# ISLE OF MAN – ADVANCED ENGINEERING AND MANUFACTURING STRATEGIC REVIEW

UNIVERSITY OF

Department of Engin



ISLE OF MAN - PROPOSED ADVANCED ENGINEERING AND MANUFACTURING STRATEGY

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# INTRODUCTION

National strategies and economic studies consistently demonstrate that a well-supported manufacturing sector is a key driver of economic growth, productivity and innovation, as well as regional development and inclusion<sup>1</sup>. In many countries, manufacturing plays a vital role in strengthening national resilience, technological sovereignty, and national security.

The development of this proposed 10-year Strategy for the Isle of Man's E&M sector has been conducted in two distinct phases. Phase One assessed the competitiveness of the Isle of Man's E&M Sector through a detailed policy and economic comparison against similar jurisdictions. To augment this sector level review, a series of diagnostic assessments were conducted on ten prominent local manufacturers. The analysis culminated in an enhanced SWOT of the Island's E&M Sector and was used to generate an initial list of strategic initiatives that could enable its growth. In summary, the Phase One report (available here) developed the evidence base which frames and informs the Phase Two Strategy.

This executive summary covers Phase Two of this work and builds upon Phase One to articulate a coherent and realistic vision for the Sector to double in value over the next ten years, with a clear ambition to grow beyond that. Using a sector vision developed by Industry, Government and academia in the Isle of Man, six core themes and strategic initiatives were generated. Industry input has been augmented with detailed policy case studies from relevant jurisdictions and complemented by the creation of key short and long-term impact metrics.

<sup>1</sup> Anzolin, G; Castaneda Navarrete, J & Ribaudo, D 2023, Perceptions of Manufacturing: How to make manufacturing charming again?.



# KEY FINDINGS FROM THE DEVELOPMENT OF THE ENGINEERING AND MANUFACTURING STRATEGIC REVIEW.

## THE BULLET POINTS BELOW SUMMARISE KEY INSIGHTS DEVELOPED AS PART OF PHASES ONE AND TWO OF THIS STRATEGY:

- A well-supported E&M Sector supports the growth of the wider economy.
- Leveraging private investment is essential to grow the Sector, underscoring the importance of working with industry to develop vision and initiatives.
- Depending on the level of ambition, the estimated investment required from both private & public sector to enact the proposed Strategy ranges from £85.8m to £182.3m by 2035. Several pilot initiatives are proposed in the short-term to test the efficacy of the proposed Strategy, with spending becoming more pronounced in the medium and long-term.
- The level of Government support needed to realise the minimum viable level of investment is consistent with previous FAS allocations.
- Targeted funding programmes will encourage investment in long-term growth and strategic areas for the Sector. Set funding programme windows may help generate demand, ease the project assessment process and manage internal resources more effectively.
- Aligning funding terms and conditions more closely with competitor regions will maximise investment into the Sector.
- Broadening the assessment criteria for any funding scheme via a "balanced scorecard" approach will ensure valuable projects are supported even if job

# **DEFINING THE IOM E&M SECTOR – WHERE ARE WE NOW?**

Engineering and manufacturing businesses currently provide an important but modest contribution to the Island's income – supporting just over 1,200 jobs directly and approximately 1.5-2% of national income. The Sector however has a wider contribution to the IOM Economy and has a significant influence on a range of other sectors that share common challenges and opportunities. Despite the E&M sector being narrowly defined in national statistics, Figure 1 illustrates the relationship between the E&M sector and the wider IOM Economy, and all industries with E&M elements or requiring E&M skillsets will benefit from implementation of the proposed Strategy.

Our Phase One report includes a detailed review of the Island's E&M sector. This review found that despite the higher cost base of doing business in the Isle of Man, the Island possesses a strong baseline of existing E&M businesses and a network of entrepreneurs. While many businesses acknowledged the higher costs of doing businesses in the Isle of Man, many operate in higher value and niche sectors which command a price premium. Indeed, the Island can profitably manufacture products but it's more suited to luxury / high-end products where the logistical challenges are less pronounced.

