

# AM EUROPE

Operated by CECIMO

## ADDITIVE MANUFACTURING: A STRATEGIC ENABLER FOR EUROPE'S INDUSTRIAL FUTURE

APRIL 2026

[www.cecimo.eu](http://www.cecimo.eu)



Europe is entering a decisive phase in shaping its industrial competitiveness. The European Union is advancing major policy initiatives aimed at strengthening industrial capacity, reinforcing the resilience of European value chains and restoring competitiveness across key sectors.

Additive Manufacturing (AM) is a key technology in this transformation. By combining digital design, advanced materials and precision manufacturing, AM enables the production of complex, high-performance components while significantly reducing material waste.

Europe hosts world-class machine builders, technology providers and research centres in this field. However, global competitors are accelerating the industrial deployment of additive manufacturing through coordinated strategies and targeted investments. Without stronger European support for industrial scale-up, Europe risks losing ground in a technology that will shape the future of manufacturing.

## A technology aligned with Europe's strategic priorities

Additive manufacturing directly contributes to several of the European Union's industrial and policy objectives.

### 1) Supporting the advanced materials agenda

Additive manufacturing relies on a new generation of high-performance materials, including advanced alloys and engineered metal powders. The technology enables the production of lighter, stronger and more efficient components, opening new applications across sectors such as aerospace, energy, healthcare and mobility.

Strengthening Europe's capabilities in additive manufacturing therefore contributes to maintaining European leadership in advanced material innovation and manufacturing technologies.

### 2) Advancing circular manufacturing

Additive manufacturing is inherently resource efficient. Components are produced layer by layer, using only the material required for the final product. This significantly reduces scrap compared with conventional subtractive processes.

AM allows manufacturers to produce complex components with reduced material waste, lighter structures and optimised geometries that improve performance and durability. In battery production, additive manufacturing can assist in the development of advanced cell architectures, customised cooling systems and rapid prototyping of new designs. In the wind sector, AM can support the manufacturing of specialised tooling, replacement components and lightweight structural parts for turbines.

AM also supports circular industrial models by enabling component repair, refurbishment and the on-demand production of spare parts. These capabilities reduce waste, extend product lifetimes and limit the need for large inventories.

### 3) Strengthening resilience and crisis preparedness

Additive manufacturing also enhances Europe's ability to respond to disruptions and emergencies. The technology enables decentralised, on-demand production of critical spare parts, reducing reliance on complex and vulnerable global supply chains. Additive manufacturing technologies offer the possibility of replacing materials that are not currently available with new material combinations and properties (e.g., fiber-reinforced plastics instead of metal, structured crystals, ceramics).

Distributed networks of additive manufacturing facilities across Member States could support the rapid production of components for critical infrastructure, healthcare systems, energy networks and defence applications.

AM is utilised for creating spare parts, maintenance tools, and specialized components, effectively addressing challenges with obsolete parts and significantly reducing lead times. As adoption grows, ensuring high quality and safety becomes ever more critical.

By enabling flexible and localised production, additive manufacturing contributes to Europe's industrial resilience and broader objectives on strategic autonomy and crisis preparedness.

### 4) Supporting defence logistics and operational readiness

Additive manufacturing can significantly strengthen defence logistics by enabling the rapid production of spare parts and components closer to where they are needed. This reduces reliance on long and complex supply chains and allows armed forces to replace unavailable or obsolete components more quickly.

AM also allows for rapid response and adaption and has seen rapid deployment related to drone production. The current turnover rate between a new Unmanned Air System(UAS) and a new counter UAS system is approximately two weeks. Experienced AM Personal can adapt CAD files to adapt to the countermeasures at a much faster rate than traditional production.

AM can also support the repair of legacy equipment, maintenance operations and the replacement of critical parts, helping extend the lifecycle of complex assets and infrastructure. These capabilities are relevant across sectors including aerospace, energy, transport and defence, where maintaining operational readiness and industrial continuity is essential. Recent experience in Ukraine has demonstrated how distributed manufacturing tools can support field level maintenance and repair when traditional supply chains are disrupted.

