# Be part of the change

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eitmanufacturing.eu

**Empowering global** manufacturing innovation





Co-funded by the **European Union** 

### Our vision

Global manufacturing innovation led by Europe

# Our mission

Bring together manufacturing actors across Europe to integrate innovation and education for an entrepreneurial and sustainable Europe.



# A powerful innovation ecosystem

EIT Manufacturing was established in 2019 with a vision that global manufacturing will continue to be led by Europe. Faster innovation can improve everyday life globally, help meet Europe's ambitious climate goals, and ensure that its workforce is ready for tomorrow's challenges.

EIT Manufacturing's mission, to bring together manufacturing actors across Europe, is made possible by its growing network of toptier industrial partners, leading academic and research institutions from across the region and innovative startups, scaleups and SMEs. These alliances with its partners are enhanced by strong links to regional governments, Digital Innovation Hubs, clusters, industry associations and accelerators. Further, through its partnerships with financial institutions, EIT Manufacturing strives to facilitate the investment necessary to turn research into industry-ready solutions and bring innovations to the market.

To ensure that innovations reach the market, industry has the right talent and entrepreneurs can thrive, EIT Manufacturing connects and integrates the areas of education, innovation and business creation. This ensures the right ideas, know-how and infrastructure are in place to transform and improve the way we make things. EIT Manufacturing is Europe's largest manufacturing innovation network, connecting its more than 85 members from industry, academia and research, alongside a growing network partnership of key players from around Europe into an innovation ecosystem. In addition, its growing portfolio of activities and services address industry pain points and better connect the manufacturing innovation ecosystem, such as up- and reskilling tools, open innovation, digital transformation and sustainability.



### Goals by 2030

- 30% of material use is circular
  60% of production uses sustainable practices
  360 new solutions created
  €325M investment attracted by EIT ventures
- **50,000** people trained and up- or re-skilled
- 1,000 startups created and supported

# Linking key regions

EIT Manufacturing's Co-Location Centers (CLCs) are strategically situated to link regions with high levels of manufacturing activity and advanced technology.

Meanwhile, EIT Manufacturing's Regional Innovation Scheme is designed to overcome disparities between regions by strengthening the local innovation ecosystems in countries that are moderate or modest innovators. These areas are connected through dedicated programmes, hubs, and by strengthening links between key innovation actors.

Through its growing partnership and alliances across the world, EIT Manufacturing's reach is global. Headquarters Paris CLC North Gothenburg CLC Central Darmstadt CLC West San Sebastian CLC South Milan CLC South East Athens

# A growing, high-impact service portfolio

As the largest innovation network for the manufacturing industry in Europe, EIT Manufacturing is your go-to partner for tackling the most pressing challenges facing the industry.

EIT Manufacturing boasts a team of industry experts and a dynamic service portfolio. With our cutting-edge platforms, you gain access to innovation networks and essential training, while our extensive network connects you with partners, tools, and solution providers to ensure



success. As a partner of EIT Manufacturing, you'll enjoy reduced fees on our comprehensive range of services. But don't worry, even if you're not a partner, everyone can still access our unparalleled support. Join us today and unlock the full potential!



### Skills.move digital platform

Skills.move is the go-to platform to take competencies in technology to the next level. Topics and learning content has been developed in partnership with industry and academia, while certificates are recognised by leading organisations. Hands-on activities aim to give valuable insights and skills.

### The leading social network for manufacturing industry

Join Agora, the premier social network and open innovation platform designed exclusively for the pan-European manufacturing community. Connect and network with over 2,500 peers from 900+ organisations spanning 36 European countries.

### **Open Innovation Services**

Scout innovative technologies from all of Europe with EIT Manufacturing's Open Innovation Services! Our scouting service connects corporates, mid-caps, and SMEs with validated technology providers, solving critical industry pain points. Join us now and access cutting-edge solutions for your manufacturing success.

