M-ERA.NET

Strengthening transnational cooperation, scientific excellence & innovation capacity in advanced materials

M-ERA.NET 3 EVALUATION HIGHLIGHTS 2021–2026

Advanced materials are the backbone of clean energy systems, digital technologies, sustainable manufacturing, and Europe's long-term resilience.

This brochure summarises the headline findings from the assessment of M-ERA.NET 3, one of Europe's largest and most internationally connected research networks in advanced materials, bringing together 35 countries (including 14 regions), thousands of research groups, and a diverse set of industries across borders.

This assessment addresses:

- Network performance, health and connectivity
- Efficiency and effectiveness
- Identified impact pathways
- Added value/ additionality
- Strategic positioning and future outlook

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May 2026

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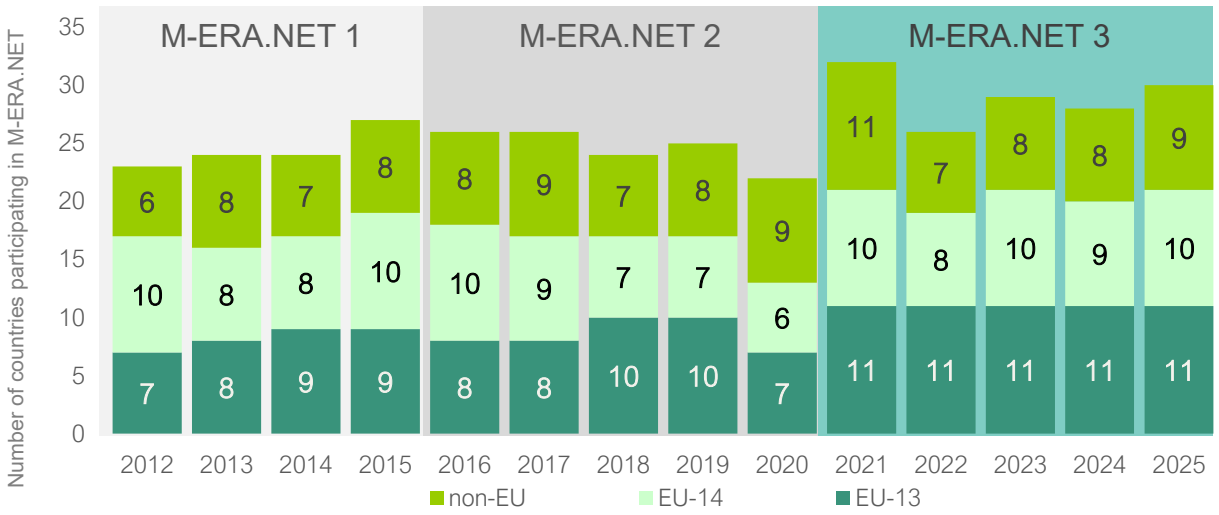
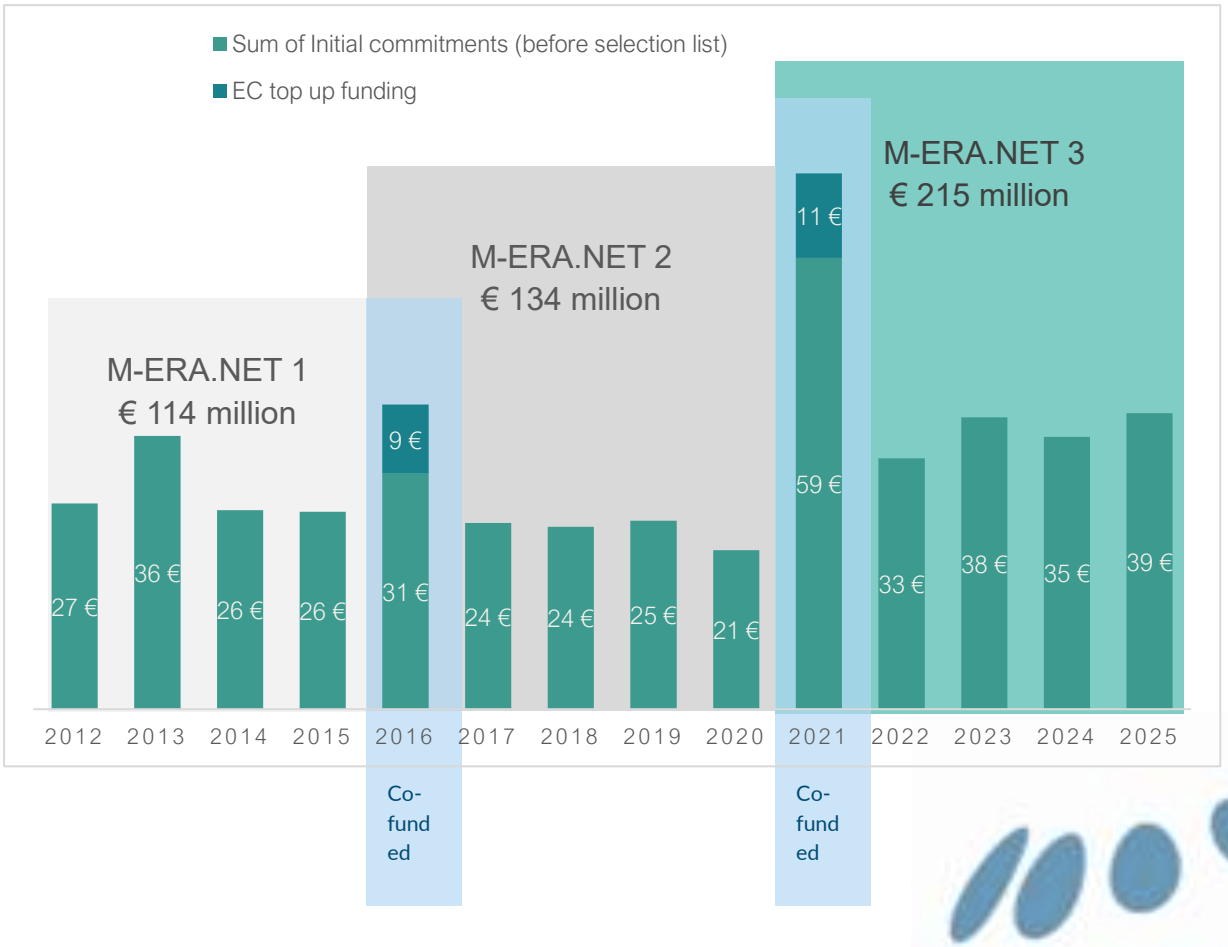
THE KNOWLEDGE EXPERTS

