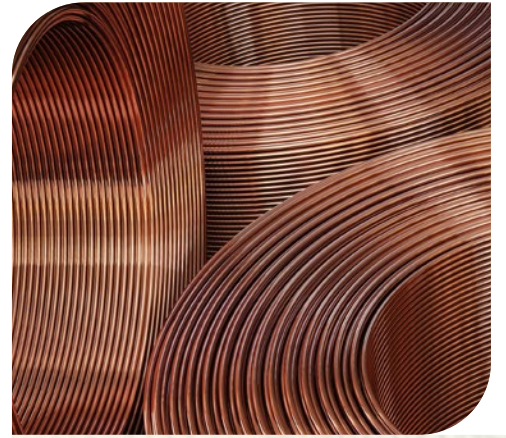


Making Innovation Happen

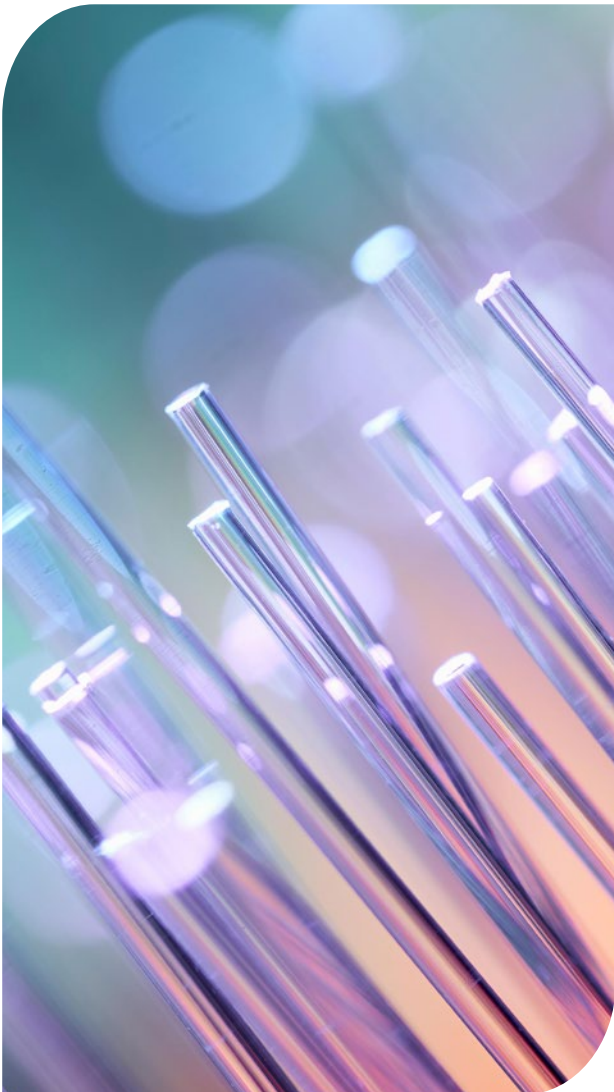


**Strategic
Agenda**
2021/2027



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1. Executive summary

Europe's manufacturing sector, consisting of more than 2 million companies, is critically important not only for maintaining Europe's prosperity, but also for ensuring the transition into a climate neutral and fully digitised continent by 2050¹. In 2018, it contributed over 14% of the total European Gross Domestic Product (GDP), while employing 32.9 million people directly and additional millions indirectly. The sector hence has a high employment multiplier effect, tends to pay above-average wages and contributes significantly to European Gross Value Added (GVA)². Europe is a leader in advanced value-adding manufacturing technology and the origin of the new industrial digitalisation paradigm, Industry 4.0. New manufacturing technologies are continually emerging from Europe. European industries' ability to apply new ideas for the benefit of global customers and to develop new markets continues to provide jobs and drive export growth by an average of 4.3 % per year (from 2002-2019)³.

Global manufacturing innovation will be led by Europe

European manufacturing needs strong innovation, business creation and education capabilities to maintain its position as a global industrial leader and continue its transformation into the world first climate neutral continent. Hence, EIT Manufacturing's vision is: Global Manufacturing Innovation is led by Europe. EIT Manufacturing will achieve its vision by focusing on strong collaboration between stakeholders across Europe, with its mission to: Bring together manufacturing actors across Europe to integrate innovation and education for an entrepreneurial and sustainable Europe. By 2027, EIT Manufacturing will have assumed a leading position in Europe's manufacturing landscape and will be a globally recognised innovation force actively engaged with more than 500 Members, Activity and Network Partners.

Addressing pressing societal and industry-specific challenges: Our strategic objectives

EIT Manufacturing will enable the emergence of innovation-based manufacturing companies, provide existing industries with strong support to realise disruptive and incremental innovation, and drive competitiveness through re-skilling and training. EIT Manufacturing is grounded in several key European initiatives, amongst them the European Institute of Technology and Innovation (EIT) and Horizon Europe. Their respective strategic planning was taken into consideration when developing this Strategic Agenda. It is also closely aligned with the New Industrial Strategy for Europe and the United Nations 2030 Sustainable Development Goals (SDGs). European Manufacturing faces challenges from intense global market competition, climate change, aging working populations, rapid technological progress, and new challenges arising from COVID pandemic. Five strategic objectives, its vision and mission (see Figure 1) give direction to the EIT Manufacturing community:

- **First, Competitive Manufacturing Skills and Social Sustainability.** Europe requires a highly-skilled workforce, employed in attractive jobs. 54% of the workforce will need reskilling to be able to engage in a range of jobs transformed by market trends, e.g. digitalisation⁴. EIT Manufacturing will address this through supporting the creation of new, attractive industry jobs and a pan-European education and training platform, which will be launched in 2021. Further, EIT Manufacturing will increase the innovation capacity of the higher education sector by promoting institutional change in higher education institutions (HEIs).

¹ EC, Additive Manufacturing – a Key Enabling Technology for Europe's industry, 2018, [Link](#)

² Eurostat, Manufacturing statistics, NACE Rev. 2, 2020, [Link](#)

³ Eurostat, Extra-EU trade in manufactured goods, 2020, [Link](#)

⁴ World Economic Forum, The Future of Jobs Report, 2018, [Link](#)

- Second, Powerful Manufacturing Innovation Ecosystems.** Europe requires strong ecosystems (see Glossary) for Innovation, Entrepreneurship and Business Transformation, integrated higher-education, and a highly active, open and visible community for manufacturing stakeholders. EIT Manufacturing is establishing the leading European Manufacturing community also leveraging the EIT Regional Innovation Scheme (RIS) to address regional disparities in innovation capacity across Europe and promote cohesion. In 2021 it will launch the EIT Manufacturing Open Innovation Platform (OIP) that connects Europe and that will offer a large spectrum of tailored, pan-European services for Start-ups, Scale-ups, Small and Medium Enterprises (SMEs) and large corporations.

- Third, Globally Competitive and Resilient Manufacturing.** Europe needs both disruptive and incremental innovation to increase the competitiveness of Manufacturing and strengthen its resilience. Europe competes on a challenging global market that requires extreme agility towards customer demands. EIT Manufacturing will increase industry’s agility, flexibility and resilience. The KIC will support established players as well as new innovative Start-ups and SMEs, which are key sources of innovation across Europe.

- Fourth, Environmentally Sustainable Manufacturing.** European manufacturing must commit to radically reduce its climate impact whilst creating closed-looped manufacturing. EIT Manufacturing will support industry to significantly reduce emissions, environmental pollution, energy and material consumption as well as to promote the transition to circular economy. It will thus significantly contribute to the goals set out in the European Green Deal.

- The **fifth objective, Manufacturing fit for the Digital Age,** cuts across all other objectives, focusing on leveraging digital technologies along advanced manufacturing value chains. EIT Manufacturing will boost the application of emerging digital technologies and standards across value networks to rapidly enable and advance digitalisation of Europe’s industry, supporting the 4th industrial revolution. This will be strongly supported by matching EIT Manufacturing educational programmes.

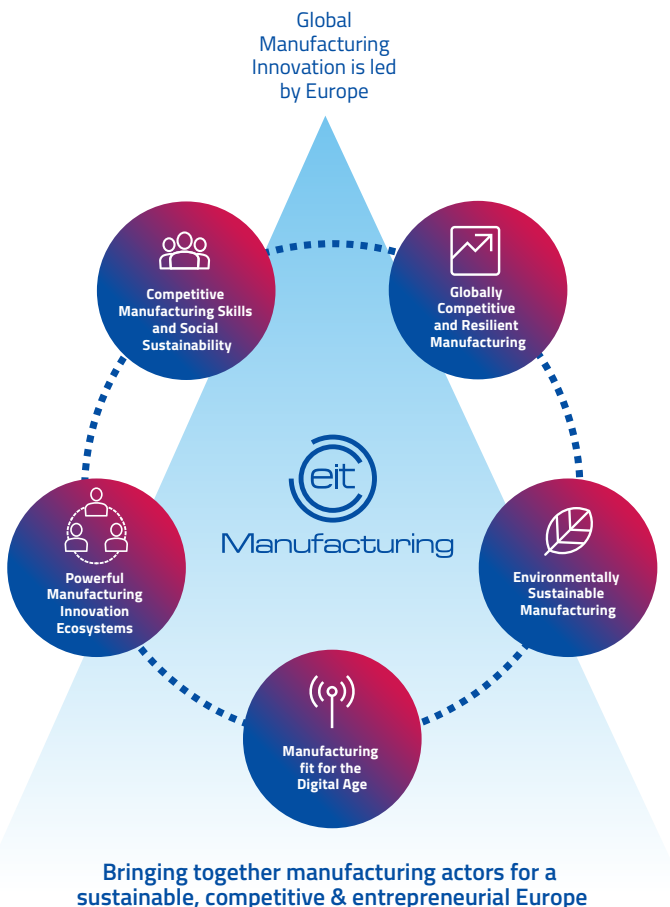


FIG 1 Vision, Mission and Strategic Objectives of EIT Manufacturing

EIT Manufacturing's integrative and responsive approach to innovation

EIT Manufacturing matches new enabling technologies with manufacturing applications and challenges in so-called innovation hotspots. EIT Manufacturing operationalises its strategy along three integrated pillars, Education, Innovation and Business Creation. Each pillar has clearly defined internal programmes. The KIC initiates concrete actions to involve the private sector, particularly SMEs and start-ups in the activities of each pillar, including education, training and skills development. During the COVID-19 pandemic, EIT Manufacturing was able to rapidly and successfully initiate and support projects and Start-ups contributing to their recovery in complementarity to Next Generation EU.