The high quality of life, taxation benefits, and access to decision makers are unique selling points for the Island and can be leveraged to attract businesses, people and high net worth individuals. Additionally, the Island's natural strength across digital technologies and sectors could be utilised to improve the performance of E&M businesses and forge new opportunities in digital manufacturing.

The Phase One review also highlighted the challenges faced by E&M businesses associated with access to talent and finance. Without addressing these challenges, the Sector risks being left behind by more innovative competitors. This E&M Sector strategy must therefore consider the steps needed to attract investment, boost innovation, develop skills, and enhance productivity. In addition, the opportunities from cleantech are considered below in the 'Enhancing Sustainability' section.



Figure 1 - conceptualising the E&M Sector's influence on the IOM economy

Core E&M industries: This inner circle represents the key industries and sectors typically associated with the IOM's E&M sector

Industries with strong E&M elements: The middle circle represents those sectors that aren't immediately recognised as the IOM's E&M sector, but are strongly reliant on similar principles, skillsets, and machinery that the core E&M companies rely on.

Industries that require E&M skillsets: These industries are further removed from the E&M sector but still rely on the skillsets for certain activities.

# THE BENEFITS OF NURTURING A HEALTHY E&M SECTOR

When the Engineering and Manufacturing (E&M) sector has the right set of conditions to thrive, it has significant direct and indirect impacts to the wider economy. Research conducted during Phase Two highlights four overarching reasons why nurturing a healthy E&M sector is strategically important for national economies. The proposed 10-year strategy hopes to appropriately support the E&M sector so it can achieve the same level of economic benefits.



# **VISION FOR THE E&M SECTOR**

The advanced Engineering & Manufacturing (E&M) sector is highly productive and a key part of the Island's Economic Strategy in that it diversifies our economy, attracts highly skilled people and ambitious new businesses to meet a growing global demand for high value, high quality products. Our vision is therefore to create and support a diverse and sustainable environment for the advanced E&M sector to double in value by 2035 with a clear ambition to grow towards five times current levels beyond 2035. The advanced E&M sector will be contributing substantially higher than average economic growth (GVA) and intellectual property (IP) generated per employee through the provision of design, manufacture, supply, maintenance and service for high quality, innovative products and services to a range of key emerging and growth sectors along with their associated supply chains. We will achieve this by:

- Building on past and current Government and private sector investment, encouraging local growth, new businesses and additional inward investment.
- Continuously supporting and building upon our critical mass of highly skilled, ambitious, and loyal E&M working population by nurturing interest in the Sector early; attracting graduates back to the IOM via incentives and actively supporting relocation.
- Actively engaging with our STEM community with skills recruitment, development and retention via targeted funding streams.
- Consolidating and building upon domestic and international research and education establishment links.
- Actively encouraging innovation through intellectual property rights (IPR) generation, together with technology identification, selection acquisition and exploitation.
- Shifting the mindset to drive increases in the efficiency and productivity of our manufacturing operations. These advances are necessary to stay competitive.
- Improving the Isle of Man (IOM) Government's agility and responsiveness with the provision of funding mechanisms / resources, to enable E&M capabilities and infrastructure to be developed at a pace to maintain competitiveness in changing global markets; all within the realistic affordable envelope and financial plans.
- Actively encouraging the Sector to support the Island's transition towards net zero by supporting business' Environmental, Social & Governance (ESG) journeys, whilst also enabling the timely realisation of clean technology development and deployment opportunities.
- Attracting new businesses to the Isle of Man to increase the output of the Sector and to increase the economy's diversity and resilience.
- Timely, effective and sustained stakeholder engagement e.g. Planning (DEFA); Immigration (Treasury); Energy Supply (MUA).
- Encourage businesses to increase their presence for non-manufacturing activities e.g. marketing, HR, Finance, R&D.