### **Evolution of RIS Innovations**

EVO-R program brings small scale manufacturing related innovations from RIS countries to the pan-European and global markets, by providing business mentoring and dedicated support for project facilitation, conceptualisation, implementation, and dissemination. Join us now and make Innovation happen!



GORA

### **Deep Tech Talent Inititiative** Let's train one million people in deep tech!

Deep tech innovations – cutting-edge technology solutions combining fields of science and engineering in the physical, biological and digital spheres – are indispensable in creating solutions to the most pressing global challenges. The Deep Tech Talent Initiative (DTTI) is a pioneering programme created to train one million people within European deep tech fields in the next three years. It is designed to ensure the development of a skilled labour force and encourage high-growth companies active in deep tech fields to maintain and expand their operations in Europe.

Through this initiative, EIT Manufacturing's main funder, the European Institute of Innovation & Technology (EIT), aims to develop a strong deep tech talent pool across Europe, mobilising its network of more than 3,400 partners, and over 70 hubs across Europe to develop state-of-the-art educational programmes in deep tech. A specially designed pledge system will allow potential partners and sponsors to support the initiative, and help shape the pioneering programme.

EIT Manufacturing is the main coordinator of this EIT-flagship initiative, and we encourage our partners and network to get involved in the initiative and pledge their support.

Tech fields included in the initiative offer a route to future competitiveness. An indicative list of these areas includes: advanced materials, aerospace, AI & machine learning, biotechnology, blockchain, Web 3.0, electronics, photonics, quantum computing, robotics, semiconductors, as well as sustainable green energy and clean technologies.

For more information: www.eitdeeptechtalent.eu

# A strong European industry is key to prosperity and innovation

Europe is the birthplace of industrial production, which continues to power the region's prosperity. EIT Manufacturing's strategy is designed to ensure that European industry is able to innovate continuously and is prepared for the ongoing green and digital transitions.



Source: A new Industrial strategy for a globally competitive, green and digital Europe, European Commission, March 2020.

### As technology changes almost exponentially, at EIT Manufacturing we map out a way forward

Success is no longer decided by a narrow technology focus, but rather by a clear vision and the capacity to adapt.

As a Knowledge and Innovation Community (KIC), EIT Manufacturing continuously works to identify emerging innovation hotspots and map out enabling technologies. Part of that effort involves technology radar and visioning work, which identify innovations with the highest technology-readiness levels (TRL) and potential to transform manufacturing.

This work not only supports EIT Manufacturing in selecting promising research projects and startups but also supports our industrial and research partners by helping them visualise the future of manufacturing and structure their research and technology roll out.



Explore the digital interactive visualisation tool in detail by connecting to the QR code on the left for more information about each technology area.



# Projects focused on high-value challenges

EIT Manufacturing programmes and activities are designed to accelerate the rate at which scientific advances can be turned into marketable innovations. This is done by homing in on solutions with high technology-readiness levels (TRL). To ensure a focus on strategic areas with strong innovation potential, EIT Manufacturing works hand-in-hand with industry and academic and research institutions in its partnership network, to define key areas that will shape the future of manufacturing. The work of defining high-value challenges offers a roadmap to the technologies that are set to define the factory of the future - and ensures that industry is prepared for a green and competitive future that is socially and environmentally sustainable.

These activities form a basis for the projects funded by EIT Manufacturing through its annual call. The majority of EIT Manufacturing's operational budget – roughly €400 million until 2026 – is dedicated to funding projects that turn research into industry-ready solutions.

Outside of its core call-activities, EIT Manufacturing is also taking roles in a growing number of strategic, external research projects in which the scope and partners are regional, national or European.

These project roles include, for example, project coordination, dissemination or commercialisation support, and rely on EIT Manufacturing's position, knowhow and broad industry reach.



### CASE

Increasing recycling capacity

By 2030, 60% of all new car sales in Europe are expected to be electric vehicles (EVs). Although today's end-of-life volumes are still small, they are expected to increase dramatically during the coming years. However a close analysis of the steps required for the disassembly of an EVbattery pack, showed that 90% of the current process involves unscrewing and (often timeconsuming) manipulation of various objects. To increase capacity, the Flex-BD project aims to increase reusability, reconfigurability and modularity of the recycling process.

