Department for the Economy
An Roinn Geilleagair
www.economy-ni.gov.uk



Advanced Manufacturing, Materials & Engineering

Sectoral Action Plan

JUNE 2024

Minister's Priorities

In February 2024, Minister Conor Murphy, set out a clear strategic vision for the economy with a focus on four key inter-related objectives – **increasing the number of good jobs**, **promoting regional balance**, **raising productivity,** and **reducing carbon emissions**.

In line with the Minister's priorities and DfE's Departmental Business Plan for 2024/2025 the Advanced Manufacturing, Materials and Engineering (AMME) Sectoral Action Plan has been developed. The Action Plan sets out a number of key activities to be taken forward by the Department and its key delivery partners that will help grow the AMME Sector and deliver the Minister's vision for the economy.

Our Action Plan will also support and contribute to other Departmental strategies and action plans that are helping to deliver against the Minister's priorities.

Background

As a significant provider of highly productive, good jobs across the region, the Advanced Manufacturing, Materials and Engineering (AMME) sector strongly aligns with the Department's Economic Vision.

Northern Ireland has a strong cohort of around 4,665 AMME companies, employing around 56,000 people and worth approximately £3.2 billion to the local economy. The sector is one of Northern Ireland's biggest exporters and is key to growing our local economy. Jobs in engineering and advanced manufacturing are often highly skilled and well-paid, involving cutting-edge research and development. Today, new technologies like Internet of Things (IoT), data analytics, automation, digital twin, and smart design, present exciting opportunities to grow the sector. Areas of expertise within the sector include aerospace and defence; automotive; construction; materials handling; electronics; green growth and renewable energy.

It is estimated that the sector is expected to require at least 1,500 new workers every year, with opportunities across all skill levels and work which includes R&D, new product development, and manufacturing. In addition, gender diversity is increasing in the sector and lots of great work has been done to raise the profile of women in manufacturing.

Advanced Manufacturing is the use of innovative, cutting-edge technologies and methods to improve competitiveness in the manufacturing sector. The 'Advanced' in 'Advanced Manufacturing' refers to the high-tech nature of the manufacturing processes involved.

We have defined the AMME sector in line with that of the Matrix Panel:

> *'A family of activities that a) depend on the use and coordination of information, automation, computation, software, sensing, and networking, and/or b) make use of cutting-edge materials and emerging capabilities enabled by the physical and biological sciences, for example nanotechnology, chemistry, and biology. This involves both new ways to manufacture existing products and especially the manufacture of new products emerging from new advanced technologies."*

Advanced Manufacturing, Materials & Engineering (AMME) Ecosystem

The AMME Ecosystem in Northern Ireland is outlined below with contacts across business, local government, tertiary education, arm's length bodies and government departments.