Network performance

From 24 countries (+11 regions) in M-ERA.NET 1, to 35 countries (+14 regions) in M-ERA.NET 3 with the number of countries participating in the network calls staying steady at around 25 or above since 2012 and with a stable presence of EU 13 countries especially in M-ERA.NET 3.



From €114 million in M-ERA.NET 1 as initial commitments to €215 million in M-ERA.NET 3



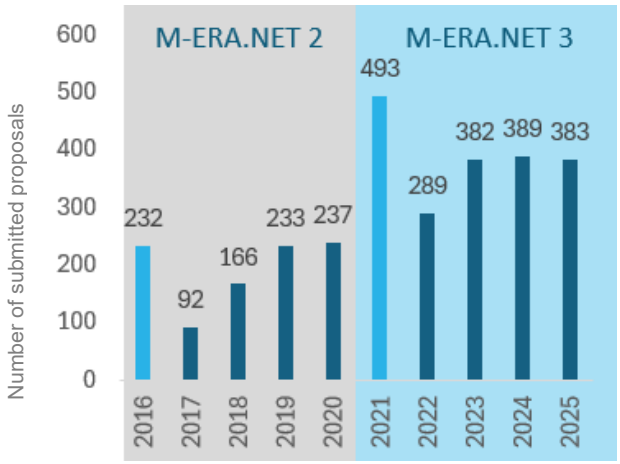
Excellent leverage far higher than many comparable partnerships

