing the scientific/technical state of the art and supporting the development of a research agenda.

Agenda

9 th October 2024, Wednesday		
Focus on knowledge on critical, strategic & advanced materials		
08:45 – 09:30	Registration & coffee	
	<p style="text-align: center;"><u>Session 1A - High level opening session:</u> <i>Policy overview & RMIS developments</i></p> <p style="text-align: center;">Chaired by Serenella Sala, HoU Land Resources & Supply Chain Assessments, JRC.D3</p> <p style="text-align: center;">(5' per presentation)</p>	
09:30 – 10:30	Workshop opening & welcome	Salla Saastamoinen, Deputy Director-General, JRC.DDG2 Marina Zanchi, Director, HaDEA
	Workshop goal & scope	Serenella Sala, HoU, Land Resources & Supply Chain Assessments, JRC.D3
	Overview of HaDEA’s work related to critical/strategic and advanced materials	Victoria Petrova, HoU, Industry Unit, HaDEA.B3

	DG GROW.I1 – policy context & needs	Madalina Ivanica, Acting-HoU Energy Intensive Industries, Raw Materials, Hydrogen, GROW.I1
	DG RTD.E3 – policy context & needs	Javier Sanf�elix, Industrial Transformation Unit, RTD.E3
	DG ENV.B3 – policy context & needs	Karolina D'Cunha, Deputy HoU, Circular Economy, From Waste to Resources, ENV.B3
	RMIS overview and recent developments	Simone Manfredi, Land Resources & Supply Chain Assessments, JRC.D3
10:30 - 10:50	Coffee break	
	Session 1B - High level opening session: <i>Scientific challenges towards a more secure and sustainable management of critical resources – addressing knowledge needs identified by the CRM Act</i> Chaired by Victoria Petrova, HoU, Industry Unit, HaDEA.B3 (15' + 5' discussion per presentation)	
10:50 - 12:20	Keynote from ENEA	Claudia Brunori, Director of Department for Sustainability ENEA - SSPT
	Keynote from KU Leuven	Karel van Acker, Professor Circular Economy, Chairman Sustainability Council KU Leuven, Promoter-Coordinator Policy Research Center Circular Economy
	Keynote from EEA	Almut Reichel, Project Officer, European Environment Agency (EEA)
	Keynote from TU Delft	David Peck, Associate Professor, critical materials and product design, TU Delft, The Netherlands
12:20 - 13:45	Lunch break	
13:45 - 15:00	Session 2A - Focus on EU funded projects on raw materials Chaired by Simone Manfredi, Land Resources & Supply Chain Assessments, JRC.D3 & Dimos Paraskevas, Project Officer, Industry Unit (7'-8' per presentation)	

	RMIS: role of EU-funded projects in facilitating knowledge & intelligence needs	Simone Manfredi, Land Resources & Supply Chain Assessments, JRC.D3
	PEACOC	Elisabet Andrés García
	SEMACRET	Blažena Wertichová
	ICARUS	Martin Bellmann
	ARENHA	José Luis Viviente
	SearcularMINE	Andrea Cipollina
	ReActiv	Konstantinos Kollias
	HARARE	Christina Meskers
15:00 – 15:15	Discussion / Q&A	
15:15 – 15:45	Posters session	
	AMBHER ANDREAH ARENHA AfricaMaVal DIGIECOQUARRY EMPHASIS EPISTORE ERAMIN4 FUTURAM HEDAsupercap NOUVEAU SALEMA SUNRISE PEACOC	
15:45 – 16:45	Session 2B - Focus on EU funded projects on raw materials Chaired by Laura Petrov, Project Officer, Industry Unit, HaDEA.B3 & Daniel Cios, Energy Intensive Industries, Raw Materials, Hydrogen, GROW.I1 (10' per presentation)	
	GROW I1 on co-partnerships	Daniel Cios, Energy Intensive Industries, Raw Materials, Hydrogen, GROW.I1
	ERA-MIN 3	Tobias Kampmann
	SCREEN 3	Stéphane Bourg
	FUTURAM	Daniel Monfort
16:45 – 17:00	Discussion / Q&A	