# **FOSTERING INNOVATION**



### **IMPORTANCE OF INNOVATION FOR THE ISLE OF MAN**

There is a strong desire to make the Isle of Man (IOM) an innovation-friendly economy. Indeed, innovation can spur long-term economic growth, secure international competitiveness, foster job creation, attract investment, and improve the economy's resilience via diversification into new sectors. Innovation is a key theme for the IOM's E&M sector. Company diagnostics carried out by IfM Engage highlighted unique value and quality as a key order winning criteria for the Island's E&M sector, particularly when competing internationally. Indeed, whilst E&M businesses on the Island are challenged by high manufacturing costs, successful products manufactured on the Island are typically sold as higher value products that are more intensive to produce. The Island also relies on the private sector for knowledge generation and as a key source of revenue generation for The Treasury. Despite this, our research highlights that the Island's innovation funding is modest and low when compared to international comparators.



# **HOW TO ACHIEVE PROGRESS – KEY INNOVATION INITIATIVES**

### **MONITORING PROGRESS: INNOVATION**

#### Short term actions

#### Creating innovation networks and forums:

- Increase number of intra-business collaborations.
- Increase number of international R&D collaborations.
- Increase number of Innovation Challenges published by DfE/ BIOM/Sector.

#### Leveraging innovation assets:

- Industry aligned on innovation needs and asset requirements.
- Decision made as to whether to have an on-Island centre of excellence or to leverage UK assets.

#### Exploiting the full value from the Island's innovative businesses:

- Conduct IP audits and management reports.
- Developing an aggregated sector view of the value of Intellectual Property

# LEADING TO LONG TERM VALUE CREATION

- Increase the E&M sector's R&D expenditure. Also, as a proportion of total company spend.
- Boost R&D headcount. Also, in high skilled roles which attract higher average wages.
- Utilisation of Government CAPEX funded assets such as plant/ machinery.
- Establish new product sales in growing markets.
- Increase the average E&M contract value.
- Create several technology startups diversifying the economy and increasing revenue from technology licencing. File more patents.

## **INNOVATION INITIATIVES INFORMED BY BEST PRACTICE**

The initiatives captured in this proposed strategy are informed by international examples of best practice, including:

- Innovate UK's Business Connect Innovation Exchange
- UK Government's Energy Innovation Needs Assessments (EINAs)
- Torbay's Electronics and Photonics Innovation Centre (EPIC)
- The UK Intellectual Property Office's IP Advance Programme

# CASE STUDY: GLOBAL INNOVATION NETWORK AS A MODEL FOR ENGAGEMENT

Innovate UK's Global Innovation Network programme aims to bring together innovators, industry and academics to solve common challenges across borders. With dedicated challenge themes across several African countries, the Global Innovation Network offers an opportunity to test and refine innovative products in diverse environments and share best practices. Current activities include sector-based networks, technology roadmapping, joint funding activities and knowledge dissemination.



# **ATTRACTING FOREIGN DIRECT INVESTMENT (FDI)**

### IMPORTANCE OF ATRACTING FOREIGN DIRECT INVESTMENT TO THE ISLE OF MAN

Attracting foreign direct investment (FDI) is vital for the Isle of Man's competitiveness and economic resilience. The Island's proximity to the UK, Ireland, and the EU enhances its appeal for E&M businesses establishing R&D and manufacturing bases. FDI benefits include higher productivity, innovation growth, and access to global supply chains – all of which are important for the Island's E&M sector. The Isle of Man's E&M sector is dominated by 4-5 key firms with the largest share of employees, highlighting the need to diversify the economy. Attracting new FDI can support this, however new E&M company arrivals are rare, with only one in the past decade. Key competitive advantages that can promote FDI are the Island's competitive tax regime, availability of Financial Assistance Scheme funding, and high quality of life which make it particularly attractive for businesses in high tax areas and high-net-worth individuals.

Ø	FDI Vision: Attracting new investments to the Isle of Man to increase the GDP of the E&M Sector and to bolster diversity and resilience in both existing and new businesses			
Sub-theme	Short Term (2025-2026)	Medium Term (2027-2029)	Long Term (2030-2035)	
Securing investment from established E&M businesses	Devise an engagement plan with established E&M business' parent companies		ch E&M parent companies to share technology / OM can actively facilitate these plans	
Understanding target markets to attract FDI	Define target markets, locations & company types (e.g. HNWI, luxury goods)		ub-sectors and markets to support new FDI (via de shows, IOM pavilions, online events)	
Providing suitable facilities promptly for E&M sector	Establish a cross-department team to identify and fast track suitable E&M facilities	-	to create internationally competitive soft-landing as and domestic businesses	
Delivery resource	Re-prioritisation of internal resource to provide greater focus on attracting FDI			
КЕҮ	Shows path dependency	Initiative Roadmap action	Initiative Key decision point	

## **HOW TO ACHIEVE PROGRESS – KEY FDI INITIATIVES**

## **MONITORING PROGRESS: ATTRACTING FDI**

#### Short term actions

#### Securing further investment from E&M businesses:

- Boost number of meetings with & visits from international HQs of existing E&M businesses.
- Increase number of trade pavilions attended.

