

# EUROPEAN MARINE SCIENCE PARK

A powerhouse transforming the marine world



Highlands and Islands Enterprise  
Iomairt na Gàidhealtachd 's nan Eilean





**Overlooking the Atlantic along the beautiful coastline north of Oban is the European Marine Science Park (EMSP), a centre of marine excellence shaping a new global economic and academic landscape based around our oceans.**

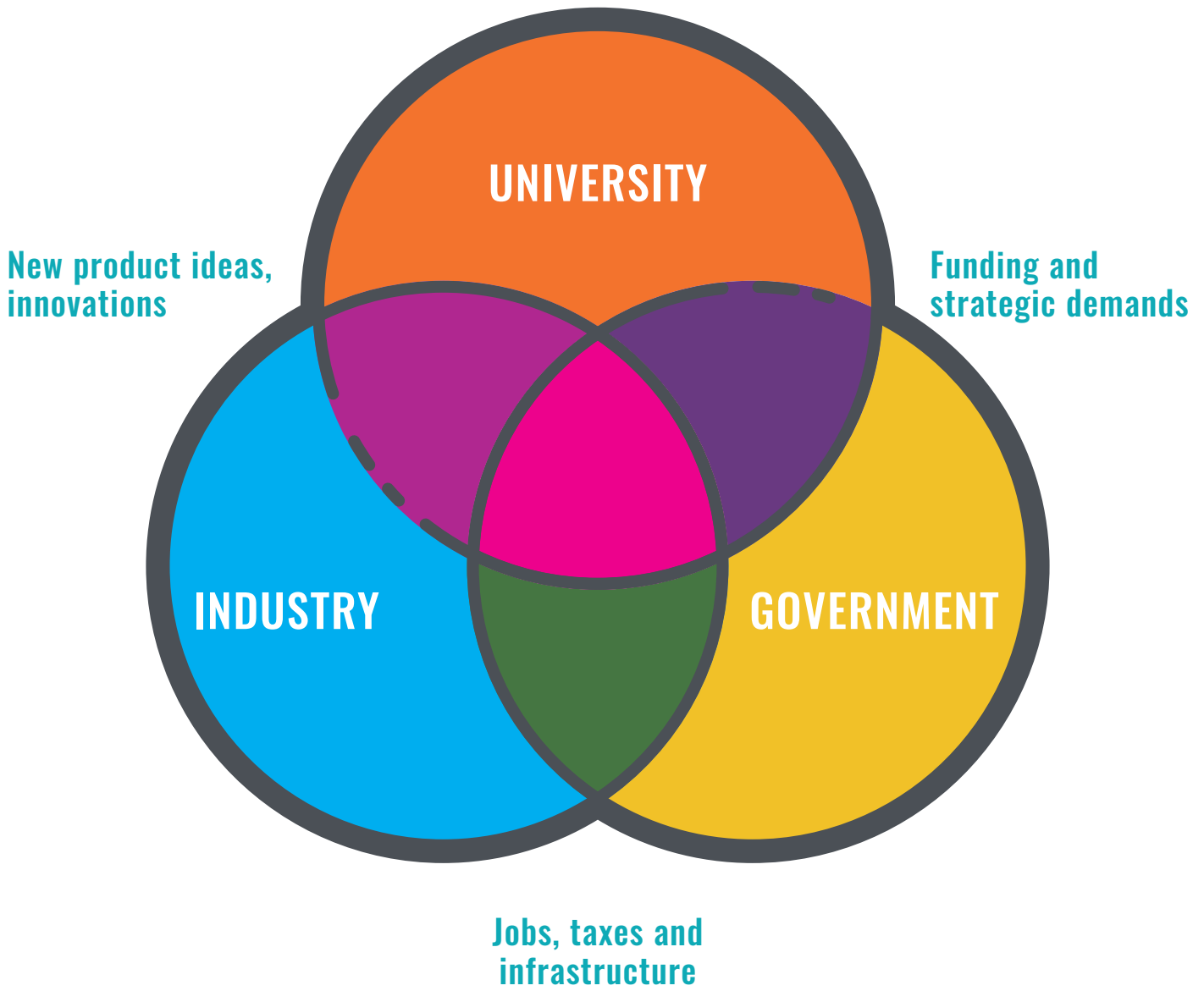
The EMSP is home to an internationally-recognised cluster of marine science activity including mariculture, biotechnology and bioprocessing. Like the marine world it inhabits, the EMSP nurtures a habitat where collaboration flourishes through co-location with other businesses, academic excellence, world-class facilities and equipment, and research expertise.