Advanced Manufacturing Ecosystem

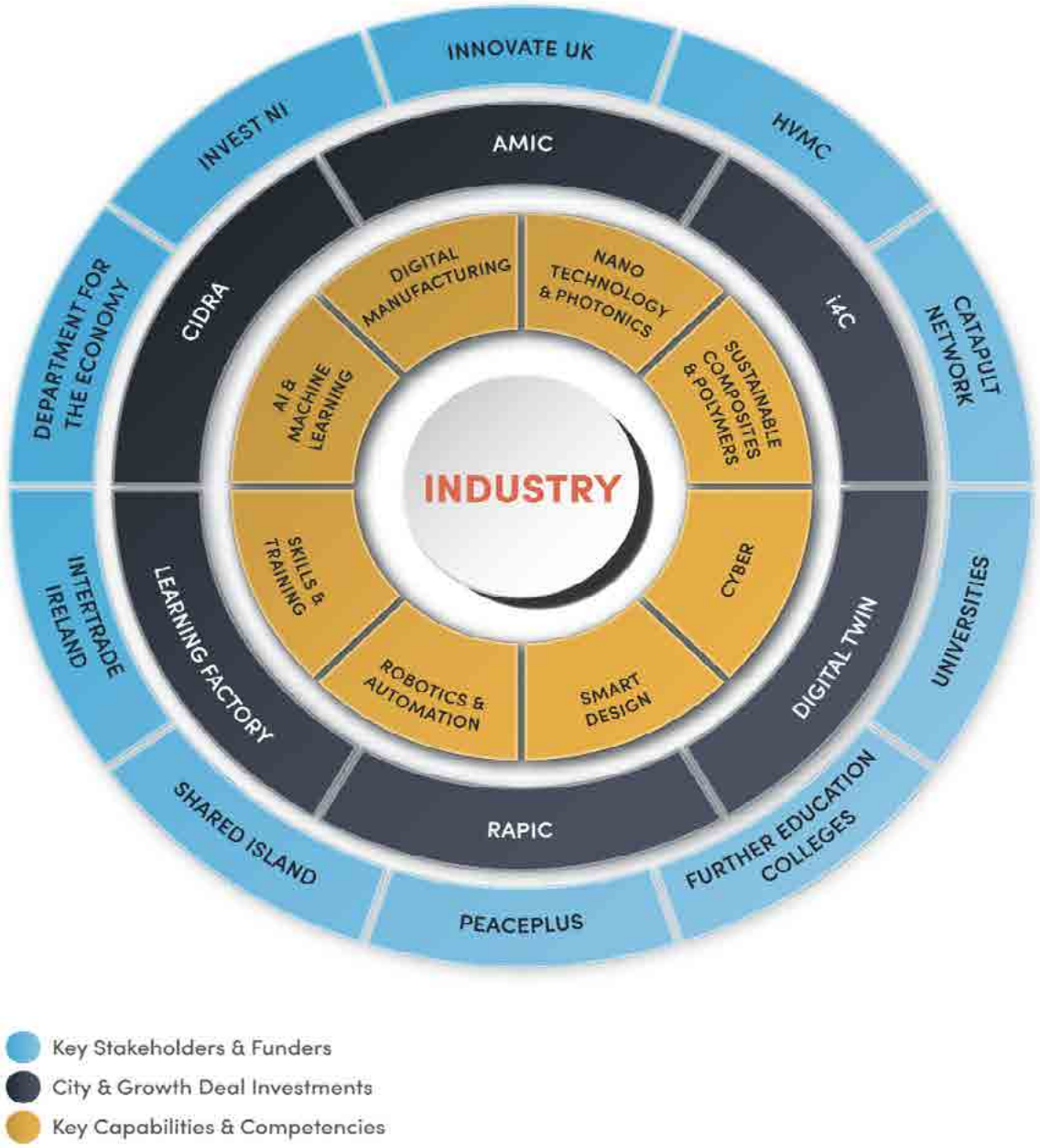


Diagram provided by sector representative body the Makers Alliance

The Manufacturing sector in Northern Ireland has also a pivotal role to play in meeting Minister Murphy's economic priorities. Manufacturing is our second largest contributor to the local economy (£6 billion) and our second largest private sector employer (almost 100,000 direct jobs). The sector supports jobs and economic growth across rural and urban areas with one in four families dependent on a manufacturing wage. The total contribution of manufacturing to the local economy is over £16 billion. Manufacturing dominates the region's exports accounting for almost half of external sales and similarly more than half of export sales (outside the UK). It accounts for two-thirds of our goods exports and 10% of the region's service exports.

Through this Action Plan along with key delivery partners the Department will work with the Advanced Manufacturing/Manufacturing sector to encourage investment in innovative and sustainable technologies for future growth, to grasp the opportunities to grow and prosper through maximising the benefits of dual market access, to improve management practices, and to support greater investment in skills and R&D.

Investment and Opportunities in the Advanced Manufacturing, Materials and Engineering (AMME) Sector Ecosystem

Government has committed to significant investment in City and Growth Deals, in partnership with local councils and universities. Significant resources have been allocated to develop the AMME sector in the short to medium term. The planned activities and innovations offered by the facilities below will actively address some of the key actions set out in the Action Plan. The proposed City and Growth Deals projects focus on automation and robotics, cleantech, smart design, digital twinning, industrial decarbonisation, artificial intelligence, and business led skills have the potential to drive real change for the benefit of all our manufacturers.

Other wider UK investments in the manufacturing sector, supported by Invest NI, are also referred to in the Action Plan. For example, the Smart Nano Corridor (and industrial 5G networks), Smart Manufacturing Data Hub and other innovation activities which we can build on. In addition, the Department for Business and Trade's Advanced Manufacturing Plan leveraging opportunities for NI manufacturers is also vital for the AMME sector.