17:00 – 17:15	Day 1 – Wrap up & closing David Pennington, Land Resources & Supply Chain Assessments, JRC.D3
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10th October 2024, Thursday Focus on advanced materials and their potential to substitute for Critical Raw Materials: policy context & needs, ongoing research & perspectives		
08:45 – 09:30	Registration & coffee	
09:30 – 10:30	<u>Session 1A – Key players, ongoing initiatives & needs on Advanced Materials</u> Chaired by David Pennington, Land Resources & Supply Chain Assessments, JRC.D3 (10-12' per presentation)	
	<u>DG RTD.E3</u>	Jürgen Tiedje, Industrial Transformation Unit, RTD.E3
	<u>JRC - Overview of ongoing research activities to reduce dependency on CRMs</u>	Fernando Coelho JRC.D3 (overview) Marco Lamperti Tornaghi, JRC.E4 (construction sector) Nicola Magnani, Energy Transition Insights for Policy, JRC.C7 (energy sector)
	<u>HaDEA.B3 - Main highlights of the annual report on advanced materials (March 2024)</u>	Iria Rio Echevarria, Project Officer, Industry Unit, HaDEA.B3
	<u>ENEA – Overview of ENEA's research initiatives on advanced materials</u>	Giuseppe Barbieri, responsible for the “Technologies and advanced materials for sustainable manufacturing” department, ENEA
10:30 – 10:45	Discussion / Q&A	
10:45 – 11:15	Coffee break	

	<p align="center">Session 1B – Key players, ongoing initiatives & needs on Advanced Materials</p> <p align="center">Chaired by Javier Sanf�elix, Industrial Transformation Unit, RTD.E3 (10'-12' per presentation)</p>	
11:15 – 12:15	IAM4EU ¹	J�r�me Gavillet, Project Officer EMIRI ²
	E-MRS ³	Tony Kenyon, Professor of Nanoelectronic & Nanophotonic Materials, Faculty of Engineering Sciences, University College London
	EuMaT ⁴	Marco Falzetti, Director of APRE – Agenzia per la Promozione della Ricerca Europea
	EISMEA ⁵	Francesco Matteucci and Paolo Bondavalli, Programme Manager – EISMEA-01, Advanced Materials for Energy and Environmental Sustainability
12:15– 12:30	Discussion / Q&A	
12:30 – 13:45	Lunch break	
	<p align="center">Session 2 – Projects & research initiatives on Advanced materials</p> <p align="center">Chaired by Jean-Philippe Guisset from HaDEA.B3 (TBC) (10' per presentation)</p>	
13:45 – 14:45	BEETHOVEN	Adrian Quesada
	NICKEFFECT	Francisco Alcaide Monterrubio
	PROMET-H2	Daniel Garc�a Sanchez
	MUSIC	Mar�a Arnaiz
14:45 – 15:00	Discussion / Q&A	

¹ Innovative Advanced Materials for Europe

² Energy Materials Industrial Research Initiative

³ European Materials Research Society

⁴ European Technology Platform for Advanced Engineering Materials and Technologies

⁵ European Innovation Council and SMEs Executive Agency (EISMEA)

	<p align="center">Session 3 – Deep dive on the use of advanced materials for substitution of CRM in key sectors Construction, Mobility, Electronics, Energy</p> <p align="center">Chaired by David Pennington, Land Resources & Supply Chain Assessments, JRC.D3</p> <p align="center">(10'-12' per presentation)</p>	
15:00 -16:00	Focus on Construction	Gian Andrea Blengini, Earth Sciences Department (DST), University of Turin
	Focus on Mobility	Beatriz Idefonso, Circularity and Materials Manager, CLEPA – The European Association of Automotive Suppliers
	Focus on Electronics	Vincent Consonni, CNRS Research Director, Head of NanoMAT Team
	Focus on Energy (& Environment)	Francesco Matteucci and Paolo Bondavalli, Programme Manager – EISMEA-01, Advanced Materials for Energy and Environmental Sustainability
16:00 - 16:15	Discussion / Q&A	
16:15 - 16:30	<p align="center">Day 2 - Workshop conclusion</p> <ul style="list-style-type: none"> • Victoria Petrova, HoU, Industry Unit, HaDEA.B3 • Jürgen Tiedje, HoU, Industrial Transformation Unit, RTD.E3 • Serenella Sala, HoU, Land Resources & Supply Chain Assessments, JRC.D3 	