A strong, open manufacturing innovation community

EIT Manufacturing is establishing an open European community (see Figure 2) ensuring a balanced group of world-class manufacturing stakeholders. Members consist of: recognised and diverse industry leaders, fostering multi-sectorial innovation approaches and cross fertilisation. Universities, globally recognised for academic and innovation performance, providing educational capacity, curricula and top-level academics. Highly recognised Research and Technology Organisations (RTOs), contributing with broad competences and specialised expertise in manufacturing and enabling technologies. EIT Manufacturing will bring European manufacturers together to explore common benefits, reshaping whole supply chains towards strengthening their resilience and global competitiveness. Special efforts are made to gain more partners from countries considered as modest or moderate innovators.

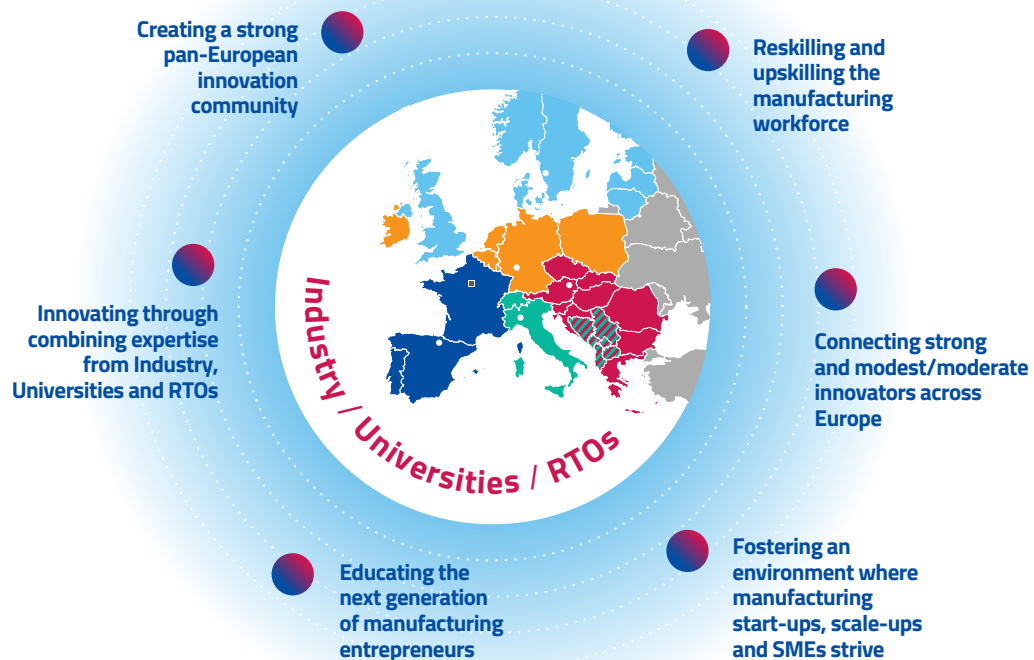


FIG 2 Key aspects of EIT Manufacturing innovation ecosystem

How we are organised

The EIT Manufacturing governance model is based on the key principles of agility, transparency, and efficiency. EIT Manufacturing builds on a strong, diverse, and dedicated leadership team; a tightly connected and engaged partnership; and constant evaluation and scrutiny. EIT Manufacturing will implement gender balance and non-discrimination principles in all its procedures, activities and programmes in line with the European Commission's

[Gender Equality Strategy 2020-2025](#) and the [EIT Gender mainstreaming Policy](#). It will gear its activities to reduce the underrepresentation of women in entrepreneurship, manufacturing and technology sectors in general. The EIT Manufacturing Innovation Forum (EMIF), established in 2021, provides a space for exchange and idea generation of young entrepreneurs from the manufacturing sector and beyond.

Outlook to some of our medium-term goals closely aligned with EIT targets - by 2027 the KIC will:



...reduce greenhouse gas emission from the sector by **25%**



... engage **320** active KIC Members plus **hundreds** of Activity and Network Partners



...improve global **competitiveness** of the sector exceeding **16%** of value added (share of GDP)



...count over **2100** Graduates from EIT labelled MSc/PhD programmes



... help create **156** innovative businesses



2. Strategic analysis of the Societal Challenge

2.1 Societal Challenges

European manufacturing industry contributed more than 14%⁵ of the European GDP in 2018, while employing 32.9 million people.⁶ Prosperity and quality employment opportunities associated with a successful manufacturing industry result in high levels of international competition between economies to attract new investment.⁷ Europe is a long-established, strong global player in manufacturing innovation but several major challenges threaten the European manufacturing industry: demographic changes, rapid technological progress, increasingly varying consumer demands, scarcity of raw materials, environmental concern as well as increasing global competition. Digitalisation and emerging technologies provide significant opportunities, yet Europe's manufacturers often struggle to usefully implement new technologies. The COVID-19 pandemic has shown the importance of a resilient and strong European manufacturing industry that is less dependent on global supply chains. The KIC will address industry-specific and societal challenges in four of the five critical areas of the 2030 Agenda for Sustainable Development of the United Nations: People, Planet, Prosperity and Partnership.⁸

2.1.1 People

Aging and a decline in population is a major challenge for Europe, introducing a new constraint to the available manufacturing workforce. This may result in 2.6 million job vacancies within manufacturing that cannot be filled in the years 2018 to 2028⁹ – a threat to Europe's competitiveness. The World Economic Forum (WEF) concludes that as much as **54%¹⁰ of the global workforces urgently need reskilling**. For the European manufacturing workforce, 9 million person-years of reskilling is required. These challenges align with the New Skills Agenda for Europe. A competitively skilled workforce is

needed to engage in a range of **transformed jobs** where new technology and digitalisation can create socially sustainable work for all, including people with disabilities or those close to retirement. To reap benefits of gender-balanced teams, manufacturing companies must engage women at all levels, offering attractive working environments. This aligns with EC's Gender Equality Strategy 2020-2025, the EIT Gender mainstreaming Policy and the European Pillar of Social Rights. **EIT Manufacturing** will address education, reskilling, female representation and social sustainability in manufacturing.

2.1.2 Planet

Climate change is an urgent challenge for humanity. European manufacturing contributed approximately 10% of the waste in 2016¹¹, and 20% of the greenhouse gases (GHG) in 2019.¹² Minimising energy consumption and GHG emissions (**decarbonisation**) as well as **environmental pollution** from manufacturing will have a huge impact on achievement of the European Green Deal. Europe-made solutions for countering the **depletion of scarce resources** and enabling solutions towards a circular economy aligns with the Circular Economy Action Plan and will position Europe as a leader in sustainable and circular design and production. To achieve this, the KIC will interact with manufacturing companies aiming to reduce negative environmental impact of their operations and entrepreneurs building businesses providing new eco-solutions and sustainable business models.

2.1.3 Prosperity

Europe is strong in a competitive global market that requires **extreme agility towards customer demands** and where digital transformation is rapidly accelerating. In its 2017 renewed EU Industrial Policy Strategy the EC identified the need to keep up with **rapid technological change** as one

⁵ World Bank, Manufacturing, value added in % of GDP, EU 28, 2018, [Link](#)

⁶ Eurostat, Manufacturing, value added (% of GDP), 2020, [Link](#)

⁷ World Manufacturing Forum, The Global Competitiveness Report 2018, 2018, [Link](#)

⁸ UN SDGs, Transforming our world: 2030 Agenda for Sustainable Development, 2015, [Link](#)

⁹ World Manufacturing Forum, Skills for the Future of Manufacturing, 2019, [Link](#)

¹⁰ World Economic Forum, The Future of Jobs Report 2018, 2018, [Link](#)