#### Understanding target markets to attract FDI:

- Identify & analyse target markets & countries.
- Create an IOM E&M sector investment prospectus. Attend sector events and online showcases.
- Increase total number of new leads for investment.

#### Provide suitable facilities promptly for the E&M sector:

- Host roundtable with industry to identify the barriers stopping manufacturing facilities being built.
- Establish an online commercial property finder tool.
- Align a consortium to attend the UK's International Investment Summit.

## LEADING TO LONG TERM VALUE CREATION

- Stock/flow of FDI from existing businesses increases. Additionally, from diversified investors and countries.
- Increased ratio of Greenfield to Brownfield manufacturing sites on the Island. Increased number of dedicated E&M facilities on the Island.
- FDI as a percentage of economic output increases. E&M sector' contribution to total IOM FDI increases.
- Time taken to receive planning approval and build facilities reduces.

# FDI INITIATIVES INFORMED BY BEST PRACTICE

# The initiatives captured in this proposed strategy are informed by international examples of best practice, including:

- The UK's International Investment Summit
- Lancashire Local Enterprise Partnerships FDI Strategy
- Torbay Council's Property Database
- Scotland's Manufacturing Property Challenge Programme

# CASE STUDY: LINCOLNSHIRE'S ADVANCED ENGINEERING & MANUFACTURING INVESTMENT OPPORTUNITY REPORT

Published in May 2023, Lincolnshire's Advanced Engineering & Manufacturing Investment Opportunity prospectus succinctly articulates the region's key benefits to potential investors. It uses selected data from ONS on key metrics such as skills, facility costs, access to logistics and promotes the critical mass of companies already manufacturing in the region to demonstrate its capabilities. It also provides a sectoral analysis to help adjacent organisations to immediately understand the strengths of the region. This is helpful to enable others to promote their capabilities, such as the Department for Trade and other regional investment bodies.



# **CHAMPIONING SUSTAINABILITY**



## **IMPORTANCE OF CHAMPIONING SUSTAINABILITY FOR THE ISLE OF MAN**

Sustainability is vital for the Isle of Man's economic stability, competitiveness, and resource efficiency. The global shift in Cleantech, with investments needing to reach \$4.8 trillion annually by 2030 presents opportunities for the E&M sector. Adopting sustainable practices improves productivity, attracts green investment, enhances economic resilience, and aligns with international regulations as well as the Island's Climate Change Act 2021. These measures lower operational costs, boost public health, ensure resource efficiency, and secure access to global markets, supporting long-term growth and stability. In 2016 the UN designated the entire Isle of Man as a UNESCO Biosphere area, the first entire nation to be designated a Biosphere. Given this commitment, the Island is better suited to attracting businesses who possess sustainable growth models. In addition, our research suggests that business costs – including energy – are typically higher on the Isle of Man than competitor regions. Pursuing initiatives that lower energy and water consumption and minimise waste can help mitigate some of the inherent weaknesses of the Isle of Man.