Leverage ratio

(partner commitments divided by EU top-up)

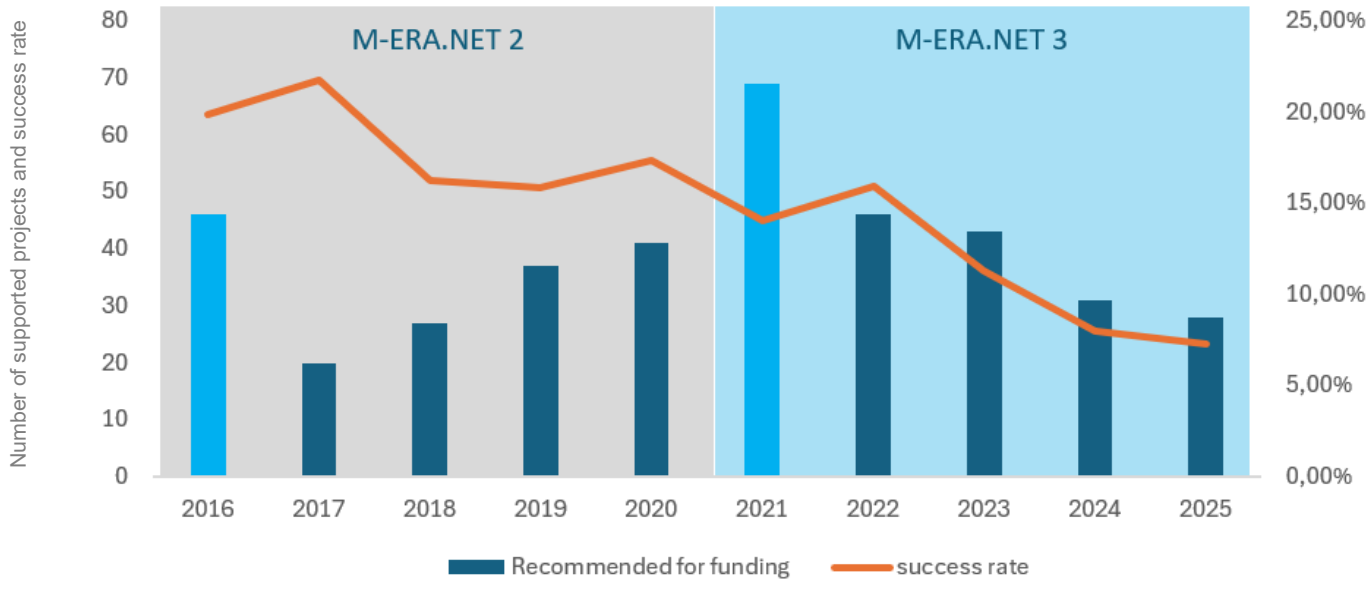
5.35×

(2021 EU co-funded call)



Gaining momentum when calls are co-funded by the European Commission both in number of proposals, as well as committed budgets and supported projects.

Oversubscription means competition is strong and quality is high, but also that the success rate for applicants is falling. However, measures are taken to mitigate this, especially with regards to the mismatch between requested and available funding across agencies.



What do participants experience?

A strong, growing and trusted network, one of the best-managed ERA-NETs, with both programme level operation and project level collaboration highly appreciated. A benchmark network, with its tools and methods emulated elsewhere.

Across M ERA.NET 3, partners consistently described the network as:

- Well governed and professionally coordinated
- Transparent and fair in its evaluation processes
- Efficient, despite the complexity of decentralised national rules
- Inclusive, allowing smaller and widening countries to fully participate

What does M-ERA.NET 3 deliver?