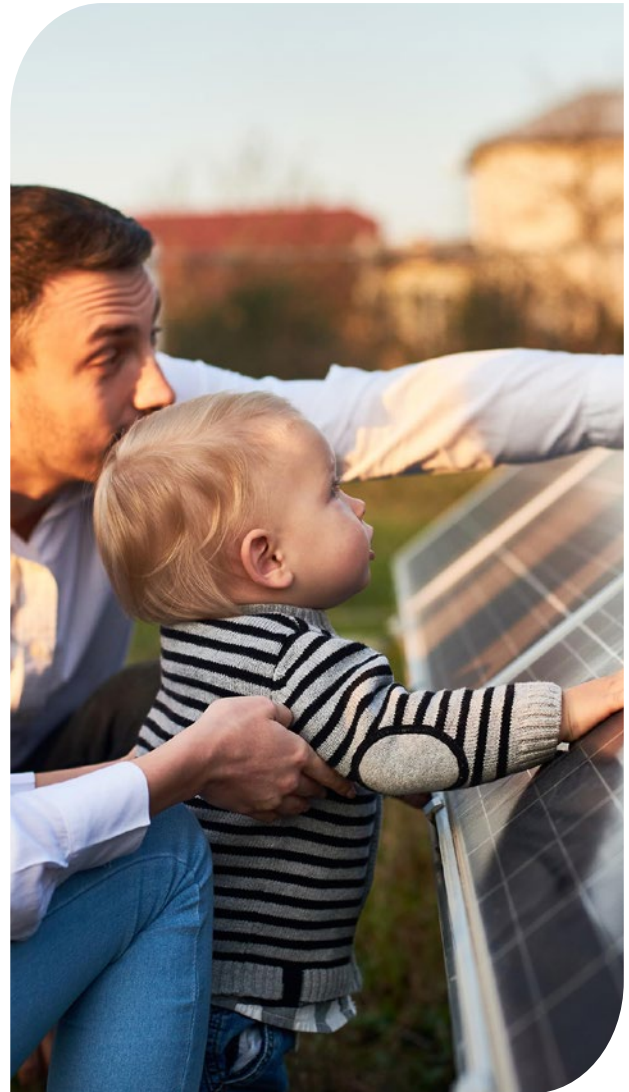
¹¹ Eurostat, Waste generation, 2016, [Link](#)

¹² European Environment Agency, Annual European Union approximated GHG inventory 2018, 2019, [Link](#)

of the key drivers for productivity and innovation. If Europe wants to maintain and reinforce its industrial leadership, it must adapt to challenges of environmental sustainability (see Planet) and new consumer demands, while increasing connectivity and real-time performance measurement.¹³ The COVID-19 pandemic revealed disadvantages of overly complex global supply chains and imposed new challenges on the sector. An innovative and agile manufacturing industry, that enables cross-fertilization and creates spill-over effects to other industries, is important for wealth creation and prosperity all over Europe. By 2030, Europe, China, the USA and India will all have shifted to digital manufacturing value networks. Europe, however, is presently **lagging behind its competitors in the area of digital platforms**¹⁴ and standardisation of data. This is especially true for SMEs, key sources of manufacturing innovation in Europe.¹⁵ **EIT Manufacturing** will address these challenges and prepare a European Manufacturing fit to compete in the future. A Europe leveraging the potential of industrial data, digital tools and Artificial Intelligence to increase its innovative capacity, whilst ensuring high flexibility and agility.

2.1.4 Partnerships

Fragmented value systems among European countries and the significant reliance on complex global supply chains necessitate the setup of complex business relations and partnerships. The increasing complexity and fragmentation of supply chains across Europe represent a big challenge. This is especially true for new-entrants and a large number of Start-ups may fail due to lack of connections with major supply-chains. In 2020, the COVID-19 pandemic temporarily halted international flows of trade, causing a massive economic shock. The crisis underlined how European manufacturing resilience requires robust and sustainable partnerships across Europe. SMEs especially can benefit from new collaboration and integration in manufacturing.¹⁶ Partnerships help find solutions to complex and multi-dimensional challenges, foster innovation and increase efficiency through resources pooling that exceeds 'a sum of its parts'.¹⁷ Strong European networks and partnerships for innovation have never been more crucial than now, and inspires the existence of eight EIT KICs as of today.



Based on its diverse set of excellent partners, **EIT Manufacturing** will build a powerful and open innovation ecosystem fostering the creation of novel solutions and the cross-fertilization of new and established businesses by integrating the players of the Knowledge Triangle (KT).

¹³ Ibid.

¹⁴ EPSC, EU industrial policy after Siemens-Alstom, 2019. [Link](#)

¹⁵ EC, Europe's Digital Progress Report, 2017, [Link](#)

¹⁶ EC, Industry Partnerships – a new impetus, conference report, 2018. [Link](#)

¹⁷ Miller, 1999, in McQuaid, Theory of organisational partnerships, 2010, [Link](#)

2.2 SWOT

As outlined above, European manufacturing must face a myriad of highly complex challenges in the years to come. The intrinsic interdependencies and causalities that exist between challenges requires a holistic, broad and, above all, interdisciplinary approach. The EIT Model combines actors from education, research and business, and thus provides

a unique opportunity to address these challenges in new ways. A continued focus on education and close-to-market innovation is also essential. The following SWOT analysis justifies EIT Manufacturing's approach, considering the specific requirements of European manufacturing.

S

STRENGTHS

- EIT Manufacturing brings together key European manufacturing experts with a strong industrial base, connecting innovation power along value chains and across sectors to foster the creation of innovative businesses
- The KIC's societal impact objectives are aligned with EU priorities and United Nations Sustainable Development Goals, enabling strong and climate neutral manufacturing
- The open KIC community leverages innovation through business ecosystems, knowledge networks and facility sharing between education, business & research
- The KIC's strong programmes for education and reskilling enable pan-European life-long learning in the manufacturing sector and increase the KIC's innovative and entrepreneurial capacity

W

WEAKNESSES

- It is challenging to exploit the KIC's full potential due to presently low pan-European collaboration and innovation-sharing in the manufacturing area
- It is a challenge for the KIC to balance focused impact creation with openness to a broad range of innovation areas and partners
- Reaching all of Europe to demonstrate attractiveness of manufacturing to a younger generation and show the importance of manufacturing to the citizens is more difficult than anticipated
- There is limited participation from EIT RIS regions in deployment of advanced manufacturing technologies weakening overall impact

O

OPPORTUNITIES

- The KIC can enable joint innovation between SMEs, Start-ups and established market players, offering huge entrepreneurial potential to strengthen the European value network
- The KIC can exploit the potential of cross-fertilization between different sectors creating significant economic, social, and environmental impact for society
- The KIC can support Europe as a front-runner in climate change mitigation by developing a sustainable and circular industry, turning it into a competitive advantage on the world market
- The KIC can create synergies with the other KICs and European initiatives, e.g. Horizon Europe, European Innovation Council, European Investment Fund and leverage strategic alliances, eco-systems and

T

THREATS

- Europe is investing less than other regions in manufacturing innovation and in industrial digitalisation infrastructure and applications. This threatens Europe's competitiveness, especially its SMEs
- The conservative culture among manufacturing industries weakens innovation and counteracts a radical shift towards sustainable and digitalised manufacturing
- The two million manufacturing companies in Europe are highly fragmented and distributed, making them difficult to reach and impact with innovation and new skills
- Diversity and attractiveness of the manufacturing community is too low, thereby the manufacturing industry's skill, innovation, and competitiveness levels are not reaching the full potential for future manufacturing



3. Vision, Mission and Strategic Objectives

3.1 KIC's vision and mission

EIT Manufacturing leverages the strengths and abilities of European industry to design and manufacture the goods and services that create our wealth and underpin our ambition to reach climate neutrality in 2050. Recent geopolitical impacts and crises, such as the COVID-19 pandemic, strengthen the need for Europe to sustain a strong and resilient manufacturing industry. In alignment with the EC's recovery plan [Next Generation EU](#) the KIC is committed to support the manufacturing industry to kick-start, recover quickly and to learn from the crisis. European manufacturing needs the strong innovation, business creation, and education capability, created by EIT Manufacturing to succeed in fulfilling our bold **VISION: Global Manufacturing Innovation is led by Europe!** We will achieve our vision through innovation and collaboration across Europe, within all dimensions of manufacturing. The **MISSION** of EIT Manufacturing is to: **Bring together manufacturing actors across Europe to integrate innovation and education for an entrepreneurial and sustainable Europe.**

3.2 KIC's strategic objectives

In line with the challenges described in Chapter 2.1 and the overarching objectives mentioned in the [EIT's Strategic Innovation Agenda](#), EIT Manufacturing has derived five Strategic Objectives (SO). Each has been concretised in Focus Areas (FA) guiding the KIC's activities towards societal and economic impact. Horizontal topics like diversity and gender balance, long-term financial sustainability and regional cohesion are an integral part of all SOs. If indicated the KIC will do a mid-term review of its SOs and FAs to

adapt to changing societal and economic circumstances or a shift of its members' priorities. Progress on the SO will be continuously measured and reported (see KPI table Chapter 4.2).

Intervention Logic

EIT Manufacturing connects and integrates actors from all sides of the EIT Knowledge Triangle: Higher Education, Research, Innovation and Business. The KIC has designed three distinct programmes, complemented by tools and instruments, in each area relevant to its SOs, described in the glossary (see Annex 3). To provide additional focus and to steer the portfolio of activities, EIT Manufacturing relies on Innovation Hotspots and Flagships which define the focus of the KIC for a certain period. This allows the KIC to remain flexible and to adjust its activities quickly towards those areas where challenges and opportunities arise. To measure the impact created, an Impact Pathway was defined for each FA with a logical sequence of short-, medium and long-term KPIs allowing close monitoring of progress and success (see tables per SO summarizing selected targets, Chapter 4 on overall impact and Annex 1, 2a and 2b on the Impact Pathways incl. indicators, baselines and sources).