# **HOW TO ACHIEVE PROGRESS – KEY SUSTAINABILITY INITIATIVES**

	<b>Sustainability Vision:</b> A well-publicised and utilised support programme that aligns IOM sustainability objectives with the needs & ambitions of E&M Sector businesses				
Sub-theme	Short Term (2025-2026)	Medium Term (2027-2029)	Long Term (2030-2035)		
Defining & measuring E&M Sector sustainability	Establish an E&M Sector and company level assessment of Scope 1-3 emissions	Trial life cycle impact assessments with E&M Sector (e.g. water, waste, air, land)	Mandated monitoring and disclosure of full environmental impact		
Sustainable manufacturing programmes	Promote & encourage the E&M Sector to access the improved BESS funding		n organisational engagement programme focused y improvements (e.g. Sustain 8)		
Enable E&M businesses entering the cleantech supply chain	E&M value chain analysis to understand cleantech supply chain opportunities	Support to help E&M Sector pursue short term cleantech supply opps (e.g. renewables, EVs)	Review efficacy of the Cleantech support scheme & continue for long term opps (aero, CCS, H2)		
KEY	Shows path dependency	Initiative Roadmap action	Initiative Key decision point		

### **MONITORING PROGRESS: SUSTAINABILITY**

#### Short term actions

#### Defining and measuring E&M sector sustainability:

- Conduct corporate scope 1-3 emission impact assessments and develop reduction strategies.
- Define sustainability monitoring metrics defined for the Sector.

#### Sustainable manufacturing programmes:

• Increase number of E&M businesses applying for both Business Emissions Savings Scheme (BESS) and sustainable manufacturing programme funding.

#### Enable E&M businesses entering the Cleantech supply chain:

- Increase number of Cleantech projects funded.
- Complete E&M company supply-chain readiness assessment. Publication of a Cleantech supply chain strategy.

# LEADING TO LONG TERM VALUE CREATION

- Reduction in E&M sector GHG emissions.
- Reduction in water, energy consumption and waste per unit output within individual E&M businesses and overall as a sector.
- Increase number of Cleantech businesses operating in the IOM and increase the rollout of technology in the Island and internationally.
- Increase the proportion of E&M business revenue driven by Cleantech/sustainability offerings.

# CHAMPIONING SUSTAINABILITY INITIATIVES INFORMED BY BEST PRACTICE

# The initiatives captured in this proposed strategy are informed by international examples of best practice, including:

- Worcestershire Council's Decarbonisation Portal
- EU Ecodesign for Sustainable Products Regulation
- Hydrogen UK's supply chain research report
- Fit for Hydrogen and CCUS Programme

# CASE STUDY: INSTITUTE FOR MANUFACTURING'S SUSTAIN 8 PROGRAMME

Sustain 8 is an organisational engagement programme developed by the Institute for Manufacturing (IfM) – a division of the University of Cambridge's Department of Engineering. This behavioural change programme focuses on making significant sustainability improvements with minimal investment. Developed at IfM, it adheres to three core principles:

- Aligns sustainability with business success
- Engages the factory workforce & leadership
- Delivers in 12 months without big investments

This programme has been implemented in multiple engineering and manufacturing disciplines across different geographies with the impacts felt within 12 months.



# **ENHANCING PRODUCTIVITY**



# IMPORTANCE OF PRODUCTIVITY IMPROVEMENTS FOR THE ISLE OF MAN

High levels of productivity are crucial to maintain international competitiveness. For firms in highly competitive areas like the E&M sector, continually improving productivity can boost exports, generate higher profit margins for companies, enable more investment into R&D and result in higher wages. Moreover, as inherent logistic costs and higher energy prices make the Isle of Man more expensive vs the UK, increasing productivity is a key mechanism to anchor manufacturing and attract new firms. However, tensions exist between enhancing productivity and the government's focus on job creation. While E&M firms often rely on capital investment to boost efficiency, The Treasury prioritises employment growth, creating challenges for E&M firms competing globally where capital investment drives productivity.

# **HOW TO ACHIEVE PROGRESS – KEY PRODUCTIVITY INITIATIVES**

<u>g</u> r	<b>Productivity Vision:</b> Shifting the mindset to drive increases in the efficiency and productivity of our manufacturing operations that are necessary to stay competitive			
Sub-theme	Short Term (2025-2026)	Medium Term (2027-2029)	Long Term (2030-2035)	
Defining & measuring E&M Sector productivity	Define productivity metrics at company & sector level that demonstrate economic value of E&M		ormance, set realistic productivity targets and create ogrammes to achieve the targets	
Implementing digital technologies into existing operations	Mentorship that identifies low-cost, low-risk methods to q digital technologies using affordable off-the-sh		t advanced digital technologies that enable the IOM e regionally competitive in digital engineering	
Exploring synergies between the E&M & Digital sectors	Develop a joint strategy with Digital Isle of Man to ide future growth areas that cut across Digital and E&I	-	ital & Business IOM support programmes across portunities (e.g. gamification, digital twins)	
Optimising existing facilities	Co-funded resource to help businesses optimise curr relocation, rationalisation, au			
KEY	Shows path dependency	Initiative Roadmap action	Initiative Key decision point	