Additive manufacturing should therefore be understood as a strategic dual use technology with important implications for industrial resilience, supply chain security and technological sovereignty. Its ability to enable distributed production, rapid design iteration and flexible manufacturing aligns with the objectives of the European Defence Fund and broader EU industrial policy, which seek to strengthen Europe's technological base while supporting innovation that benefits both civilian and defence ecosystems.

## From innovation to industrial deployment

Despite Europe's strong technological base, the large-scale industrial adoption of additive manufacturing remains uneven. While Europe has supported research and early-stage innovation, the transition from pilot projects to certified industrial production remains slow.

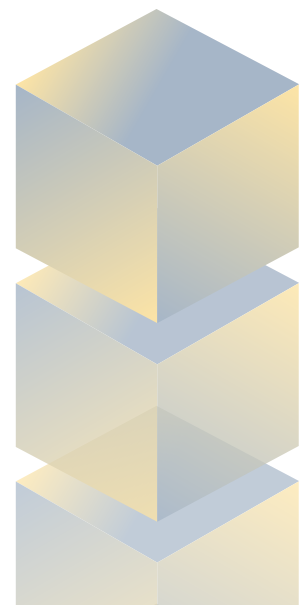
A key challenge lies in the "last mile" of industrial deployment. Scaling additive manufacturing requires significant investment in pilot production lines, process validation, industrial integration, automation, post-processing and quality assurance. Yet many existing funding instruments remain primarily focused on research rather than supporting this critical phase of industrial scale-up.

Certification and qualification also represent major barriers. In regulated sectors such as aerospace, healthcare, energy and defence, moving from prototype to certified component requires extensive testing and documentation. Without coordinated European frameworks for qualification and standardisation, companies must navigate complex and costly certification procedures individually, a particularly significant challenge for SMEs.

Productivity and cost competitiveness also vary across Europe. Improvements in build speed, machine reliability, post-processing efficiency and in-process quality monitoring are still needed to support broader industrial adoption. Achieving these advances requires large-scale deployment projects bringing together machine builders, material suppliers and industrial end users.

Europe also lacks a coordinated pathway for industrial deployment. While several national initiatives exist, EU programmes often support projects in isolation. The absence of a structured European framework aligning industrial use cases, funding instruments and certification priorities slows the development of cross-border AM value chains.

Meanwhile, global competitors are advancing rapidly through coordinated public-private platforms that integrate research, industrial deployment, skills development and standardisation under a single strategic vision.



## A strategic opportunity for Europe

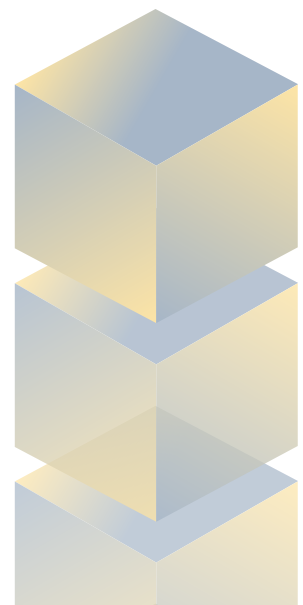
The European Union is currently advancing several major policy initiatives aimed at strengthening industrial competitiveness, accelerating the green transition and reinforcing the resilience of European value chains. These include the forthcoming Advanced Materials Act, the Circular Economy Act and the recently proposed Industrial Accelerator Act.

Together, these initiatives create an opportunity to recognise and leverage additive manufacturing as a key enabling technology within Europe's industrial ecosystem.

Additive manufacturing sits at the intersection of advanced materials innovation, resource-efficient production and resilient manufacturing systems, making it highly relevant to the objectives of these initiatives.

Additive manufacturing also offers strategic value for defence by enabling rapid, localised production of critical components, strengthening military logistics, operational readiness and security of supply across European defence systems.