Boosting innovation in EIT RIS countries

Throughout all its activities EIT Manufacturing will fully integrate and closely collaborate with organisations and individuals from EIT RIS eligible countries to overcome prevailing disparities regarding innovative capacity and participation in EIT initiatives. In the manufacturing sector, many relevant suppliers and solution providers are located in EIT RIS countries. The importance of an integrated and resilient pan-European manufacturing sector with the ability to produce strategically important parts and products for the European market has been stressed again during the COVID-19 pandemic. To further develop and leverage the

innovative potential and talent in RIS countries, the KIC encourages continuous exchange, proximity to existing and potential partners, and region-specific approaches – based on assessments of the regional market, competencies, needs and demographics. The KIC established 2 CLCs in EIT RIS countries (Italy and Spain) and will add another CLC in a RIS country in 2022. RIS hubs already operate in already 13 EIT RIS countries with up to four additional ones planned in 2021 (see Chapter 5.1). With the RIS CLCs and hubs the KIC increases its regional impact and enhances its outreach to a wide range of stakeholders and potential partners integrating them into the KIC community and its activities along the KT. The hubs are responsible for building a pipeline of activities with RIS participation and to ensure that partners or projects which have not reached a certain maturity are supported to further develop. It also lies within their responsibility to facilitate access to the educational programmes. The hubs connect new relevant partners to the community, e.g. the OIP or manufacturing companies as potential end-users for pilot cases, as well as the KIC's business development services. EIT Manufacturing's RIS approach is deeply anchored in the belief that mutual benefit and impact can be leveraged by close cooperation between organisations across Europe forming open geographically distributed ecosystems.



3.2.1 SO1 Competitive Manufacturing Skills and Social Sustainability

FA 1.1 Increase Skill Agility and reduce Skill Gaps: Skills development is one of the most pressing and timely challenges of the manufacturing industry^{18, 19}. To address it, the KIC initiates and offers a wide range of programmes and activities to educate, up-skill, and re-skill European citizens. It has created strategic educational assets, such as the Guided Learning Platform (GLP) providing modular and highly customisable digital learning, the Teaching Factories (TFs) providing real manufacturing social and business challenges and the Learning Factories (LFs) for hands-on training. The GLP will be available end of 2021 offering the first 1100 short learning units ("Nuggets"), which can be combined to Learning Pathways suitable for every type of learner. The initial TLF network of 21 entities shall grow towards 50 by the end of 2027, with an emphasis on expanding to RIS countries. Higher education programmes include EIT Labelled Master and PhD Programmes that integrate the skills flagged as important by the KIC's Members and verified in a systemic analysis of manufacturing job profiles in 2021. They focus i.a. on entrepreneurship, creativity, leadership and competences necessary for the digital and green transition. Application to the four different Master Programmes, carried by initially seven universities, opened in Q1 2021. Six universities (four from RIS countries) participate in the PhD Programme initially. The KIC plans to integrate more than 80 non-academic partners to its educational programmes until 2027. Through participation in the EIT's cross-KIC Higher Education Initiative (HEI), HE institutions will be supported in designing and implementing actions to increase their innovation capabilities, aiming to support 82 HEIs by the end of 2027. The KIC's education strategy is also aligned with the Digital Education Action Plan (DEAP).²⁰

¹⁸ World Manufacturing Forum, The 2018 World Manufacturing Forum Report, 2018, [Link](#)

¹⁹ World Manufacturing Forum, Skills for the Future of Manufacturing, 2019, [Link](#)

²⁰ Quantification to be done once the EIT's impact framework and methodologies per indicator are available

FA 1.2 Empower Women in Manufacturing: EIT

Manufacturing is convinced that the sector can only thrive if it attracts and is attractive to the entire European workforce. The KIC will put a strong focus on gender balance and diversity to leverage the underutilised potential women can bring to the industry. The KIC encourages and assesses (see Chapter 4.2) the participation of women in its programmes, identifying and promoting entrepreneurial talents aiming e.g. for 40% of female activity leads and 40% of start-ups created under female leadership. The KIC will also reward activity proposals led by women during the proposal evaluation process. It will also inaugurate a Women Ambassador's Programme with inspiring women. By the end of 2022 the first five ambassadors will be recruited, including and especially from RIS countries, and ready to resume work.

FA 1.3 Make working in manufacturing attractive: EIT

Manufacturing aims to position Europe as the industrial role model for socially sustainable manufacturing. Its activities and solutions will contribute to achieving safer, more ergonomic, inclusive jobs and working conditions, aiming for an increase in workplace attractiveness among KIC partners by 20%. These goals prompted the KIC's selection of the Flagship *Human-machine Co-working for Socially Sustainable Manufacturing*, as human-robot collaboration bears the potential to increase human well-being at the manufacturing workplace while supporting the retention of older and physically weaker workers in their jobs. By informing relevant target groups about the promising opportunities and huge diversity of jobs within the industry, the KIC aims to prompt more people to choose a career in manufacturing.

3.2.2 SO2 Powerful Manufacturing Innovation Ecosystems

FA 2.1 Establish Open Innovation Ecosystems: EIT

Manufacturing will connect stakeholders from and beyond manufacturing across Europe leveraging the partners' immense and diverse powers.²¹ Maximum impact can only be achieved through cooperation and exchange of knowledge and data, for example via the EIT Manufacturing Open Innovation Platform (OIP), which will be called *Agora* and released mid 2021. Starting in 2022 it will be populated with additional services to facilitate a more flexible and dynamic innovation process among the users (internal and external), facilitating around 15-20 activities per year. Until 2027, the partnership and the ecosystem will grow constantly to 320 active partners and the KIC will seek synergies with over 40 relevant stakeholders to increase scope and depth of the innovative capacity and to maximise impact (see Chapter 5.1, 5.5). Following this logic, the KIC's Calls and the partnership itself are open for new external entities, expecting initially 200 and later 300 expressions of interests from external partners to participate in the KIC annually. Integration of all 17 EIT RIS countries will further reinforce the independence of European manufacturing.

FA 2.2 Foster Business Creation, Start-ups and SMEs:

The KIC aims to boost business creation through all its programmes, including Education. *Business Creation Managers* and *Innovation Managers* have been appointed at all Co-Location Centres (CLCs) and will provide business development services to foster sustainable and profitable growth. By the end of 2022, each CLC is asked to have set-up partnerships with at least two leading accelerators to co-invest and share existing facilities. The KIC thus leverages the capabilities of its ecosystem to provide over 1.300 start-ups with business development services and access to investors and public funding sources. EIT Manufacturing coordinates the efforts of all KICs to partner with the European Investment Fund (EIF) aiming to launch a joint instrument financing European ventures in 2022, which, by 2024, shall have supported 300 start-ups and scale-ups. Also, as part of the Memorandum of Understanding between the EIT and the European Innovation Council (EIC), the KIC aims to exploit synergies in its financing portfolio and business development support services to deploy and scale up innovations aiming to attract 15 MEUR of investment

²¹ Harvard Business Review, *How Leaders create and use Networks*, 2007, [Link](#)

by 2024. By doing so, the KIC aligns with the EC's [SME Strategy](#) and [Start-up Europe](#). To further increase the KIC's direct impact on business creation, EIT Manufacturing will contribute to the initiative "Access to Finance" alongside private Venture Capital investors and corporates by directly (co-)investing in promising start-ups. The KIC expects to contribute to "Access to Finance" with 5 MEUR in 2023, 10 MEUR in 2024 and 20 MEUR in 2025 and beyond.

3.2.3 SO3 Globally Competitive and Resilient Manufacturing

FA 3.1 Increase Competitiveness through high Innovative Capacity: Encouraged by the phenomenon that increased innovation correlates with increased competitiveness²², EIT Manufacturing will focus on the development of innovative products, processes and services. Manufacturing specifically supports innovation activities which are already close to market (i.e. TRL 7 and higher) to introduce new solutions for global manufacturing challenges. EIT Manufacturing identifies an increasing innovation potential in EIT RIS countries and will strongly support innovations originating from there. Supporting educational content, e.g. digital learning paths and Teaching Factories' sessions, will be created and delivered via the GLP and integrated in education and training programmes. The OIP (see F.A. 2.1) will help the KIC to foster efficient collaboration and insights into latest technological development from inside and outside the community. It will identify so-called *Innovation Hotspots*, i.e. situations where maximum impact can be created through innovation. To this end a radar, called "The Future of Manufacturing" with insights into currently 40 emerging technologies of different TRLs has been developed by the KIC and will be published to its partners in 2021. Such hotspots, especially those around technologies with higher TRLs, may evolve into a Flagship, guiding the calls and the KIC's portfolio. The KIC will revise its Flagships in 2023 to closely adhere to industry use cases, also consulting its Members in the process. To further guarantee an influx of innovative and disruptive ideas the EIT Manufacturing Innovation Forum (EMIF) solicits insights on improving innovation from eight young and highly diverse entrepreneurs. Ultimately these activities and efforts will contribute to increase the Manufacturing value added (share of GDP) to more than 16% (baseline 14% in 2018).

²² Ciocanel & Pavelescu, Innovation and competitiveness in European context in *Procedia Economics and Finance*, 2015, [Link](#)

FA 3.2. Increasing System Agility, Flexibility and Resilience:

Increasing demands for highly-customised products and/or the need for resilience in the face of disruptive market events like COVID-19 demand higher levels of manufacturing flexibility, through lean and agile processes and new technologies and skills.²³ From a technological and process perspective, techniques like various forms of 3D- and 4D-printing, robotic swarms or digital twins are promising example to achieve the desired system flexibility and produce personalised products, accounted for in the Flagship *Flexible Production Systems for Competitive Manufacturing*. However, EIT Manufacturing will also support flexibility and agility in production by for example focusing on aspects like remote operations e.g. for maintenance or intervention. A survey is planned to analyse and disseminate lessons learnt from the COVID-19 pandemic within EIT Manufacturing partnership.

