Seizing Europe’s opportunity to lead the global manufacturing transformation

Representing technology leaders driving the transformation of industry in Europe and beyond, we call for urgent action to preserve and expand Europe’s global leadership on advanced manufacturing.

The uptake of advanced manufacturing technologies and processes across manufacturing sectors is a precondition for Europe to address the defining challenges of our time. Our society must not only consume sustainably – it must also produce sustainably to be competitive in the global marketplace. It must do so in an unstable and fragmenting global order, and without compromising the wealth and standard of living which Europe’s citizens expect. In short, we must make more with less. A revolution in the way things are produced is required.

The transition to advanced manufacturing will be crucial for every sector across Europe’s industrial base. At its heart is the convergence and integration of technologies like automation, robotics, and digitally connected solutions on the manufacturing shopfloor. This enables new production processes (‘Industry 4.0’ or ‘Smart Factories’), as well as new types of products and materials. Using the vast amounts of industrial data generated in the process, manufacturers can make products and services with higher added value and develop entirely new business models. Those companies, and those economies, that complete this transformation first will have a competitive edge for decades to come.

The global race to lead the transformation of manufacturing is well underway – and we want Europe to take advantage of our current pole position. We want jobs and economic prosperity coming from the next generation of global manufacturing to be generated here. And Europe is uniquely placed to succeed. World class manufacturing is in our DNA.

We therefore welcome that Europe’s Industrial Strategy reflects this ambition to retain and expand our competitive edge in the future of manufacturing. And we are committed to work with the European Commission and our partners in the EU Industrial Forum to achieve this goal.

The time for action is now. Industry, policymakers and social partners need to join forces in tackling the obstacles ahead of us, from insufficient investment and disruptions in global supply chains to concerns over cybersecurity, a lack of skilled labour, and removing barriers for a well-functioning Single Market with access to global markets. Europe is a leader in advanced manufacturing, however unless we address these challenges head-on Europe is at risk of deindustrialisation as manufacturing shifts to markets offering better returns.

For Europe to retain and expand our competitive edge in the global transition to advanced manufacturing, we see three key priorities for action:
1. Scale up public and private investment

Significant increases in public and private investment will be needed for Europe to deploy advanced manufacturing technologies at scale. Europe lags behind in terms of public funding for Research & Innovation and deployment of advanced manufacturing technologies in the market. Existing Public Private Partnerships (PPP) such as Made in Europe can be expanded to reap the full benefits of the PPP model. Public funding instruments targeted at later stages in the innovation and deployment process, such as the Important Projects of Common European Interest, can be important to overcome underfinancing but must be applied cautiously given their potential to distort competition. To redirect private capital flows towards advanced manufacturing, Europe must ensure financial actors understand the massive sustainability benefits brought by advanced manufacturing. To do so, the EU needs to recognise the critical enabling role advanced manufacturing plays in achieving major sustainability goals, such as climate change mitigation, and thus label it as sustainable under the EU taxonomy for sustainable finance.

2. Catalyse industrial data sharing and use

To facilitate the deployment of advanced manufacturing, building trust in secure data sharing and use will be key. The creation of new data flows must also become more affordable. Multiple industry initiatives are underway to unlock manufacturing data spaces. EU legislation in this field should focus on accelerating the market for industrial data by creating a safe environment which fosters B2B data sharing. Legislation should always protect the trade secrets and intellectual property rights of companies to maintain a competitive market and incentives for innovation. To ensure reliable and resilient supply chain management based on shared data, it is essential to enable dependable data access and high-performance data exchange via leading-edge communication technologies and gap-free networks.

3. Ensure market-driven standardisation

Standardisation has been a core aspect of Europe’s success, yet it is undermined by policy measures which diminish the role of Europe’s industry in standard development bodies. The European standardisation system must remain relevant to the market needs of advanced manufacturing, which is essential to keep Europe’s global leadership position in this area. Enhanced global cooperation with the IEC, ISO and other relevant bodies, such as the EU-US Trade and Technology Council, should take full advantage of state-of-the-art open technology standards such as the Asset Administration Shell and OPC UA, which are at the heart of Europe’s strengths in advanced manufacturing.
Our industries stand ready to work with policy makers and other partners to ensure Europe reaps the full rewards of its competitive advantage in advanced manufacturing.

We call on Member States to strengthen their focus on advanced manufacturing in the context of the EU’s industrial strategy, including through the relevant workstreams of the EU Industrial Forum. Specifically, we call on the upcoming EU presidencies of the Czech Republic and Sweden to support the Industrial Forum’s work on accelerating the uptake of advanced manufacturing. A Competitiveness Council meeting to review the Industrial Forum’s recommendations on advanced manufacturing should be envisaged.

Finally, we call on the European Parliament to form a partnership to assess the impact of ongoing legislative files on Europe’s global leadership in advanced manufacturing and ensure its work across all relevant areas of legislation effectively supports Europe’s manufacturing transformation.

Orgalim represents Europe’s technology industries, comprised of 770,000 innovative companies spanning the mechanical engineering, electrical engineering, electronics, ICT and metal technology branches. Together they represent the EU’s largest manufacturing sector, generating annual turnover of €2.480 billion, manufacturing one-third of all European exports and providing 10.97 million direct jobs. Orgalim is registered under the European Union Transparency Register – ID number: 20210641335-88.