Central to its development are key stakeholders including Highlands and Islands Enterprise (HIE), the Scottish Association for Marine Science (SAMS), UHI Argyll, and the Scottish and UK Governments.

These stakeholders 'buy' into a shared vision of job creation and innovation, and a unique approach to facing up to the challenges of working in our oceans, while keeping these oceans healthy as we battle the effects of climate change.

As we look to create a net-zero carbon economy by 2045, the EMSP aims to position itself, Argyll, Scotland and UK as the beating heart of marine science, technology and business. This is through a once-in-a-lifetime opportunity to grow and prosper into an industrial, academic and scientific powerhouse of worldwide significance and reputation.

Through a circa £20m injection in funding over the next five to ten years, the EMSP can take full advantage of this opportunity.



## THE VISION

The EMSP's vision is to foster a strategy combining the forces of research and academia with industry and government, working in tandem together.

Known as the 'triple helix model of innovation', the aim is to drive innovation, education, business growth and conservation in the world of marine science which feeds into the blue economy.



## BLUE ECONOMY

The 'blue economy' acknowledges the need for a new way of living, working on and caring for our oceans, where exploitation of marine resources ends, and the preservation of a healthy ecosystem begins, combined with improving the economic prospects of those relying on the power of the oceans to support them.

This includes Scotland's rural and island communities along the western seaboard, whose nutrient-rich waters are ideal for fish, seaweed and shellfish cultivation. There is a global premium on these natural resources 'feeding the world', providing the basis for high-value consumer goods.

Geographically, EMSP is perfectly positioned next to this 'aquaculture hot spot' where science, research and education can thrive. For example, over 100 marine industry businesses are within a 20-mile radius.

It is also in close proximity to coastal communities who are benefitting the most from its academic findings and economic opportunities, such as shellfish and seaweed cultivation.

## SCOTTISH, UK AND INTERNATIONAL STRATEGIES

The EMSP's importance goes beyond the blue economy. As we look to tackle climate change, the EMSP's vision aligns with a host of Scottish, UK and international policies and strategies.

These include:

- The OECD sustainability goals: Creating a world free from hunger through sustainable consumption and production.
- HIE Strategy 2023-28: Sets out a clear vision and direction on HIE's aim to build and sustain a greener, fairer and more resilient region that benefits everyone.
- The Scottish Biodiversity Strategy to 2045: Working towards a Scotland where the natural environment is restored and communities and nature thrives through innovation.
- Aquaculture Growth to 2030: A strategic plan for farming Scotland's seas creating a thriving aquaculture sector, boosting the economy by £3.6bn a year.
- Innovate UK Strategic Delivery Plan 2022-25: The UKRI's strategy to inspire organisations and people to invest in a vibrant innovation ecosystem.
- UK Marine Strategy: Detailing how the UK moves towards Good Environmental Status in our seas over the next six years.





## ECONOMY AND ENVIRONMENT

The EMSP can provide the conditions to grow the economy of the Highlands and Islands, Scotland, the UK and globally through:

- State-of-the-art facilities for working and an attractive place to live.
- Investments that create opportunities to boost regional assets and the supply chain.
- Developing a high-value marine biotechnology and bioprocessing sector that brings skilled employment.
- New innovative methods – e.g. through the Scottish Association for Marine Science – to make sustainable use of the abundance of raw materials in the region.
- Growing the Highlands and Islands marine sector which, according to Industrial Biotechnology Innovation Centre, is worth up to £600m a year by 2030, and £5.2bn globally by 2025.
- Investing in ground-breaking R&D to define and develop opportunities for different types of biomass, practices of extraction and processing, and new high-value application.
- Attracting, retaining and developing a diverse, skilled workforce.
- Fostering academia and business collaboration, leveraging innovation funding to encourage more spin-out opportunities with potential to quickly upscale.
- Supporting innovation in food and drink, plus agriculture through innovation and sustainable growth in primary production.
- Focusing resources to accelerate a transition to net zero, especially in agriculture and whisky, and future proof the sector through investment in digital technologies, automation and skills.
- Influencing national policies and investment initiatives to ensure the sector embraces sustainability and achieves positive outcomes.



## EMSP PHASE 1

Since opening in 2012, EMSP has played its part in creating a vibrant, growing marine science cluster of innovative enterprises, world-class research, skilled talent pool and excellent infrastructure through strong government support and close links with key stakeholders.

Chief among them is SAMS. Founded in 1884, it is the world's second oldest marine institute, an independent non-profit making organisation that researches how the marine environment works, and educates, communicates and promotes how to use it sustainably for public good.

