

Declaration of the Advanced Materials 2030 Initiative

Context

Europe is a global leader in advanced materials and associated processes. By transforming raw materials into materials with significantly improved (physical or functional) performances, this sector **makes up 20% of Europe's industrial base and forms the root of nearly all value chains.** Advanced materials can be found in almost every sphere of activity, where they are the driving force behind a multitude of innovations. About **70% of all technical innovations are directly or indirectly attributed to advanced materials.** Yet, advanced materials often contribute to the dominant share of the cost of technologies.

The Green Deal and the Digital Decade address societal challenges by establishing European high-priority policies. The recent health, energy and geo-political crisis also highlighted the need to reduce our dependencies. Advanced materials, associated to fast development cycles, are indispensable to provide quickly game-changing solutions driving the twin green and digital transformation and reinforcing Europe's sovereignty. Dovetailing upstream R&D and downstream applications development is fundamental to operating at the necessary speed, scale, and efficiency, thus offering solution-driven solid value creation.

Objectives

As underlined in the [Materials 2030 Manifesto](#)¹ published in February 2022, to remain competitive and meet customers' and citizens' needs for high-performance sustainable products and services, Europe needs **a systemic approach to develop innovative advanced materials to offer faster, scalable, and efficient responses to the challenges and opportunities for Europe's society, economy, and environment.**

The Advanced Materials 2030 Initiative paves the way for an inclusive European advanced materials ecosystem, integrating all value chains, from producers to users and from experts to citizens. This will be achieved, among others, through an ambitious Research and Innovation Agenda, feeding a pipeline of industrial projects, as well as through mobilising resources and actors to leverage the interplay between advanced materials, digital technologies and circular economy strategies collaboratively in order to accelerate the development, and reduce the cost and complexity of developing tomorrow's solutions for the twin green and digital transitions.

Working towards a climate-neutral by 2050, more resilient EU, the Advanced Materials 2030 Initiative aims to accelerate the development of sustainable advanced materials as the backbone of the green and digital transition and a source of prosperity and sovereignty in Europe.

¹ <https://www.ami2030.eu/>

Scope

The Advanced Materials 2030 Initiative covers the full range of advanced materials required by Europe's green and digital transitions, such as active materials for clean technologies, functional materials for electronics or photonics and lightweight materials for automotive, aeronautics or construction, to name just a few.

The Initiative addresses advanced materials discovery and development, associated production and processing technologies, integration into components and products and life-cycle management towards a circular economy.

It will support activities beneficial to all the European strategic value chains through:

- (i) New approaches to delivering complex and sustainable advanced materials solutions on shorter and more agile development cycles than ever.
- (ii) Circular strategies using less (scarce) materials, new production technologies, re-use & re-purposing and dismantling, recycling & refining, combined with latest digital technologies.
- (iii) securing a sustainable supply of advanced materials for the EU's industrial ecosystems that support the transition to a green and digital economy, complementing the EU's policy on CRMs (namely metals and minerals).
- (iv) Smart, safe and sustainable materials and products fully compliant with a circular economy, meeting citizens' needs and expectations

Working methods

The European Advanced Materials 2030 Initiative is built upon openness, partnership, inclusiveness, diversity and transparency principles.

The Initiative is open to all organisations engaged across the research and innovation spectrum - from blue sky and discovery-led research to market-pulled applied research and innovation - who want to collaboratively contribute to the set-up of game changers for the accelerated development of advanced materials solutions addressing today's and tomorrow's challenges.

The Advanced Materials 2030 Initiative provides an open and inclusive forum to coordinate and maximise the impact of joint actions and projects by engaging all stakeholders of the advanced materials ecosystems in Europe.

For the year to come, the operational work of the Initiative will be organised in thematic working groups according to the key pillars identified in the [draft roadmap](#) released in June 2022:

- Activities to accelerate digitalisation in product innovation
- Activities for new materials manufacturing, processing and scaling up
- Prioritisation within the Materials Innovation Markets

- Policy support
- Identification and setting up of supporting instrument(s)

All the organisations joining the Initiative will be invited to actively contribute to these working groups.

The European Advanced Materials 2030 initiative will ensure transparency by disseminating information about meetings and significant outcomes on its website.

The European Commission will monitor the progress of the Initiative with a view to its climate-neutrality, sustainability, sovereignty and prosperity objectives to co-create the strategic agenda and act as a facilitator towards cooperation and engagement of all stakeholders.

Deliverables

The European Advanced Materials 2030 Initiative will deliver in early 2023 a strategic Research and Innovation Agenda for an ambitious deployment of advanced materials technologies and solutions, taking into account the needs of the materials innovation markets, the stakeholders and society. This agenda will pilot the governance of the materials research in Europe, especially across the different Pillars and Clusters within Horizon Europe Programme, contributing to growth, jobs, and a more sustainable society.

A strong Governance will facilitate stakeholders to find the critical mass and pathways to accelerate the materials research towards the market, with interdependence with raw and secondary materials supply and recycling, to attend to the new materials increasing demand for the various industrial pillars.

Where relevant to its work, the Initiative can flag obstacles and bottlenecks for scaling up sustainable materials and provide input to work on standardisation and research and innovation priorities.

Actors

The signatories submitted the Materials 2030 Manifesto to Commissioner Gabriel in February 2022.

DG-RTD then invited four platforms (EUMAT, SUSCHEM, MANUFUTURE and EMIRI) to draft a strategic roadmap to “*pave the way for the engagement* of all advanced materials stakeholders”.

Together, the platforms, signatories and DG-RTD have set up interim governance to manage the Initiative and its activities until ~ the end of 2023.

Once again, the European Advanced Materials 2030 Initiative is built upon the principles of openness, partnership, inclusiveness, diversity and transparency. All interested stakeholders are invited to join!

Who can join?

Any European organisation with activities of significant relevance for advanced materials development, production and use, that commits to developing sustainable advanced materials value chains for Europe, can join the Initiative at any time (in particular industrial companies, research and technology organisations, academics, and also policymakers, civil society, NGOs,...).

To join the Initiative, please visit [AMI2030's website](#) and submit the online application.

Contact

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