3.2.4 SO4 Environmentally Sustainable Manufacturing

FA 4.1 Enable Manufacturing for a Circular Economy:

Besides improving manufacturing processes, including de- and re-manufacturing, the KIC will work towards zero-waste manufacturing and closing material loops to reduce costs and increase profitability. Overall, the KIC will improve energy (see FA 4.2) and material intensive production processes and increase the lifetime of products. Through the EIT labelled Master dedicated to Zero Waste and Circular Economy and the educational content developed, the KIC will enable knowledge sharing between partners and engage in cross-KIC activities with e.g. EIT Raw Materials ²⁴. Since 2021, EIT Manufacturing, is also part of the [Secretariat of EU Environmental Technology Verification](#) (ETV) Programme for a clean and circular economy. The Flagship on *Low Environmental Footprint Systems & Circular Economy for Green Manufacturing* allows the KIC to focus on those technologies supporting circular and eco-friendly approaches. The "Transform" programme actively supports the development of circular business models.

FA 4.2 Decarbonise manufacturing: Industrial process and product use as well as the energy consumed in manufacturing industries and construction accounted for approximately 20% of total European Green House

²³ See for example, World Manufacturing Forum, The 2018 World Manufacturing Forum Report, 2018, [Link](#)

²⁴ EC, A new Circular Economy Action Plan, 2020, [Link](#)

Gas emissions in 2018.²⁵ Decarbonisation – as well as dematerialisation – is a priority for EIT Manufacturing. Through its network and testbed facilities it will facilitate the demonstration of low-carbon technologies to speed up commercialisation and wide-spread implementation. Through its own means (i.e. funding of activities) and partnership with investors and other financial intermediaries, it will contribute to the financing of such undertakings. Both FAs in this strategic objective will be addressed with educational content in the areas of circular economy and materials, decarbonization, design for sustainability.

3.2.5 SO5 Manufacturing fit for the Digital Age

FA 5.1 Exploit the potential of Digital Tools, Industrial Data and Digital (Business) Platforms: Well-functioning value networks (SO2) need a strong base in the form of secure digital business platforms and industrial data spaces. The KIC offers a wide variety of learning and developing opportunities in emerging digital technologies, an EIT Labelled Master on Platforms for digitized Value Network as well as hands-on learning activities. This is of utmost importance since spreading the use of digital solutions will also drive environmentally friendly innovation (SO4) and secure a strong competitive position for EU manufacturing (SO3). Digital technologies, like implemented in the GLP, allow distant and de-centralised learning across Europe, including RIS (SO1). Europe is leading in the development and enforcement of standards for the ethical use of data and (digital) technology. The KIC supports this, and the Flagship *Digital & Collaborative Solutions for Innovative Manufacturing Ecosystems* fosters creation of digital and digitally enhanced solutions, including data spaces, to enable trustworthy digital marketplaces and cognitive assistance for efficient collaboration across companies, sectors and value chains. This will be aligned with other European initiatives, e.g. GAIA-X with whom a memorandum of collaboration (MoC) is currently negotiated. The KIC will hence produce contributions to the Strategy on Digitising European Industry and to the effects of Europe's Digital Innovation Hubs (EDIHs). In 2021, 4 of 5 CLCs are applying to establish an EDIH. In doing so they are elaborating concepts and exploring synergies to support local manufacturing SMEs to further develop digital maturity.



²⁵ European Environment Agency, Annual European Union approximated GHG inventory for 2018, 2019, [Link](#)

4. Impact and Results

4.1 Impact

Reaching our ambitious goals

EIT Manufacturing has identified several overarching challenges, resulting in the KIC's five SOs on skills, ecosystem, competitiveness, environmental sustainability and digitalisation. The KIC's strategy is further guided by the United Nations' SDGs and the EU key policy priorities, such as the [European Green Deal](#), the [New Circular Economy Action Plan](#) and [A Europe Fit for the Digital Age](#). By bringing together manufacturing actors across Europe to integrate innovation and education the KIC will contribute to an entrepreneurial, sustainable and resilient Europe. Focus is set by means of transversal Flagships, which are identified through the Innovation Hotspots and are most promising in terms of ability to create meaningful impact in the manufacturing sector (see Chapter 3). A systematic process for a adapting, updating and refining the Flagships will launch in 2021. The current four flagships are:

- **Flexible Production Systems for Competitive Manufacturing:** emerging technologies enable almost limitless flexibility in product design and production, allowing full customisation.
- **Low Environmental Footprint Systems & Circular Economy for Green Manufacturing:** using new technology to minimise use of resources, energy, and material in production systems enables new circular business models.

- **Digital & Collaborative Solutions for Innovative Manufacturing Ecosystems:** collaboration and business on digital platforms and value networks enables companies to create new and highly efficient value-chains.
- **Human-machine Co-working for Socially Sustainable Manufacturing:** smart use of automation and robots enables great workplaces, flexible production, and sustainable human work.

KIC impact

The following impact pathways are described for the FAs, showing the logic link between strategy and short-term outputs, medium-term outcomes and long-term (societal) impacts.

4.1.1 SO1: Competitive Manufacturing Skills and Social Sustainability

FA 1.1 Increase Skill Agility and reduce Skill Gaps: the **impact targeted** is increased European workforce skill levels and readiness that make our industry competitive on a global scale and allows for adaptation to changing job market requirements. In the **short term**, digital learning nuggets consumed will show the usage of the GLP. The **outcome** will be monitored through the number of Badges issued to testify the achievement of a learning outcome. **Long term**, EIT Manufacturing aims to increase the number of highly qualified employees in manufacturing sector to 30% by 2027 and reduce skill gaps and shortages.

FA 1.2 Empower Women in Manufacturing: the impact targeted is strongly enhanced female representation and participation in European Manufacturing innovation and start-ups, and an increased pipeline of future female talent in Science, Technology, Engineering, Mathematics/ Manufacturing-related higher education. In the **short term**, the the KIC's impact will be measured by the number of female graduates from EIT labelled programmes and female activity leaders. In the **medium term**, this will be shown by the number of new Start-ups led by women. EIT Manufacturing will contribute to an increase in the share of female scientists and engineers in manufacturing to at least 30% and to a share of female board membership in Manufacturing above 40% in the **long term**.

FA 1.3 Make working in manufacturing attractive: the impact targeted is that Manufacturing is a desirable and sought-after sector for creative and innovative people of all ages, genders and physical capabilities. Manufacturing's best possible use of automation will support humans in the workplace and create a high-tech environment where people feel safe, empowered, inspired and innovative. In the **medium term**, workplaces will increase their social sustainability through KIC Activities contributing to more attractive and safe workplaces in the short term. In the long term, EIT Manufacturing will increase social sustainability and attractiveness of workplaces in manufacturing by 20%.

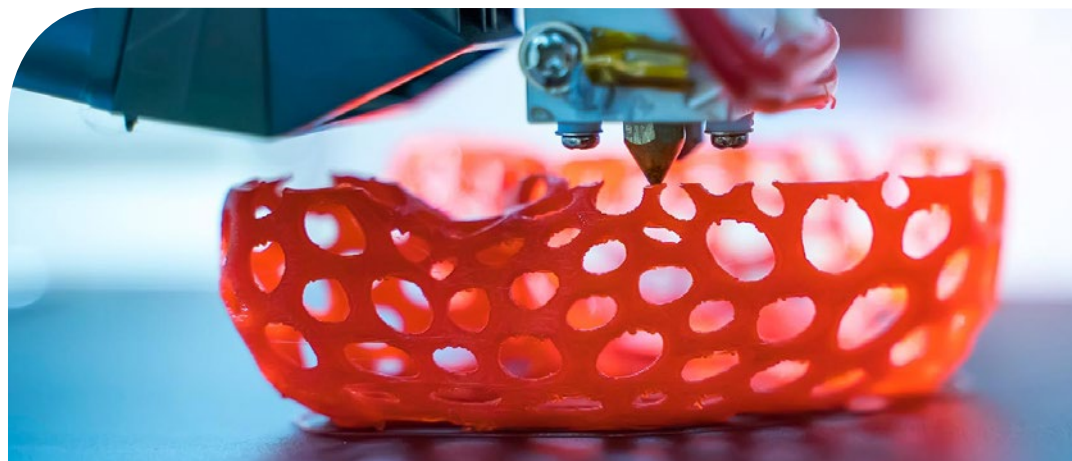
RIS-specific impact under SO1 requires enabling virtual, distance learning, resulting in an increase in knowledge and capabilities through practical, complementary education offers. In the long-term, this will contribute to the attractiveness of RIS locations for investments. New jobs will be generated, as availability of qualified personnel increases. RIS countries have a strong tradition of highly-skilled women in science and engineering, a best practice examples to be further supported by KIC activities.

4.1.2 SO2: Powerful Manufacturing Innovation Ecosystems

FA 2.1 Establish Open Innovation Ecosystems: the impact targeted is value creation through an open innovation community that connects European manufacturing stakeholders with researchers and investors and provides a platform for collaboration. EIT Manufacturing will be recognised as the EU's ecosystem for manufacturing innovation. Participation in EIT Manufacturing initiatives, measured by external organisations' interest in calls, will increase in the **short term**. The outcome, connections between actors, is measured by activities facilitated through the OIP. **Long term**, 27 new innovation ecosystems will be formed and 15 existing innovation ecosystems will evolve into business ecosystems.