### **MONITORING PROGRESS: PRODUCTIVITY**

#### Short term actions

#### Defining and measuring E&M sector productivity:

- Develop baseline economic output figures for sector (e.g. GVA).
- E&M companies share metrics and data they use to measure productivity. More businesses respond to data collection request.

#### Implementing digital technologies into existing operations:

• Increase number of E&M businesses supported by Digital technology opportunity programme. Support businesses with technology integration after opportunities identified.

#### Exploring synergies between E&M and Digital sectors:

- Define new market areas & articulate the opportunity.
- Increase collaboration between Digital and E&M sectors.

## LEADING TO LONG TERM VALUE CREATION

- Improve E&M company and sector economic output (GVA).
- Evaluate E&M sector's proportion of total IOM exports.
- Increase proportion of E&M businesses using digital technologies.
- Increase profit margins.
- Economic output (GVA) per worker increased.
- Increase number of E&M businesses investing in new digital and E&M opportunity areas.
- Increase capital productivity.

# BOOSTING PRODUCTIVITY INITIATIVES INFORMED BY BEST PRACTICE

# The initiatives captured in this proposed strategy are informed by international examples of best practice, including:

- ONS' productivity benchmarking tool
- IfM Engage's 'Digital Manufacturing on a Shoestring' research
- UK Government's Made Smarter programme which supports digital technology adoption across the manufacturing sector
- Loughborough Uni/Automotive Council's Digitalisation Roadmap

# CASE STUDY: DIGITAL MANUFACTURING MULTI-YEAR EPSRC PROGRAMME

The EPSRC Manufacturing the Future programme supports early-stage, basic research with the goal of delivering transformative new knowledge that can be used to build new and more competitive manufacturing activities in the UK. Digital technologies for manufacturing have been a core theme of the programme for many years. In 2022, as part of a review of priorities, EPSRC released £7 million in funding to support novel research into how digital approaches can be applied to improve manufacturing processes, manufacturing systems or both. The goal of the funding call was to help stimulate idea sharing between academia and industry on early-stage innovation in digital manufacturing systems.

# **DEVELOPING SKILLS**



## **IMPORTANCE OF SKILLS FOR THE ISLE OF MAN**

Shifting global workforce needs due to digitalization and decarbonization require economies to evolve skills to remain competitive, foster growth, and provide resilience. Investing in skills enhances adaptability to challenges, promotes innovation, and boosts productivity. It reduces unemployment and inequality by integrating more people. Without investment, the Isle of Man risks falling behind in advancements like digital technology, undermining competitiveness. The Isle of Man faces challenges in retaining local talent and attracting skilled workers, crucial for its E&M sector. IOM skills development programs are underutilised, with uncertainty over future needs. Addressing this is vital to meet the Island Plan's goal of creating 1,800 new jobs by 2026. A dynamic skills strategy is needed to attract talent, support innovation, boost productivity, and enhance supply chain resilience, ensuring the workforce aligns with evolving E&M sector demands and sustains economic growth.

() ()			l loyal E&M working population through and actively supporting relocation
Sub-theme	Short Term (2025-2026)	Medium Term (2027-2029)	Long Term (2030-2035)
Mapping the future E&M skills needs	Establish a sector level skills matrix for the short, medium and long term		d respond to the skills need (at least on a 3-year olling basis)
Creating a skills centre of excellence	E&M Sector & UCM decide on th scale of a skills centre of excelle		ndustry-academia CoE that's tailored to foster DI, enhance sustainability & improve productivity
Ensuring a steady throughput of future E&M workers	Increase engagement with schools via ACE to increase uptake in E&M courses		on targeted campaigns that attract E&M talent to s, university placements, STEM returners)
Continuous training and certification	Targeted training and specialised company acc (e.g. an executive education progra		
KEY	Shows path dependency	Initiative Roadmap action	Initiative Key decision point

# **HOW TO ACHIEVE PROGRESS – KEY SKILLS INITIATIVES**

### **MONITORING PROGRESS**

#### Short term actions

#### Mapping the future E&M skills needs:

- Complete skills gap analysis across current/future E&M roles.
- Identify priority roles/skills for course development.