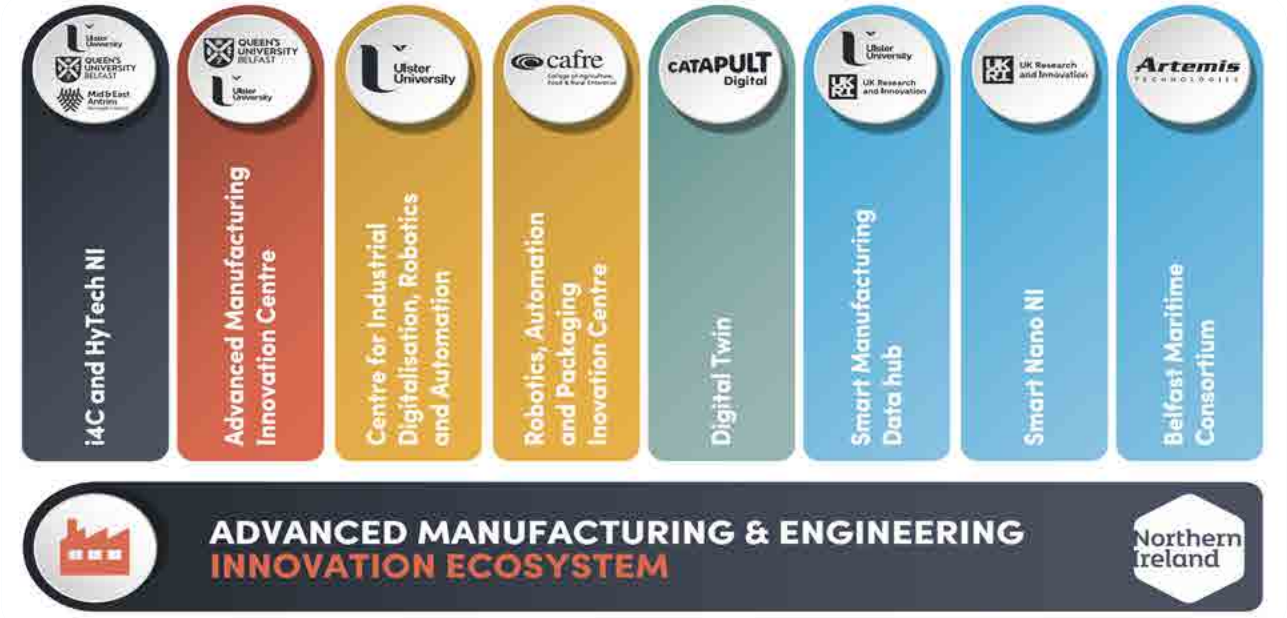


Diagram provided by sector representative body the Makers Alliance

Further to this investment, there are a wealth of opportunities to build upon our existing strengths and further develop the AMME ecosystem in order to provide high quality, high productivity jobs throughout the region. The sector's unique access to both GB and EU markets has the potential to drive exports and attract foreign direct investment. Additionally, there are further opportunities to increase alignment with and funding from Irish, UK and EU schemes and innovation supports. In addition, the development of enabling technologies such as AI, robotics, smart design, digital twinning, industrial decarbonisation etc have the potential to grow the sector even further for the benefit of all our manufacturers.

Clusters have been recognized as supporting competitiveness, productivity and economic growth, and the AMME action plan will consider collaboration and networks in Advanced Manufacturing in the context of, and contributing to, this broader work. The AMME sector already demonstrates clustering and the emergence of significant capability and capacity with the potential to drive the economy forward. Several local businesses within these specialisms, both Small and Medium Enterprises (SMEs) and large companies, have already demonstrated an appetite for collaborative working and have come together with academic partners and other key stakeholders to develop new products, services, and ways of working.

There is an opportunity within this Action Plan to consider developing a 'supercluster' of advanced manufacturing in Northern Ireland. The examples from Canada, Denmark and the Basque region can demonstrate the potential impacts. An AMME super-cluster has the potential to support the diffusion of new technology, drive industrial de-carbonisation and promote the manufacturing sector globally.

Departmental Action Plan for the Advanced Manufacturing, Materials and Engineering (AMME) Sector

The Department has developed an Action Plan to help make the Minister's Economic Vision a reality for the AMME sector across Northern Ireland. This Action Plan is a 3-year vision containing collective objectives that support the development of a more productive sector where the proceeds of growth are shared across more of our society and geography with better quality jobs for all, and action s which contribute to the sector's delivery of the NI Climate Action Plan and associated imperatives.

This Action Plan also addresses the Minister's emphasis on developing clusters and working with businesses to adopt sustainable productivity-improving technologies. This includes automation and robotics, cleantech, smart design, digital twinning, industrial decarbonisation, and artificial intelligence. Furthermore, it addresses the need to grasp the unique opportunities presented by the NI Protocol to export goods to the UK and EU markets and tap into the unrealised potential of the thriving all-Ireland economy.

This Action Plan covers most areas of advanced manufacturing, materials and engineering but leaves out agri-food, which is widely considered to be a sector and, for similar reasons, life and health sciences. Both these have their own sectoral actions plans.

A further departmental economic priority is to ensure a more inclusive economy that works for everyone and that everyone, no matter where they live, regardless of their circumstances or background, has access to the same opportunities to secure a reasonable standard of living. This is particularly important for women and people with disabilities who disproportionately make up the low-paid. This Action Plan therefore seeks to address imbalance with actions that include providing opportunities for all to gain qualifications, to re-skill or upskill.