FA 2.2 Foster Business Creation, Start-ups and SMEs: the impact targeted is establishment of attractive open regional ecosystems supporting set-up and growth of new enterprises through access to venture capital, business support and coaching. This is measured in the **short term** via the number of manufacturing clients introduced to Start-ups and SMEs through the KIC, and in terms of deals initiated by Start-ups, Scale-ups and SMEs in the **medium term**. In the **long term**, this will contribute to more than 8000 new jobs created in start-ups and manufacturing share of GDP exceeding 16%.

RIS-specific impact under SO2 is supported through the OIP, which connects manufacturing actors across Europe and facilitates flows of ideas and new valuable partnerships. The RIS Hubs will enable the KIC to act as accelerator for innovation and to involve local actors in the KIC ecosystem, ultimately benefitting the local Start-up communities to evolve and get access to industry customers and finance.



4.1.3 SO3: Globally Competitive and Resilient Manufacturing

FA 3.1 Increase Competitiveness through high Innovative Capacity: the **impact targeted** regards Europe being the global innovation hotspot for manufacturing technology and solutions, and a core engine of societal growth. The amount of innovative products/services designed or tested will be a **short-term** measure; the number of products or processes launched on the market will show **medium-term outcomes**. **Long term**, this will contribute to the increase of Manufacturing's share of GDP to 16 %.

FA 3.2 Increasing System Agility, Flexibility and Resilience: the **impact targeted** is an increase in highly flexible and resilient manufacturing systems, companies and supply chains across Europe. A good upstream view of supply chain and production flows is a prerequisite to flexibility. Europe is a leader in product customisation and small or single batch production, leading to increased attractiveness for businesses and investors. In the **short term**, impact will show in KIC Innovation Activities increasing agility, flexibility or resilience of manufacturing systems. The outcome of these activities will be further monitored by the number of Activity Partners implementing activities targeting agility, flexibility, or resilience of manufacturing systems in the **medium-term**. **Long term**, these outcomes will contribute to an increase in the value added (share of GDP) of manufacturing, also in comparison to other regions.

RIS-specific impact under SO3 is increased innovation capacity, enabled through collaboration amongst different actors along the knowledge triangle. RIS countries are strategically vital to resilience of Europe's industry and to making traditional, static supply chains into modern, innovative networks.

4.1.4 SO4: Environmentally Sustainable Manufacturing

FA 4.1 Enable Manufacturing for a Circular Economy: the **impact targeted** is Europe's manufacturing industry to be a leader by example in terms of circular economy processes and technologies, with a focus on pressing issues like critical materials. The percentage of KIC Activities contributing to environmental sustainability will guide the portfolio as **short-term** indicator. A **medium-term** indicator will be the number of activities that lead to a reduction of material consumption of >20%. In the **long term**, this will contribute to an increased circular material use rate in manufacturing sector of 15%.

FA 4.2 Decarbonise manufacturing: the **impact targeted** regards Europe having the highest share of production facilities with a net zero-carbon footprint worldwide. Progress will be measured in Activities contributing to environmental sustainability as **short-term** indicator, and number of companies participating in Activities that lead to a decrease in their greenhouse gas emissions of at least 20% as **medium-term** indicator. In the **long term**, GHG emissions will be reduced by at least 25%.

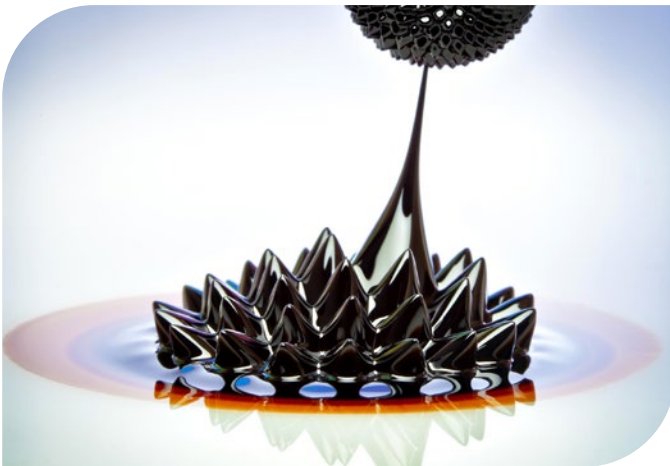
RIS-specific impact under SO4: Per the European Green Deal's Just Transition Mechanism, focused investment and best practice examples will be target environmental technologies in EIT RIS countries.

4.1.5 SO5: Manufacturing fit for the Digital Age

FA 5.1: Exploit the potential of Digital Tools, Industrial Data and Digital (Business) Platforms: Digital technologies are a means to achieve the above societal impacts. The **impact targeted** therefore is use of digital business platforms and technologies to enhance performance and increase compatibility and agility of companies and supply chains. This will put Europe at the forefront of standardisation, while supporting ongoing efforts to establish a framework on ethical rules for AI, such as on Building trust in Human-

Centric AI²⁶, the White Paper on AI²⁷, and the FAIR principles²⁸. EIT Manufacturing supports maintenance of Europe's role in transferring European standards globally, but also establishment of new standards for digital technologies in manufacturing. Indicators of results **short term** are Activities deploying advanced digital business platforms or technology, leading to continued deployment in the **medium term**. **Long term**, annually 20 participating companies should increase their digital maturity.

RIS-specific impact under S05 is reached through promotion of collaboration on digital platforms across Europe. Cloud-based data services are critical, and independent of geographical location, offering opportunities for solution providers from EIT RIS. Being part of pan-European digital platforms will enable accessing markets faster and fill in gaps in value chains. Combining these opportunities with current reshoring efforts, European manufacturing could make a big move toward RIS in the long term.



²⁶ EC, Communication: Building Trust in Human Centric Artificial Intelligence, 2019, [Link](#)

²⁷ EC, White Paper on Artificial Intelligence: a European approach to excellence and trust, 2020, [Link](#)

²⁸ EC, Turning Fair Into Reality, 2018, [Link](#)

5. Governance and Operation Model

5.1 Partnership

The EIT Manufacturing partnership is positioned to assume a leading role in Europe's manufacturing innovation landscape as *the* pan-European manufacturing innovation community focusing on practice-based education and matching innovators and innovative ideas with a strong industrial base. The industry partners cover the whole manufacturing value chain and a broad range of industrial sectors. The partnership composition reflects the EIT's mission to increase Europe's competitiveness by integrating the knowledge triangle. Cross-fertilisation and close collaboration are ensured through the effective and open model, operationalised e.g. in the CLCs, on the OIP or within TLFs. The partnership is structured into three broad partner categories:

- **Members** of EIT Manufacturing ASBL are those partners that accede to the KIC Legal Entity and pay an annual fee to contribute to the KIC's financial sustainability. The KIC is open to entities from any country eligible for funding under the EU's current framework programme for research and innovation (i.e. Horizon Europe). Both, B2B and B2C partners are incorporated to accelerate innovation at all stages of the product and equipment lifecycle. Until February 2021, 17 new Members joined.
- **Activity Partners:** This category ensures openness of the KIC and the attraction of diverse and excellent partners. KIC activities are open to all entities eligible under Europe's Framework Programme for Research and Innovation. Activity Partners do not need to become members of the KIC Legal Entity.

- **Network Partners** are stakeholders representing various target groups and intermediaries who are not formal KIC Members. Their involvement aims to embed the KIC into a wider ecosystem, beyond the scope of Members and Activity Partners, and throughout the CLCs.

Role and location of the CLCs

The CLCs are an integral part of the KIC's governance and foster connectivity with local ecosystems and collaboration through the provision of physical spaces for interaction. They initiate, host and implement the various KIC's activities and provide a platform for discussion of innovative ideas. Additional CLCs will be set up as the KIC grows (in 2022, 2025 and 2027). Current CLCs are strategically located within regions of high manufacturing activity and advanced manufacturing technology, whilst also providing accessibility to RIS, thus supporting the EIT Manufacturing growth and RIS strategy.

EIT Regional Innovation Scheme

The EIT Regional Innovation Scheme (EIT RIS) constitutes an integral part of the EIT Manufacturing's strategy as detailed in Chapter 3. It is designed as a long-term initiative to strengthen the local innovation ecosystems of RIS countries that are moderate or modest innovators. The KIC aims to have established hubs in 13-16 RIS countries by the end of 2023 (including the two CLCs already established in Italy and Spain). The manufacturing suppliers, subcontractors and solution providers (usually SMEs) in RIS countries are critically important for the operations of large, often world-leading, European manufacturers. The KIC will increase their innovation capacity.

Growth strategy

The KIC seeks to expand its partnership and stakeholder network to integrate complementary competences from the Knowledge Triangle, the manufacturing value chain and financial intermediaries. EIT Manufacturing aims to have 120 Members by the end of 2022 and 170 by 2027. Besides increasing the number of new **Members**, EIT Manufacturing aims to enhance the involvement of **Activity Partners**, to substantially increase the participation of SMEs, Start-ups and Scale-ups. The KIC also expects to build an extensive web of **Network Partners**, covering the whole of Europe.