Recognising additive manufacturing within these policy initiatives would help ensure that Europe fully leverages its technological and industrial strengths in this field.



## AM-Europe recommendations

To unlock the full potential of additive manufacturing within Europe's evolving industrial policy framework, four priority areas should be addressed.

### 1) Accelerating industrial scale-up

European policies should support the transition from research to industrial deployment by enabling pilot production lines, industrial demonstrators and cross-border collaboration across the additive manufacturing value chain.

### 2) Building resilient European value chains

Europe should reinforce capabilities across the additive manufacturing ecosystem, including machines, advanced materials, software and post-processing technologies. The integration of AM as an innovative manufacturing technology into established manufacturing processes in Europe serves to strengthen existing production capacities. Stronger European value chains will contribute to competitiveness while improving resilience and reducing strategic dependencies.

### 3) Strengthening certification and standards

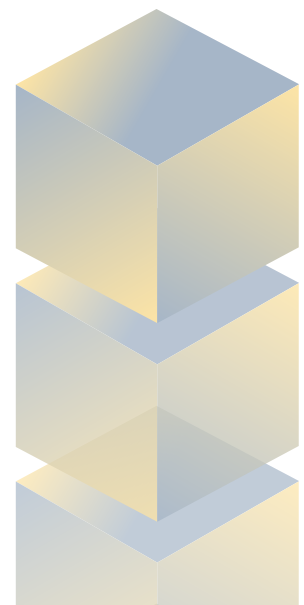
Harmonised qualification and certification frameworks are essential to facilitate the adoption of additive manufacturing in regulated sectors. Coordinated European efforts in standardisation can reduce costs, accelerate market access and support SME participation.

### 4) Coordinated European action

Additive manufacturing is no longer a niche technology; it is becoming a core pillar of advanced manufacturing systems worldwide.

Europe possesses the expertise, industrial capacity and innovation ecosystem required to lead in this field. Ensuring stronger alignment between industrial policy, regulatory frameworks and investment priorities will be essential to maintain this leadership.

A coordinated European approach will ensure that Europe remains not only a centre of innovation, but also a global leader in the industrial deployment of additive manufacturing.



# AM EUROPE MEMBERS



**EUROPE: CECIMO**  
European Association of Manufacturing Technologies



**AUSTRIA: METALTECHNOLOGY**  
Fachverband Metalltechnische Industrie



**BELGIUM: AGORIA**  
The Federation of the Technology Industry



**FRANCE: EVOLIS**  
Organisation professionnelle des biens d'équipement



**GERMANY: VDMA**  
Verband Deutscher Maschinen- und Anlagenbau



**ITALY: AITA**  
Associazione Italiana Tecnologie Additive



**PORTUGAL: AIMMAP**  
Associação dos Industriais Metalúrgicos, Metalomecânicos e Afins de Portugal



**SPAIN: ADDIMAT**  
Additive & 3D Manufacturing Technologies Association



**SWITZERLAND: SWISSMEM**  
Die Schweizer Maschinen-, Elektro- und Metall- Industrie



**TÜRKIYE: MIB**  
Makina Imalatçileri Birliği



**UK: ADDITIVE MANUFACTURING UK (AMUK)**  
Additive Manufacturing Association

## For more information please contact:

Vincenzo BELLETTI, Director of EU Public Affairs, CECIMO  
vincenzo.belletti@cecimo.eu

## About CECIMO:

CECIMO is the European Association of Manufacturing Technologies. With a primary focus on machine tools and additive manufacturing technologies, we bring together 14 national associations representing approximately 1500 industrial enterprises in Europe (EU + UK+ EFTA + Türkiye), over 80% of which are SMEs. CECIMO covers 97% of the total machine tool production in Europe and about 1/3 worldwide. It accounts for approximately 150,000 employees and a turnover of around 23.3 billion euros in 2025.