It has in the region of 160 staff, 20 honorary research fellows, 11 trustees, as well as 200 undergraduate and Master students and 40 research students as part of its own dedicated education programme. They study BScs in Marine Science, Oceanography, Marine Robotics, MScs in Aquaculture, Environment and Society, and MRes and PhDs in Algal Biotechnology, Biology and Ecology.

SAMS also provides a key role as an incubator for innovative researchers looking to spin out.

## SAMS

SAMS has gone from strength to strength at the EMSP. It is home to:

- **The Seaweed Academy:** The UK's only dedicated seaweed industry facility offers training, education and business development for those looking to improve their technical knowledge or gain accreditation in required skills for cultivating seaweed. The project also brings a host of market benefits, including help for existing operations to expand, and supporting farmers and jobs.
- **The Culture Collection of Algae and Protozoa:** A recognised, trusted global leader which accesses, maintains, characterises and distributes living cultures of marine and freshwater algae, cyanobacteria, protozoa and related organisms to provide it to researchers, scientists, educators and commercial ventures worldwide for training and related services. CCAP currently maintains over 2,500 strains of algae and protozoa.
- **The North Atlantic Glider Base:** Welcomes scientists worldwide to bring their own gliders for deep-water testing, launch and recovery for North Atlantic missions. It also owns seven gliders to use in trials. The base offers access to laboratory space for pre-mission glider preparation, access to research and fast vessels, and advice on operations and real-time data delivery.
- **The Robotics Academy:** Skilled staff and students develop, adapt, deploy and operate a multitude of flying and diving robots to gather ocean data from the most extreme and as yet unexplored marine environments. These technologies drive marine science forward and enable people to plan how we interact with the marine realm more sustainably.
- **Collaboration:** The EMSP develops an 'ecosystem' of collaboration with academia and organisations in Scotland, the UK and globally. For example, collaborating with University of Strathclyde's National Manufacturing Institute of Scotland has turned ground-breaking research into reality.

## MALIN HOUSE

To grow a world-leading cluster, you need high-quality accommodation and infrastructure. Malin House is home to 1,900 sqm of accommodation for organisations including SAMS and 15 commercial marine businesses employing 74 staff.

Occupants have access to shared facilities, including a boardroom, foyer, café, bicycle sheds and showers plus car parking. There has been a steady update in space, with the most notable increase in 2021 when the ground floor was fitted out as laboratory space and fully occupied within six months of completion.

This prompted HIE to reconfigure vacant first floor office suites into more laboratory space, which immediately attracted interest from existing tenants looking to expand their business.





## EXCITING NEW CHAPTER

EMSP is looking to Phase 2, to consolidate and expand the work it does. This will position the Highlands and Islands as home to the world's top marine science academic and business cluster – opening a significant chapter for the marine sector in Scotland and the UK.

Exciting plans include:

- Establishing a world-class Marine Industry Training Centre to provide technical and vocational training to develop the next generation of skilled workers in the marine industry.
- The creation of SAMS' Centre for Seaweed and Shellfish Innovation and Development (CSSIDe), home to an integrated seaweed nursery and shellfish hatchery, and providing facilities, space and opportunities for industry and academia to collaborate on innovative research.
- SAMS STEM Hub – SAMS securing funding to develop a full on-site hub to deliver a complete range of STEM education for schoolchildren, students and those already working in marine science – a UK first.
- A second Malin House, providing a further mix of office and laboratory accommodation to boost research, spin-out capabilities and new SMEs involving in innovative technologies.
- New homes, road and cycling infrastructure so people live within the community and travel quickly and safely to and from the EMSP.



## CONCLUSION

Our world is undergoing seismic changes as we attempt to curb the worst effects of climate change and look to live in harmony with the natural resources around us. EMSP has already worked to bring positive outcomes to the future of the marine science sector by encouraging and inspiring real innovation, world-class research resources, high-quality academic capabilities and a skilled workforce.

Through an investment of another circa £20m in the next three years the opportunity is now there to continue to build on this work so EMSP, its stakeholders, and the Highlands and Islands continues to transform the world of marine science.

**We can show the world how it is done.**

**The future health of our oceans depends on it.**



**Thanks to the following key agencies, partners and stakeholders for their contributions to this strategic vision:**

Crown Estate Scotland

Scottish Association for Marine Science

The University of the Highlands and Islands (UHI)

UHI Argyll

Argyll and Bute Council

Marine Analytical Unit, Marine Scotland

Blue Economy, Marine Scotland

Scottish Funding Council

Scottish Government Policy Leads in Seaweed and the Blue Economy

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