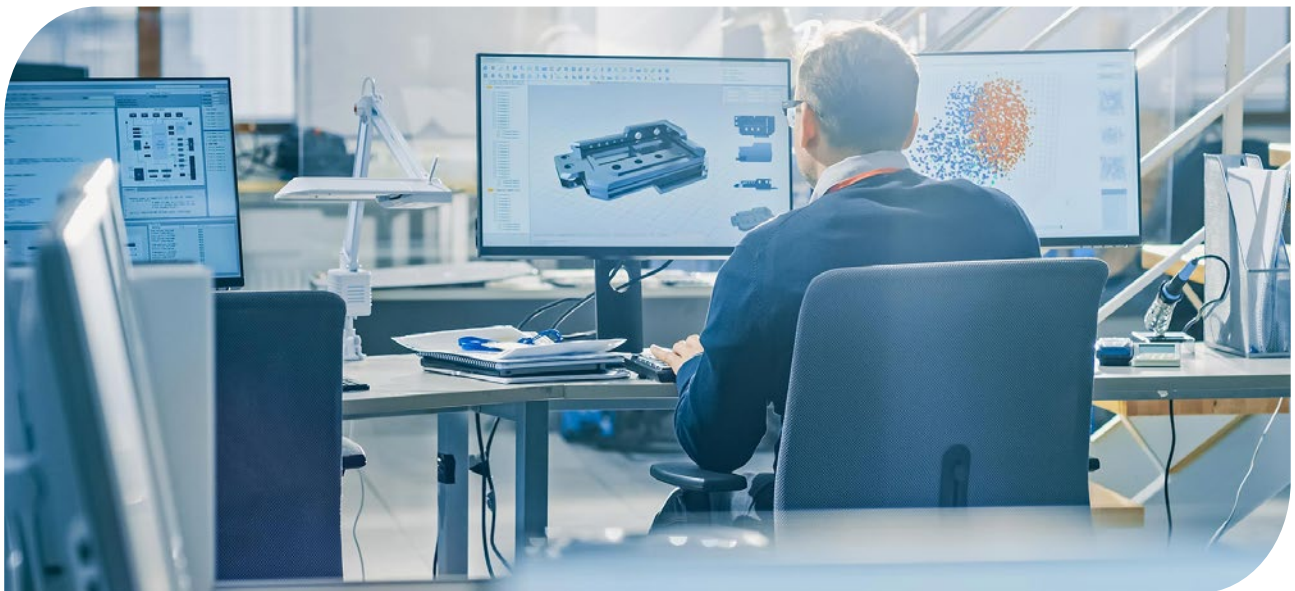
5.2 Governance

The governance model is designed to efficiently implement our vision and strategy fostering innovation and entrepreneurship. The key principles are agility, transparency and efficiency. EIT Manufacturing promotes an innovation-mindset, open collaboration and adaptability in its communication and guidelines. The structure will reflect the multiple stakeholders and at the same time enable strong leadership as well as agility, flexibility and connectivity. The operational structure allows effective management of operations and efficient decision-making processes, while ensuring knowledge triangle integration and connectivity among the CLCs. Further operational principles are designed to enable a maximum degree of cross-fertilisation and applicable to the integration of the Knowledge Triangle.

The KIC's Entities

KIC Legal Entity: Through its various bodies (see Figure 6), the KIC Legal Entity (LE) "EIT Manufacturing ASBL" (a non-for-profit association in French law) is responsible for developing and executing the KIC strategy and operations. It is the main interlocutor toward the EIT and the other EIT KICs and has its seat in Paris. EIT Manufacturing established a commercial entity to manage its revenue streams (see 5.4). The KIC Legal Entity is composed of the following bodies:

- **Partner Assembly (PA):** The PA is the **highest decision-making body**. It is responsible for approving the Strategic Agenda and the annual Business Plans, including the annual budgets. The PA is composed of one representative per Member. Each representative is nominated by its entity and holds one vote. The chairperson of the SB leads the PA.
- **Supervisory Board (SB):** The SB has the general functions to **monitor and guide the Management Team (MT)** and designate and dismiss its members. It pre-approves the Strategic Agenda and annual Business Plans before submitting them to the PA. It consists of up to 15 members which are selected through an open procedure.



- Management Team (MT):** The Management Team is the **main executive body** of the KIC LE. It consists of the CEO, COO, functional directors (Education, Innovation, Business Creation, Finance, Communication, European Affairs and RIS) and the CLC directors. It manages KIC operations, such as strategy execution, activity implementation, resource allocation, financial sustainability, accounting and reporting, risk management, corporate control.

- Ancillary Bodies:** A number of ancillary bodies with advisory functions will be established to provide the governance bodies with expert consultation on relevant strategy and policy issues: the IP Board, the Ethical, Legal and Social Implications Board (ELSI) and the EIT Manufacturing Innovation Forum.

- Commercial Arm:** The EIT Manufacturing SASU (Société par actions simplifiée unipersonnelle) is set up according to the by-laws and articles of association of EIT Manufacturing ASBL and be fully owned by it. The purpose of the subsidiary is mainly to be the commercial owner of the assets such as equity shares and to collect the income excluding the membership fees.

- CLCs:** The CLCs are solely owned and controlled by the EIT Manufacturing ASBL. The CLC Directors are part of the KIC LE MT representing the CLCs. Each CLC creates an Advisory Board representing the local partnership and external stakeholders, apart from of CLC South which formed a Board of Directors.

5.3 Budget

Sources of funds

EIT Grant: EIT Manufacturing receives financial support from the EIT. In total, 438.5MEUR are envisaged in the first 7 years. In the long-term, financial support of the EIT will decrease in line with the KIC's ambition to become financially sustainable. Nonetheless, the KIC expects a base funding in accordance with the 15-year mandate to sustain the established structural assets in all three pillars.

Partner financial contributions: Annual fees paid by all EIT Manufacturing Members and Activity Partners will provide a stable and reliable source of income which will grow as the partnership expands.

In-kind contributions: Most of activities carried out by the KIC are co-funded by the partners. The envisaged rates of co-funding are: 30% for Innovation Activities and 5-10% for Business Creation Activities. For Education activities, no co-funding is expected.

Third party contributions: Additional funding will be obtained from regional, national and/or other EU funding programmes. The CLCs are being set up in a legal form that allows them to attract alternative funding, e.g. from public funding programmes at EU, national and local funding programmes.

EIT Manufacturing-revenue sources (others): Own generated resources from RoI and equity, education and services & consulting.

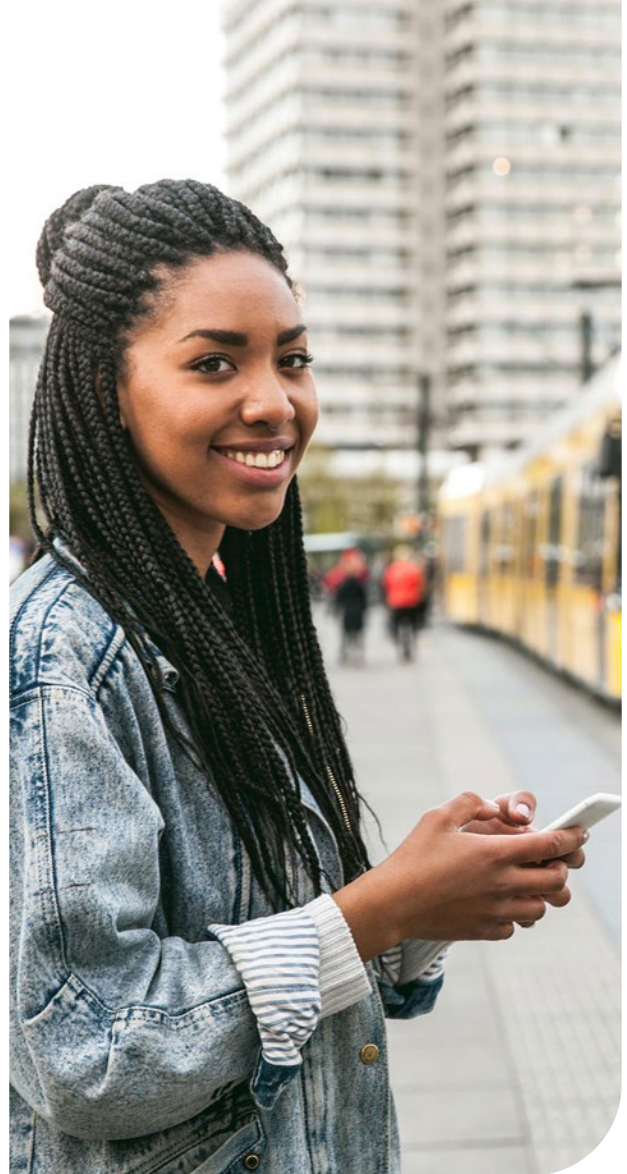
Uses of funds

The EIT Manufacturing Members have agreed on a top-down distribution of the funds as a guideline for the allocation to the different activity areas in the yearly business plans. The final allocations may differ marginally by year. The guidelines state an allocation of 40% to Innovation, 30% to Education, 18% to Business Creation, max 12% to Communication and operational expenditures. Across these different activity areas, at least 10% of the funds will be spent on RIS strategy implementation.