#### Creating a skills centre of excellence:

- Make decision on future of E&M training required.
- Decision on an industry & Government co-funded model to support the CoE vision.

#### Ensuring a steady throughput of future E&M workers:

- Boost number of STEM ambassadors and returners.
- Increase number of schools visited to promote E&M.
- Knowledge transfer placements offered to graduates & cash incentives to young families looking to relocate to the Island.

#### Continuous training and certification:

- Boost the number of individuals put through training.
- Increase the number of companies seeking accreditations.

### LEADING TO LONG TERM VALUE CREATION

- Reduction in the skills gap and density.
- Increased number of E&M joiners, graduate placements, and workers in R&D.
- Existing E&M jobs safeguarded, and new roles created.
- Greater proportion of workforce with accreditations and upskilled.

## **DEVELOPING SKILLS INITIATIVES INFORMED BY BEST PRACTICE**

# The initiatives captured in this proposed strategy are informed by international examples of best practice, including:

- The Advanced Construction and Engineering Centre in Norwich.
- The STEM Returners programme in the UK.
- University of Cambridge's executive education programme.

# CASE STUDY: LANCASHIRE SKILLS & EMPLOYMENT STRATEGIC FRAMEWORK

Lancashire's Skills Framework aims to enhance the adaptability of the region's skills and employment ecosystem. It seeks to align workforce development more effectively with the evolving needs of Lancashire's businesses. The framework aspires to empower individuals to continually upskill throughout their lives, making Lancashire an attractive destination for business investment. This has been achieved through various intervention programmes aimed at boosting digital skills, promoting adult education, facilitating academic-industry collaboration, and expanding apprenticeship opportunities, among other initiatives. The framework aims to foster stronger collaboration between the public, private, and voluntary sectors, and optimises the use of skills resources across the county.



# **COMPETITIVE FUNDING**



## IMPORTANCE OF BUILDING A COMPETITIVE FUNDING LANDSCAPE FOR THE ISLE OF MAN

Government funding is critical for driving innovation, attracting FDI, and boosting productivity in the E&M sector. It de-risks private R&D investments by compensating firms who invest capital into emerging markets or fundamental innovation. Funding has been an important enabler of growth for E&M businesses in the Isle of Man. Flexible terms and accessible financing options for new and existing businesses can strategically support new sectors and technologies which are aligned with the Isle of Man's long-term growth plans. However, whilst FAS funding is somewhat flexible, the grant system is not set up to nudge businesses to invest in longer term growth opportunities. Moreover, the terms of receiving financial assistance are onerous and uncompetitive for the E&M sector, especially for existing firms in the Isle of Man.

#### Funding Vision: Improving IOM Government's competitive offering in funding mechanisms to enable capabilities and infrastructure to be developed at a pace within a realistic budget Short Term Medium Term Long Term Sub-theme (2025 - 2026)(2027 - 2029)(2030 - 2035)Refining how funding Review the terms, accessibility and ease of which is administered businesses can access IOM funding & support Defining & Define and collect funding impact data for E&M to Streamlined funding process awarded based on modified KPIs and metrics that measuring E&M understand the ROI (e.g. GVA) align with growing the E&M sector and IOM economy funding impact Dedicated funding for Run a pilot SME support scheme, tailored for the Initial commitment to an SME support Commitment to a long term, holistic mentoring E&M SMEs E&M sector and test uptake & efficacy programme for the E&M sector SME support scheme for E&M sector Stakeholder mapping & relationship building with UK Forge partnerships and funding programmes with private sector investors / UKRI to Leveraging alternative Government and private investors help bolster funding for established E&M companies and start ups funding streams Allocate an economist to capture new data sources which could be used across multiple sectors **Delivery resource** KEY Shows path dependency Initiative Key decision point Initiative Roadmap action

## **HOW TO ACHIEVE PROGRESS – KEY FUNDING INITIATIVES**

### **MONITORING PROGRESS: FUNDING**

#### Short term actions

#### Refining how funding is administered:

• Consult on changing funding allocation rules. Pilot to trial and use modified funding rules.