Some positive outcomes of the automated Flex-BD approach is that it could reduce safety risks for operators, including ergonomic risks of injury, increase batterydismantling capacity and allow for the reuse of valuable materials. Project partners include Hydro and Evyon from Norway, Comau from Italy, Festo from Germany, and SUPSI from Switzerland.



### **CASE** Industry challenges solved by startups

BoostUp! Bridge is a programme designed to solve key challenges of manufacturers through tech solutions from innovative startups. Thanks to BoostUp! Bridge, startups compete for the chance to implement their solution the challenge of a corporate industrial manufacturer, and benefit from a cash prize to help cover costs in doing so. Participating corporates have included, for example, Whirlpool, voestalpine, KUKA, EROSKI, Universal Robots, Prima Additive and Ford.

#### <u>CASE</u>

### Teaching shaped by the factory

TF KnowNet is a Teaching Factory network that brings together industry and academia in a knowledge-exchange network to leverage knowledge, expertise and infrastructure. TF KnowNet offers remote access to intuitive teaching and high-value, state-of-the-art infrastructure – to address real world challenges and thus provide skills needed by industry. So far, TF KnowNet includes five universities in five different countries across Europe, as well as manufacturing companies in Spain, Italy and Sweden.





# **RIS Intrapreneurship**

EIT Manufacturing dedicates extra resources to projects in EIT Regional Innovation Scheme (RIS) countries, which are countries in Europe with modest and moderate innovation capacity. One such initiative has been the RIS Intrapreneurship Challenge, an activity that supports Intrapreneurs from RIS countries to make their company more environmentally friendly and/ or addressing relevant societal challenges. The activity provides financial and in- kind support to the selected teams. In 2022, 8 teams were supported and 3 Intrapreneurs were awarded for their valuable contributions in their companies.

### <u>CASE</u> Sustainable purification for industry

The PURE project developed a filterless air purification system for industrial spaces to ensure better, safer and healthier workplaces. It uses a new, unique, disruptive and sustainable nature-based filterless solution APA (Air Pollution Abatement) technology capable of controlling a wide range of air pollutants effectively. Project led by Comau with CEA, Fagor Arrasate and U-Earth-Italy.



#### EXTERNAL PROJECT

# Building industry resilience

The Austrian-German project EuProGigant aims to strengthen the resilience of industry to supply chain shocks. And EIT Manufacturing plays a key role in it.

In times of crisis, supply chains often come under pressure. The COVID-19 pandemic, the Russo-Ukrainian War, climate change and the global microchip shortage are just a few recent examples.

To raise industry resilience, EuProGigant is building a multi-location, digitally networked production ecosystem that integrates with Gaia-X, Europe's multi-cloud infrastructure, to ensure secure data access and sharing. If successful, the project can lead the way to a resilient and sustainable European industry, with fewer material and product shortages, less manufacturing waste and faster value creation.

EuProGigant involves 23 active project partners, spread over multiple locations in





Austria (Linz, Nußbach, Rankweil, Vienna) and Germany (Darmstadt, Isernhagen, Hamburg, Langenfeld, Leverkusen, Loßburg, Munich, Nürtingen, Würselen).

Among the project partners, EIT Manufacturing's teams in Vienna, Austria and Darmstadt, Germany have been charged with the work of disseminating the findings and insights gathered in the project.

EuProGigant was officially designated as the Gaia-X lighthouse project for manufacturing and industry 4.0, demonstrating EuProGigant's strong potential business value for the manufacturing industry.

EIT Manufacturing has played a key role in raising the profile of the project: "EIT Manufacturing was and will be instrumental in supporting the national and European growth of EuProGigant," said Dr Claudia Schickling, Director of the TU Wien Pilot Factory Industry 4.0.

Read more at www.euprogigant.com. Catalogue freely accessible through the EuProGigant portal: www.euprogigant.com/en/experience



# Making innovation happen.

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