5.4 Financial Sustainability

From year one onwards EIT Manufacturing will start to maximise value creation and develop diversified income streams to ensure continuity of operations independent from EIT funding. The following sources of revenue are foreseen:

- **ROI and Equity:** All Innovation activity proposals are requested to suggest a mechanism contributing to the financial sustainability of the KIC, and EIT Manufacturing will institutionalise the principle of the financial back flow from successful commercialisation of activities. Two basic models are initially presented to partners, a fixed “success fee” or a revenue sharing model, and partners are free to propose other mechanisms. In addition, **EIT Manufacturing** will create a financial revenue stream while sharing the upside and downside entrepreneurial risks with Start-ups, acting as a strategic partner. Equity shares can be earned by EIT Manufacturing in exchange for the services provided to Start-ups.
- **Education:** EIT Manufacturing Master students will be charged an annual **tuition fee**. In addition, fees will be earned from the **badges**, which are associated to digital learning paths created by KIC-funded activities and distributed through the GLP.
- **Services and consulting:** EIT Manufacturing will identify opportunities to develop service offerings for its partners and the wider market through our **Open Innovation Platform (OIP)**. Typically, these services are strongly connected to the KIC’s core business and expertise such as innovation management, funding management and training offerings. Further **Innovation Services** offered by the KIC may include support to digital transformation, standardisation guidelines and conformance testing, technology scouting, matchmaking and transfer services, intellectual asset brokerage and support services and access to networking events. CLCs also will develop services such as access to test beds and pilot lines.
- **Membership Fees:** EIT Manufacturing will continuously review and adjust its financial sustainability plan based on experience from the pilots executed and those made by other KICs. Sustainability will be ensured by the KIC’s long-term strategic orientation, the commitment of its partners and the diverse and reliable income streams.



5.5 Cross-cutting aspects

Openness and Transparency

Openness and transparency are overarching principles of EIT Manufacturing. They are embedded at all levels of strategy and operations implementation, for instance in the governance set up and processes, including the business planning and selection of activities and new partners based on clearly defined criteria to deliver on the strategy. Specifically, we ensure transparency regarding participation in activities, involvement of stakeholders, and calls and the process for establishing our Business Plans.

Synergies and Collaborations

EIT Manufacturing will collaborate and coordinate with initiatives on European and national/regional level to establish collaborations and synergies of mutual benefit. Towards this, the strategy of EIT Manufacturing is based on two key advantages: i) the multi-sectorial character of manufacturing covering a wide range of industrial sectors and ii) the combined capacities of its community allowing fertilisation across several, modern technologies.

Synergies at European level: EIT Manufacturing interacts with the EC Services on a regular basis to explore and define and strengthen the development of synergies and complementarities, especially with regards to innovation, education and entrepreneurship, with existing and upcoming relevant EU programmes and initiatives, such as the Horizon Europe programme and in this connection also with the EIC, or for instance the COSME programme focussing on SME support. Within this context, the KIC is in constant exchange with DG EAC, DG RTD, DG CONNECT, DG GROW and DG ENV, as well as other relevant EC Services. **Synergies at global level:** EIT Manufacturing is aligned and collaborates with the World Economic Forum (WEF), and the KIC will join forces with the World Manufacturing Forum (WMF) to create a global network of students and youngsters, called “Young Manufacturing Leaders”, who will act as European manufacturing ambassadors. The KIC participates in EIT Global Outreach to further explore synergies.

Cross-KIC cooperation and Simplification/ Shared Services

Next to the collaboration with other EU initiatives, the collaboration with the other KICs represents an indispensable added value for achieving its SOs and to increase the overall impact of the EIT Community. The KIC is therefore keen to deepen cooperation on thematic fit. The specific format will depend on the needs of the KICs involved. EIT Manufacturing currently focuses on cross-KIC cooperation in the thematic areas of **resource efficient society, digitalisation of industries and deployment of Artificial Intelligence** in manufacturing.

Communication

The KIC's Communication Strategy aims at positioning EIT Manufacturing as *the* leading European manufacturing knowledge and innovation ecosystem, with the capacity to bring cutting-edge, competitive and sustainable solutions answering to global manufacturing challenges. Communication holds a key role in supporting EIT Manufacturing in achieving its 2027 goals and in creating awareness around and driving participation in the KIC's ongoing activities. Communication supports the education, innovation, business creation pillars and EIT RIS in attracting participants to its activities and visitors to its platforms. In all communication activities, EIT Manufacturing will continue to amplify and champion the EIT brand ensuring consistent visibility of EIT Community branding and EU and EIT support.

Dissemination of Results

The EIT and EIT Manufacturing have an obligation to disseminate results, good practices and lessons learnt generated from their activities, whilst respecting relevant IP rights. The objective is to detect, analyse, codify, share and ensure take-up of results to facilitate further exploitation by the European and global innovation community and thus, maximise impact beyond the EIT and the KIC. Main targets audiences for the KIC's dissemination activities are entrepreneurs, researchers, academia, prospect candidates for PhD programs, teachers, manufacturing employees, industrial partners but also policy-makers at regional and European level.

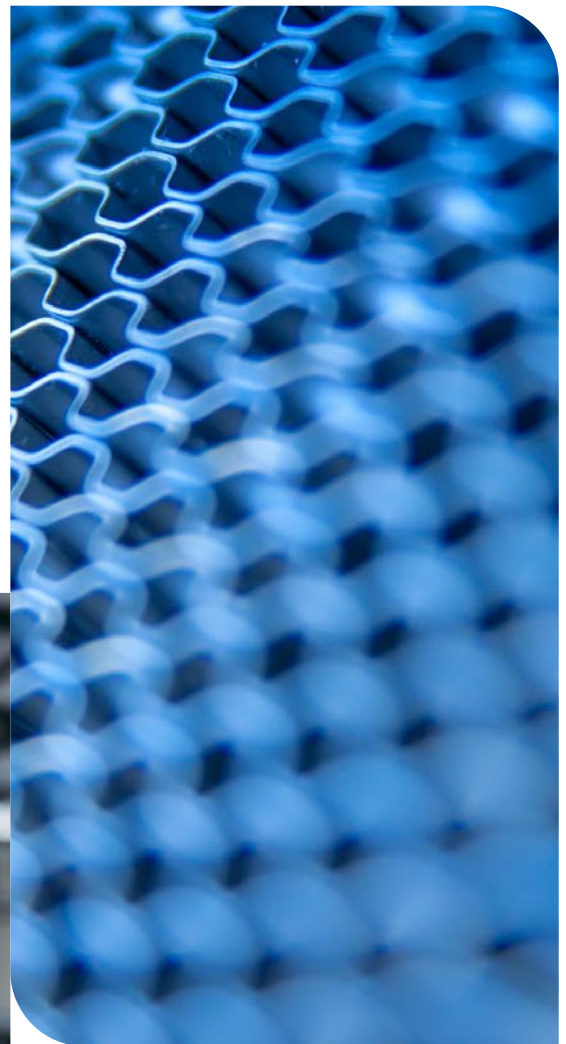
Stakeholder Engagement

EIT Manufacturing will engage a large stakeholder network at European, regional and national level and when relevant on a global level in order to:

- Align on common challenges and priorities, and join forces to tackle them, as is already the case for the European Green Deal and the New Industrial Strategy, among others
- Identify emerging technologies, trends and opportunities
- Promote EIT Manufacturing and EIT beyond its existing network
- Promote EIT manufacturing activities and results for wider spread and take-up, i.e. maximise impact of the communication and dissemination activities

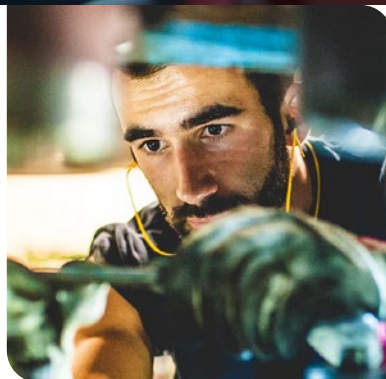
Global Outreach

EIT Manufacturing's Global Outreach activities aim at positioning the KIC as well as EIT and Europe's industrial sector as a global innovation force for manufacturing, with EIT Manufacturing acting as a leading embodiment of shared values and as bridge between EU policy, such as the [European Green Deal](#), the Digital Europe Programme and the [Circular Economy Action Plan](#), and the UN's 17 SDGs). In order to increase its international recognition, expand globally, and strengthen its own sustainability, EIT Manufacturing envisions a smart internationalisation strategy beyond the EU within a mid-term horizon by actively involving – among others – members with an international presence.



LIST OF ABBREVIATIONS

AI	Artificial Intelligence	I4.0	Industry 4.0
CEO	Chief Executive Officer	KAVA	KIC Added Value Activities
CLC	Co-location Centre	KCA	KIC Complementary Activities
COO	Chief Operating Officer	KIC	Knowledge and Innovation Community
DIH	Digital Innovation Hub	KPI	Key Performance Indicator
DOC	Director of Communication	KTI	Knowledge Triangle Integration
DOF	Director of Finance	LE	Legal Entity
EC	European Commission	MT	Management Team
EFFRA	European Factories of the Future Research Association	OECD	Organisation for Economic Co-operation and Development
EFSI	European Fund for Strategic Investments	PA	Partner Assembly
ELSI	Ethical, Legal and Social Implications	RTO	Research and Technology Organisations
EIC	European Innovation Council	RIS	Regional Innovation Scheme
EIB	European Investment Bank	R&D	Research & Development
EIT	European Institute of Innovation and Technology	SB	Supervisory Board
EMB	Extended Management Board	SMES	Small and medium enterprises
EMIP	European Manufacturing Innovation Platform	SDG	Sustainable Development Goals
EU	European Union	SO	Strategic Objective
FD	Functional Director	OIA	Open Innovation Accelerator
FPA	Framework Partnership Agreement	TLF	Teaching and Learning Factories
GLP	Guided Learning Platform	TTO	Technology Transfer Offices
IEEE	Institute of Electrical and Electronics Engineers	TRL	Technology Readiness Level
IMS	Intelligent Manufacturing Systems	UN	United Nations
ISB	Interims Supervisory Board	WEF	World Economic Forum
IP	Intellectual Property	WMF	World Manufacturing Forum



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