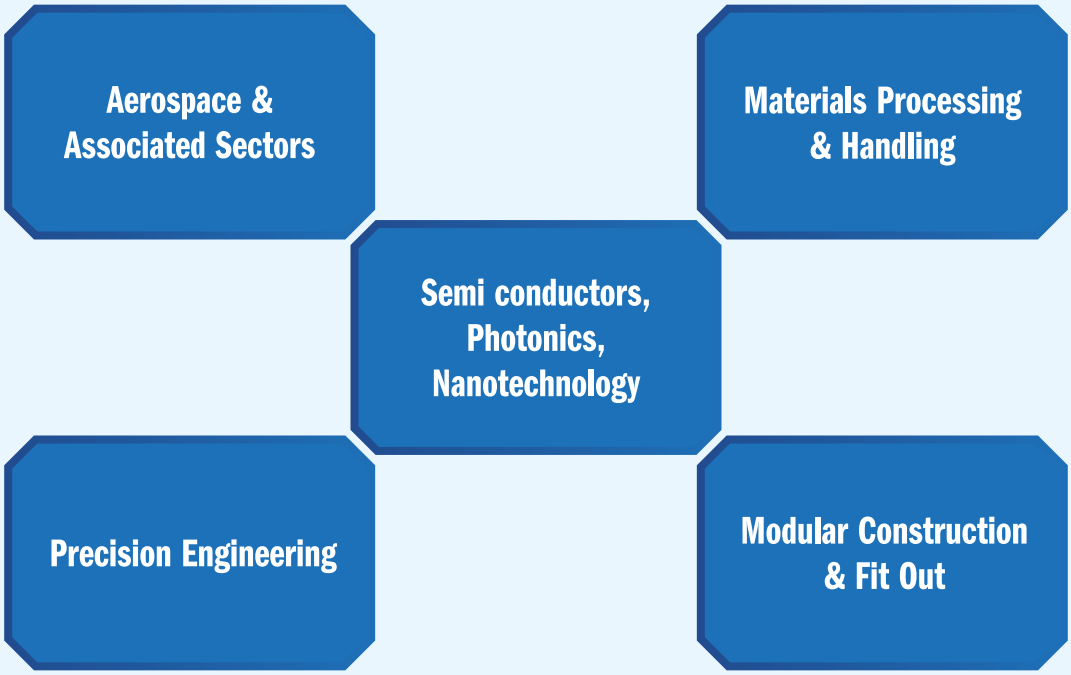
Central to the work undertaken to develop this Action Plan has been a period of extensive collaboration with industry, through engagement with the sector's main representative body, the Makers Alliance, and its wider network, with key delivery bodies Invest NI, and InterTradeIreland. Discussions have included talking in detail about the challenges facing the sector in day-to-day industry, the concerns they have, the opportunities they seek and the support they need going forward to deliver on the Minister's Economic Vision.

We would like to acknowledge the support of the Makers Alliance, Invest NI and InterTradeIreland in the development of our Action Plan.

Sector's Unique Selling Points - Key Strengths

Following extensive research and stakeholder engagement, including a public consultation on the wider approach to technologies and clusters, the Department has developed the following Action Plan to develop the Advanced Manufacturing, Materials and Engineering (AMME) sector in the next three years.

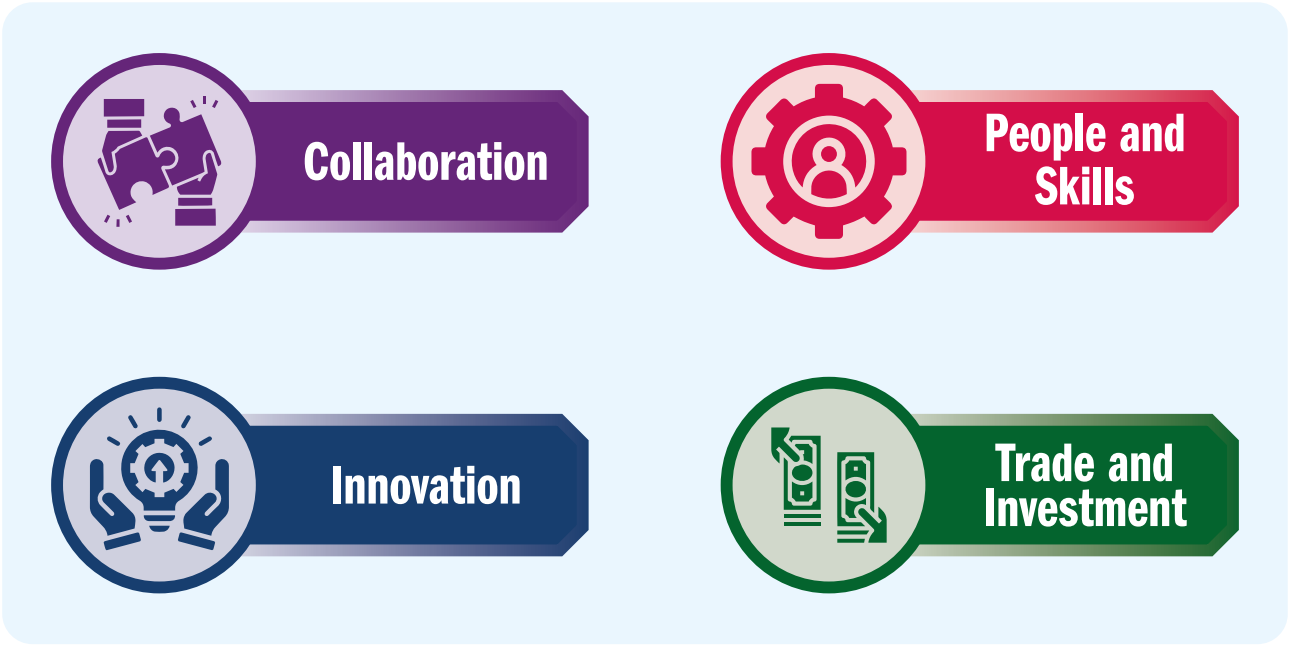
The public consultation held in late 2023 on the Approach to Technologies and Clusters identified the following five key strengths for the AMME sector:



Cross cutting technologies (technologies relevant to a number of key sectors) were also identified such as artificial intelligence, data capture/analytics, software applications, robotics, and automation. Although the consultation shortlisted these technologies and key strengths (USPs) for the sector, it is important to note that this is not a definitive list. This Action Plan will look to support these in addition to other technologies and USP's across the sector. The key technologies when applied on their own, or with a greater impact in combination, can generate increased productivity through innovation, higher levels of competitiveness and help businesses diversify into new markets. However, their real impact comes when they are supported to come together and form 'clusters' in the economy with the potential to be world class, creating a unique proposition for Northern Ireland and developing global leadership capabilities.