- 1,000+ scientific publications across M-ERA.NET phases with strong citation performance: average of 21 citations per publication with many of the papers published in reputable, high impact journals
- High levels of interdisciplinarity (materials science, chemistry, physics, biology, digital sciences)
- The creation and protection of intellectual property including the filing of 110 patents
- High quality collaborations and benefits that last beyond the projects' lifetime through
- Follow-on applications to Horizon Europe, EIC Pathfinder, and national programmes that lead to new international research projects
- New methods, data, prototypes, demonstrators
- Deeper expertise and new skills for early career researchers

"Together we published 15 articles."

"The project resulted in two patents, one in Japan and one in the United States."

"The most collaborative projects I've ever worked on."

"Small enough to stay focused, big enough to achieve something ambitious."

– Quotes from project beneficiaries

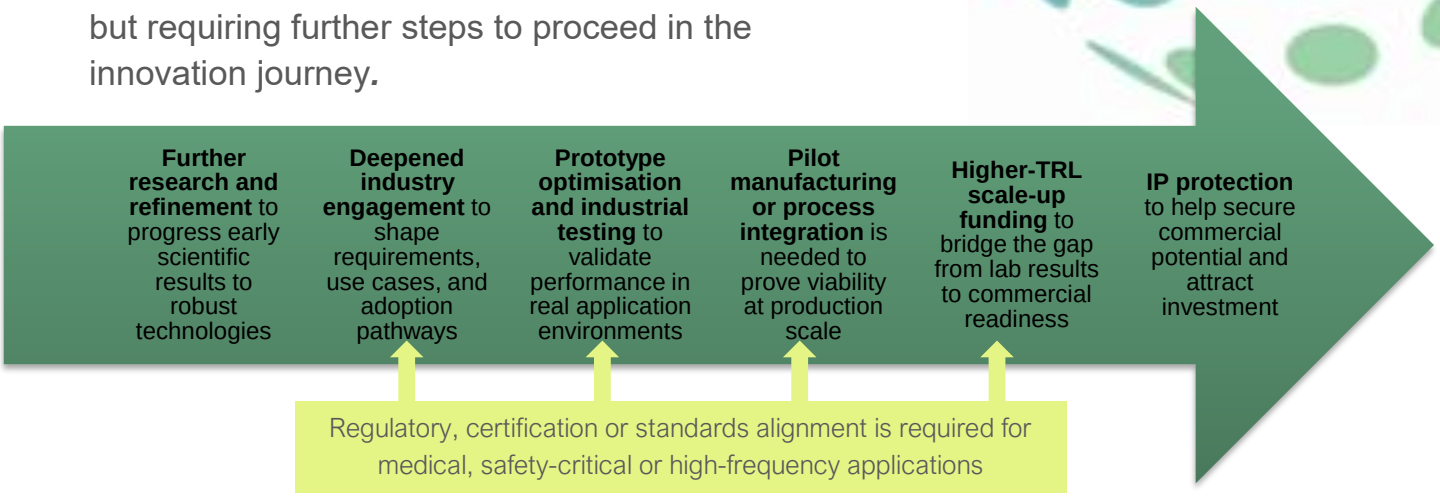
What is the impact…

…on innovation?

Most M ERA.NET 3 projects finish at TRL 4–6, producing:

- Early prototypes
- Demonstrators
- Improvements in materials performance
- Data for industrial validation
- Foundations for follow on research and innovation

but requiring further steps to proceed in the innovation journey.



…on policy?