### Defining & measuring E&M sector funding impact:

- Develop a set of evidenced metrics across the 6 strategy themes.
- Update business survey / funding application forms to capture data needed.

## Dedicated funding for mentoring E&M SMEs:

- Run the pilot programme with a first cohort.
- External report: analyse the direct impact of the funding.

## Leveraging alternative funding streams

- Complete a stakeholder mapping report highlighting high priority investor groups.
- Increase the number of meetings with global/country funding bodies and private investors.

# LEADING TO LONG TERM VALUE CREATION

- Increased number of successful applications for funding from E&M sector. Reduced processing time.
- More metrics tracked which show impact of the E&M Strategy.
- Increasing number of SMEs supported & start-ups achieving revenue objectives. SMEs commit to further manufacturing & R&D in the Island.
- Increased number of joint funds available with international, private equity, and venture capital partners.

# DEVELOPING SKILLS INITIATIVES INFORMED BY BEST PRACTICE

The initiatives captured in this proposed strategy are informed by international examples of best practice, including:

- Funding models deployed by the UK Government's Advanced Research and Innovation Agency (ARIA).
- Innovate UK's Impact reports and measurements.
- The UK- Taiwan R&D partnership supported by Innovate UK.

# CASE STUDY: APC SME SUPPORT SCHEME

This 18-month phased programme is designed to accelerate an innovation's route to market and includes up to £170,000 grant funding split across two phases: Market Focus and Technology Validation. Six focus areas supported and delivered by a series of flexible workstream activities and workshops including: commercialisation strategy and financial planning; IP management; investor readiness; leadership and new venture growth; dissemination, networking and marketing; business & investor mentoring from experts; auto industry networking.



# **IMMEDIATE STEPS TO ACTION THE STRATEGY**



Below are the immediate next steps Business Isle of Man and industry can take in 2025 to begin developing the final strategy in response to this Strategic Review.

IMMEDIATE ACTIONS	Business Isle of Man	E&M Industry	Treasury	Digital Isle of Man	DESC
Formally agree the final 10-year strategy for the Sector as well as each of the six strategic roadmaps.	R, A	R	R	I	I
Initiate a constructive dialogue with other Government Departments to inform final spending and resource requirements.	R	I	А	с	с
Evaluate and then adopt the initial 'pilot' initiatives proposed.	R, A	с	R	I	I
Strategically allocate resources and funding to manage these selected initiatives.	R, A	I	I	с	с
Build further upon the company-level data (e.g. GVA & GVA/employee) obtained in Phase 1 so that baselines and targets can be set and tracked to measure impact for each initiative going forwards.	R, A	R	R	с	с
Create a cross-Departmental task force to look at current metrics for business and sector performance.	R, A	R	R	с	с
Invigorate industry networks like the STEM Committee and ACE to begin initiating the final strategy	А	R	I	I	I
Organise a structured visit to the UK to discuss approaches to funding and collaboration opportunities	R, A	R	I	с	с
Facilitate active engagement between UCM and the E&M sector to drive a decision on the future of E&M skills need and provision.	R	R	I	I	R,A
Periodically review the roadmap in 12 months and review the portfolio of ongoing and potential new initiatives that emerge as trends and drivers evolve over time.	R, A	R	с	с	с

#### R = Responsible

#### A = Accountable

#### The responsible organisation must complete the task/project within agreedupon parameters. The responsibility is delegated by the accountable organisation.

The accountable organisation ensures that all the responsible members complete the task – given the parameters.

# C = Considered

Stakeholders who need to give input before the work can be completed and signed-off on. These people are active participants and may be subject matter experts.

#### I = Informed

The informed party is typically a stakeholder who wants info about the project. Informing these stakeholders promotes internal transparency, team alignment, and project delivery.