As well as the work undertaken within the Department, a range of other external research was used in the development of this Action Plan. This includes the Makers Alliance Delivery Plan for Northern Ireland's manufacturers to support businesses to focus and drive change, generate growth and prosperity through partnership.

The Department's Action Plan sets out a range of activities that aim to support the growth of the sector in order to provide high quality, high productivity jobs across the region. These can be classified under the following four broad themes:



Delivery Partners

As well as a range of teams across the Department for the Economy we have identified other key delivery partners who will support the Department in delivering these actions. Our Action plan lists our delivery partners however through regular engagement and collaboration there maybe additional stakeholders who will support us in the delivery of this plan and updates to our delivery partners may be required.

In implementing the Action Plan's strategic actions, the Department will work closely with colleagues within the Department who are developing the related policies and approaches that Northern Ireland needs to achieve greater collaboration and innovation to deliver DfE's Economic Vision. We will also work closely with the Makers Alliance on their Delivery Plan for the sector and with Invest NI and InterTradeIreland. We will ensure that our approach informs, and is informed by, the development of new policies and that the lessons we learn contribute to wider policy implementation.

We are aware of the ongoing challenges of power generation, grid infrastructure, availability of land, the planning process, immigration, industrial derating, and the potential impact of dual regulation all of which are significant burdens and issues for the AMME sector. While we recognise these issues, they are NI Executive wide and will require long term strategic alignment of thinking across government with political will to address.

The objectives in the Action Plan will complement each other. Actions around skills and labour will, for example, have a significant impact on productivity, innovation, and supply chain. Energy and environment actions will impact skills, competitiveness, and infrastructure. None of the actions will succeed in isolation in the long-term. Collaboration and partnership are key to delivery.

This Action Plan focuses on areas of existing or potential strength across the sector, on what can be done differently, where we can be ambitious in terms of scale, and areas where we can make most difference. There are key strengths across the sector and the Action Plan will support these by focusing our efforts on promising technologies and unique selling points (USPs) and using this focus to drive benefits at scale for the wider economy. The Action Plan's strategic aims include ensuring companies of all sizes have access to the technologies, the skills, the innovation, and R&D supports necessary to become more productive and increase their exports creating wealth for all Northern Ireland.

Northern Ireland offers a unique proposition to overseas partners, same language, dual access to UK and EU markets, defence partnership, lower cost manufacturing base but with low risk to security and geo-political instability. The Action Plan supports dual market access to the UK and EU markets and opportunities for clustering including island wide.

What's Next

The Department and its delivery partners will take forward these actions over the next three years. This will include continued horizon scanning of the AMME sector and reviewing and updating the Action Plan on an ongoing basis. This may include adding new or removing actions in response to the needs of the sector. Updated versions of this Action Plan may be published as required over the next 3 years.

A key Ministerial priority is the need for a more regionally balanced economy. To deliver this, the Department will publish a Sub-Regional Economic Action Plan in Autumn 2024 that will set out interventions to address strategic priorities for each region complementing existing Council-led plans.

We look forward to your support in ensuring the AMME sector continues to grow and deliver for all with the proceeds shared across more of our society and geography with better quality jobs for all, and actions which contribute to a greener and more circular economy.

Theme 1: Collaboration

Objective: To tackle fragmentation within the Advanced Manufacturing, Materials & Engineering (AMME) sector and enhance strategic alignment and points of influence to maximise NI's AMME capabilities and create a higher productivity sector.

Action No.	Delivery against Minister priorities	Detail	Delivery partners	Timescale
1	• High Productivity • Good Jobs • Regional Balance • Reduce carbon emissions	**Sector support** - We will provide support and policy direction to industry and other stakeholders through participation in the Makers Alliance Panel meetings with key industry representatives including Invest NI and the Councils. This will also help to keep abreast of challenges and opportunities and help influence future actions in line with the Minister's Economic Vision's priorities.	Action Commenced	Action Commenced
2	• High Productivity • Good jobs • Regional Balance • Reduce carbon emissions	**Devolved Nations Manufacturing Network** - We will seek to deepen collaboration with relevant UK Government partners, and other Devolved Administrations engaged in AMME sector activity through participation in a Devolved Nations Advanced Manufacturing Network set up to share best practice, networks, common problems, and advice on solutions to help grow the sector.	DfE, UKG & Devolved Administrations	Action Commenced

Theme 1: Collaboration (continued)