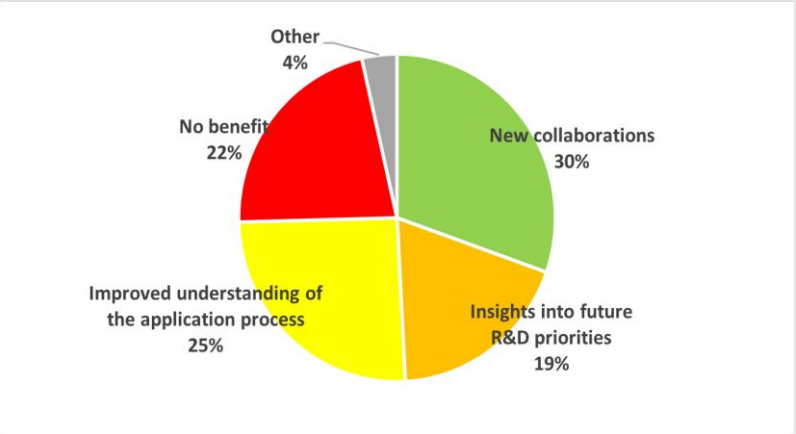
- Reducing fragmentation by aligning national and regional programmes.
- An alignment instrument whose structured inputs - surveys, strategic agendas, and databases such as Materipedia - support the European Advanced Materials Technology Council.
- However, its influence on high-level EU legislation remains indirect.

…on institutions and R&I governance?

- Participation has spurred organisational reforms: e.g. Latvia created a dedicated international networks unit; Slovenia developed mechanisms for transnational funding management; Romania aligned monitoring with EU standards; Saxony established collaboration with other ministries to allow support of all TRLs; Brazil, Taiwan, and Québec introduced advisory or cross-cutting cooperation units.

Behavioural changes and benefits even for unsuccessful applicants

Participation in M-ERA.NET 3 influences beneficiaries' collaboration behaviour, encouraging new partnerships and future international engagement. M-ERA.NET 3 projects increasingly integrate environmental, open science and wider Responsible Research and Innovation considerations into their research activities. 3 out of 4 unsuccessful applicants still report benefits, particularly new collaborations, learning and improved readiness for future funding.



M-ERA.NET excels in comparison with other networks

The network (all 3 phases) funded around 5 times the number of projects of the other networks to a value of € 520 million, i.e. almost five times the respective amount achieved by the second largest network in this regard.

network	requested EU contri-bution	participating countries (last phase)	duration	years	joint calls	funded pro-jects	funded projects/ call (av-erage)	total costs of funded projects	size of funded consortia (average)
Total ERA-MIN	€11 mio	29	2011-2025	16	8	88	11	€94 mio	5.85
Total FLAGERA	€14 mio	28	2013-2024	15	6	93	15	€32 mio	4.84
Total QuantERA	€26 mio	33	2016-2026	12	5	101	20	€103 mio	5.44
Total M-ERA.NET	€30 mio	35	2012-2026	16	14	481	32	€520 mio	4.51

Key messages and the road ahead

The assessment makes clear that:

- M ERA.NET helps countries work together on these shared priorities — efficiently and at scale. It is trusted, efficient, and produces meaningful outcomes.
- It occupies a unique, vital niche between national programmes and Horizon Europe — especially for mid TRL research, filling in important gaps in advanced materials R&I.
- It supports policy cohesion, capacity building, and internationalisation across Europe and beyond.
- It generates scientific excellence, innovation potential, and durable partnerships.
- It has clear additionality by leveraging national and regional funds for collective goals, reducing fragmentation, and fostering learning among agencies.

M ERA.NET has a clear role in supporting:

- European Green Deal objectives.
- Clean energy and mobility materials.
- Digital and industrial technologies.
- Sustainable and circular materials.
- Europe's strategic autonomy in critical technologies.

What could make it even stronger:

- More effective involvement of large industry and SMEs.
- More support for valorisation and exploitation of results.
- Better access to infrastructure and testbeds.
- Deepened cooperation between academia and business by incentivising participation and creating bridges to innovation programmes.
- Continued attention to harmonisation of rules and timelines across funders.
- Stronger visibility of the network's outcomes and political anchorage.

M-ERA.NET has the potential to become a strategic coordination mechanism for advanced materials within the EU broader focus of technological sovereignty with a key role due to global outreach.

M-ERA.NET

M-ERA.NET 3 - the ERA-NET for research and innovation on materials and battery technologies, supporting the European Green Deal

M-ERA.NET 3 is an EU funded network which has been established to support and increase the coordination of European research programmes and related funding in materials science and engineering.

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Download the
Full final assessment report

www.m-era.net/links

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