Action No.	Delivery against Minister priorities	Detail	Delivery partners	Timescale
3	• High Productivity • Good jobs • Regional Balance • Reduce carbon emissions	**Clustering support** - We will work with delivery partners to consider the benefit of a super cluster to grow the AMME sector as part of a wider DfE cluster policy. This will help deliver on a common vision and goals for the advanced manufacturing/ manufacturing sector in Northern Ireland. Activities will include - Invest NI's regional office network will be enhanced to support the delivery of Northern Ireland's Sub-Regional Economic Plan and associated performance targets. Makers Alliance and Invest NI working to increase collaborative networking and clustering activities through sharing of best practice across Councils and encouraging Councils to showcase their USPs. InterTradeIreland will lead on the development of all-island clustering possibilities, working in partnership with Invest NI and Enterprise Ireland in development of shared island funding activities. InterTradeIreland will grow cross border collaboration, clusters, and networks through identifying and developing strategic partnerships with a range of economic development agencies, industry bodies and private and public sector partners.	DfE, InvestNI, InterTradeIreland, Makers Alliance	Commencing 2024

Theme 1: Collaboration (continued)

Action No.	Delivery against Minister priorities	Detail	Delivery partners	Timescale
4	• High Productivity • Good jobs • Regional Balance • Reduce carbon emissions	**UK Government engagement** - We will seek to deepen collaboration with relevant UK Government partners working on the UKG's Advanced Manufacturing Plan and the Department of Business & Trade's (DBT) Action Plan for NI to ensure funding streams and supports are accessible to NI's AMME sector and that local companies have greater access to the UK's innovation ecosystem with actions in alignment with Department's economic priorities.	DfE, Invest NI, Makers Alliance, UK Government, DBT	Commencing 2024
5	• High Productivity • Good jobs • Regional Balance • Reduce carbon emissions	**Irish Government engagement** - We will seek to deepen collaboration with the Irish Government, ensuring relevant representation of NI's AMME sector, around the design, delivery and draw down of various cross-border initiatives and funds where these align with the needs and capabilities of the sector.	DfE, Irish Government, InterTradeIreland	Commencing 2024
6	• High Productivity • Good jobs • Regional Balance • Reduce carbon emissions	**EU influence and access** - We will engage with our delivery partners to target more focused partnering with our European partners to improve awareness of, and access to funding and support available to AMME companies including Horizon UK monies.	DfE, Invest NI, InterTradeIreland, Office of the Northern Ireland Executive in Brussels (ONIEB) EFFRA IMR	Commencing 2024
7	• High Productivity • Good jobs • Regional Balance • Reduce carbon emissions	**Funding & support infrastructure** - We will work with delivery partners to build on support available to secure a greater share of eligible UK wide (and other) funds for business growth and Economic Vision priorities, including net zero/decarbonisation support and to take advantage of dual market access through Horizon Europe, Shared Island etc.	DfE, InvestNI, InterTradeIreland	Commencing 2024

Theme 2 : People and Skills

Objective: To ensure a future facing and inclusive skills pipeline to nurture talented people with the right skills to support the Advanced Manufacturing, Materials & Engineering (AMME) sector at all levels, helping to create a higher number of good jobs and raising productivity across the sector.

Action No.	Delivery against Minister's priorities	Detail	Delivery partners	Timescale
8	• High productivity • Good jobs • Regional Balance	**Improving pathways and career awareness** - We will work across government, industry, and academia to develop pathways which support access to the AMME sector including the upskilling of the existing workforce in line with emerging skills need. This will emphasise education at all levels with a view to boosting productivity across the sector, enhancing the quality of work and progression opportunities for individuals across NI.	DfE, Invest NI, Makers Alliance, Academia, City & Growth Deals	Commencing 2024
9	• High productivity • Good jobs • Regional Balance	**Identifying future skills pipeline aligned to AMME's needs** - Building on the recently published Matrix report "Future Skills: Scenarios for the Northern Ireland Economy" Technology Skills Scenarios [Final] (2) (matrixni.org), and the outcome of the "Advanced Manufacturing Skills Assessment" from the AMIC Northern Ireland City and Growth Deals we will work with key delivery partners to identify the future skills needs of the sector and how these can be targeted via various skills programmes including those projects with the City & Growth Deals	DfE, Academia, Makers Alliance, City & Growth Deals	Commencing 2024

Theme 2: People and Skills (continued)

Action No.	Delivery against Minister's priorities	Detail	Delivery partners	Timescale
10	• High productivity • Good jobs	**Transferrable skills** - i.e. data analytics, AI and wraparound business and entrepreneurship skills for AMME students. We will explore how best to ensure Universities, FE colleges and other key delivery partners can best partner with industry to ensure AMME students have access to a range of 'wraparound' and 'transferrable' skills. This includes areas in real demand in NI's AMME sector such as focused management and leadership programmes, business and project management courses, data analytics, AI, and other skill gaps identified by industry.	DfE, Academia, Makers Alliance, City & Growth Deals	Commencing 2024
11	• High productivity • Good jobs • Regional Balance	**Learning Factory to deliver skills for growth** - We will collaborate with delivery partners on a Learning Factory pilot proposal in 24/25 as part of the MSW region. The training and learning factory for school leavers will deliver the skills for growth of the industry in the region and will create a new learning pathway.	DfE, Makers Alliance, Invest NI, MEGA	Commenced 2024
12	• High productivity • Good jobs • Regional Balance	**Tackling barriers to inclusion** - We will collaborate with delivery partners to help identify and deliver opportunities for upskilling and reskilling with a focus on females, people with a disability or people from an area of economic disadvantage.	DfE, Industry, Academia	Commencing 2024

Theme 2: People and Skills (continued)

Action No.	Delivery against Minister's priorities	Detail	Delivery partners	Timescale
13	• High productivity • Good jobs	**Skills deficit from new and emerging technologies** - We will engage with delivery partners to identify the skills deficits emerging from new innovative and green technologies to help inform DfE's future skills policies and programmes.	DfE, Invest NI, City & Growth Deals	Commencing 2024

Theme 3 : Innovation

Objective: To support R&D, entrepreneurs, start-ups, and scale ups by better integrating and aligning innovation support while mitigating supply chain issues, promoting net zero and the ambition for lower carbon emissions across the Advanced Manufacturing, Materials & Engineering (AMME) sector.

Action No.	Delivery against Minister's priorities	Detail	Delivery partners	Timescale
14	• High productivity • Good jobs • Regional balance	**Innovation infrastructure** - We will partner with delivery partners to develop the innovation network. Activities will include - Makers Alliance, Invest NI and City and Growth Deals will seek to promote Digital Catapult (DC), Design Smarter Digital Twin (DSDT), and the High Value (HVMC) network. Makers Alliance, Invest NI and City and Growth Deals will seek to build on momentum around Strength in Places (Smart Nano) and IUK activities (Smart Manufacturing Data Hub). Makers Alliance, Invest NI and City and Growth Deals will seek to maximise UKG investment opportunities to increase productivity, technology transfer and clustering. Will also help build east west relations. City and Growth Deals will seek to target companies from various regions across Northern Ireland to encourage R&D and innovation.	DfE, Invest NI, Makers Alliance, City & Growth Deals	Action Commenced

Theme 3: Innovation (continued)

Action No.	Delivery against Minister's priorities	Detail	Delivery partners	Timescale
15	• High productivity • Good jobs • Regional balance	**Growing entrepreneurship** - We will work with delivery partner Invest NI to encourage business innovation in micro and SMEs to accelerate economic growth at a sub-regional level.	DfE, InvestNI	Commencing 2024
16	• High productivity • Good jobs • Regional balance	**Innovative businesses across Ireland and NI** - We will work with delivery partner InterTradeIreland to increase the number of innovative businesses across Ireland and NI through support and programmes that are integrated and complementary, deliver best practice, align with, and reinforce the changing economic and enterprise policy priorities in both jurisdictions.	DfE, InterTradeIreland	Action Commenced
17	• High productivity • Good jobs • Regional balance	**Growing leadership capabilities** - We will work with delivery partners to build leadership capabilities across the sector. Activities will include - Invest NI will build capability through their Leadership and Capability Solutions portfolio and continue to encourage collaboration between SMEs to learn from best practice. InterTradeIreland will enable collaborative innovation and development of SME leader's capabilities by introducing SMEs and academics to best practice, thought leaders and collaboration opportunities through a re-designed All Island Innovation Programme.	DfE, InvestNI, InterTradeIreland	Action Commenced

Theme 3: Innovation (continued)

Action No.	Delivery against Minister's priorities	Detail	Delivery partners	Timescale
18	• High productivity • Good jobs • Regional balance	**Cross border collaboration & knowledge transfer** - We will work with delivery partner InterTradeIreland to support more SMEs to develop and implement new innovative products, services and solutions through cross-border collaboration and knowledge and technology transfer between and across SMEs, Universities and R&D Institutions in NI and Ireland through the InterTradeIreland Business Explorer and Innovation Boost programmes.	DfE, InterTradeIreland	Action Commenced
19	• High productivity • Good jobs	**Capital grant scheme** - We will work with deliver partner Invest NI to consider a proposal for a new capital grant scheme similar to the Productivity Investment Capital Grant (PICG) to address ability of SME businesses to adopt proven, readily available solutions.	DfE, InvestNI	Commencing 2024
20	• High productivity • Good jobs	**Productivity measure** - We will work with delivery partners to build on the work of a Productivity Measure, to introduce a common approach across interventions to better drive and align Invest NI's focus on productivity improvement across Innovation interventions.	DfE, InvestNI, Makers Alliance	Commencing 2024

Theme 3: Innovation (continued)

Action No.	Delivery against Minister's priorities	Detail	Delivery partners	Timescale
21	• High productivity • Good jobs • Reduce carbon emissions	**Supply chain capabilities** - We will work with delivery partners to address barriers for supply chain businesses who want to adopt new and emerging technologies. Activities will include - Invest NI will grow their Supply Chain Solutions support to help manufacturers and internationally tradeable services businesses improve their supply chain resilience and competitiveness. This will include offering specialist advisory support to help businesses identify supply chain risks and appropriate mitigations, to identify net zero opportunities, reduce costs, improve competitiveness, identify supply chain opportunities, and develop supply chain capability. City & Growth Deals will seek to increase the number of companies accessing digital and other technological solutions to help with sustainable supply chain management. DfE will engage with Innovate UK to ensure their Action Plan for NI supports NI companies maximising supply chain opportunities resulting from net zero. InterTradeIreland will grow their Collaborative Innovation Programmes to support businesses to develop supply chain capabilities.	DfE, InvestNI, City & Growth Deals, InterTradeIreland	Commencing 2024

Theme 3: Innovation (continued)

Action No.	Delivery against Minister's priorities	Detail	Delivery partners	Timescale
22	• High productivity • Good jobs • Reduce carbon emissions	**AMME sector alignment with decarbonisation** - We will work with delivery partners to ensure the sector grows in a sustainable manner with conditions that meet the Department's objectives to reduce carbon emissions and net zero. Activities will include - Invest NI will promote the Green Economy in Northern Ireland by (1). delivering industry leading expertise and targeted investment to generate green jobs and drive cross sectoral growth in emerging green markets; and (2). engaging with external partners and supporting businesses to improve resilience in responding to Climate Change through the transition to Net Zero. Invest NI will offer incentives to help reduce energy consumption and to decarbonise their activities to fully optimise the opportunities emerging in the Green Economy and the global drive to net zero. This will include providing specialist advice and guidance to companies to become manufacturers and exporters of sustainable products. Invest NI will work the UK Department for Energy, Security and Net Zero to maximise opportunities available through the Industrial Energy Transformation Fund so more businesses lower their carbon emissions and cut energy costs through investing in energy efficiency and low carbon technologies.	DfE, InvestNI, City & Growth Deals, InterTradeIreland, UKG	Commencing 2024

Theme 3: Innovation (continued)

Action No.	Delivery against Minister's priorities	Detail	Delivery partners	Timescale
22		Invest NI will promote a programme of activity in Smart Design, Digital Twinning and Circularity to reduce industrial waste and remove embedded carbon emissions. DfE will work in partnership with Invest NI to progress industrial decarbonisation in Northern Ireland through the Industrial Decarbonisation Northern Ireland (ID-NI) project led by InvestNI. Invest NI will collaborate with relevant City & Growth Deal projects to increase opportunities for companies to become exporters of renewable energy, including wind, biomethane and geothermal. City & Growth Deals will work collaboratively to promote a Green Economy to deliver products and services that drive industrial decarbonisation e.g. to reduce scope 1 emissions. Also, through promoting resource circularity and energy efficiency technologies for example use of smart design and digital twinning. InterTradeIreland's Collaborative Innovation programmes will include digitalisation and sustainability as themes. DfE will engage with UKG counterparts to ensure funded programmes available to NI businesses are incentivised to support the adoption of green and circular technologies for example through UKG Shared Prosperity.		

Theme 4 : Trade and investment

Objective: To support indigenous businesses to grow through access to finance and export support while promoting regional balance and increased productivity by ensuring all parts of Northern Ireland have the support needed to grow.

Action No.	Delivery against Minister's priorities	Detail	Delivery partners	Timescale
23	• High productivity • Good jobs • Regional balance • Reduce carbon emissions	**Grow local exports through identifying and maximising the opportunities of dual market access** - We will collaborate with delivery partners to build on the established supports in place to take advantage of NI's unique trading arrangements and dual market access position to exports through promoting benefits of dual market access to UK, EU, and all-island markets. This will include showcasing sub-regional strengths. Activities will include - Invest NI will look at what opportunities dual market access to both UK and EU markets can specifically bring to the AMME sector and build on the supports available for home-grown businesses to grow through exports. Invest NI will grow the export potential of the sector in particular start-ups and small micro businesses through helping to identify USPs and matching these to EU or global markets. Invest NI will help the sector export beyond the ROI and GB markets through for example their Go Dutch programme by helping businesses develop the necessary skills, knowledge, and confidence to export.	DfE, InvestNI, InterTradeIreland City & Growth Deals	Action Commenced

Theme 4: Trade and investment (continued)

Action No.	Delivery against Minister's priorities	Detail	Delivery partners	Timescale
23		Invest NI will collaborate with relevant City & Growth Deals to increase opportunities for the sector to use dual market access to become exporters of renewable energy, including wind, biomethane and geothermal. InterTradeIreland will support the sector to take advantage of dual market access through funding opportunities available through Trade support programmes. Engaging businesses with the aim of enabling access to Horizon Europe R&D funding opportunities. DfE will partner with Invest NI in welcoming overseas trade delegations to showcase sector's unique selling points and key technologies.		
24	• High productivity • Good jobs • Regional balance	**Increase in foreign direct investment to areas of economic disadvantage** - We will work with delivery partner Invest NI to attract more foreign direct investment by taking advantage of NI's unique trading arrangements and dual market access position to UK, EU, and all-island markets. Activities will include - Invest NI will offer incentives to new and mobile FDI to locate in areas of disadvantage. This will include nurturing new FDI until they are able to consider reallocation. Invest NI will support investors to scale internationally through promoting current supports including fact-finding, bespoke discovery visits, property and talent sourcing, business and sector networking, and tailored packages of assistance.	DfE, InvestNI	Action Commenced

Theme 4: Trade and investment (continued)

Action No.	Delivery against Minister's priorities	Detail	Delivery partners	Timescale
25	• High productivity • Good jobs • Regional balance • Reduce carbon emissions	**Investment Zones** - We will participate in meetings with lead officials both within and outside the Department to consider opportunities for the AMME sector within an Investment Zone for Northern Ireland.	DfE, Invest NI	Commencing 2024