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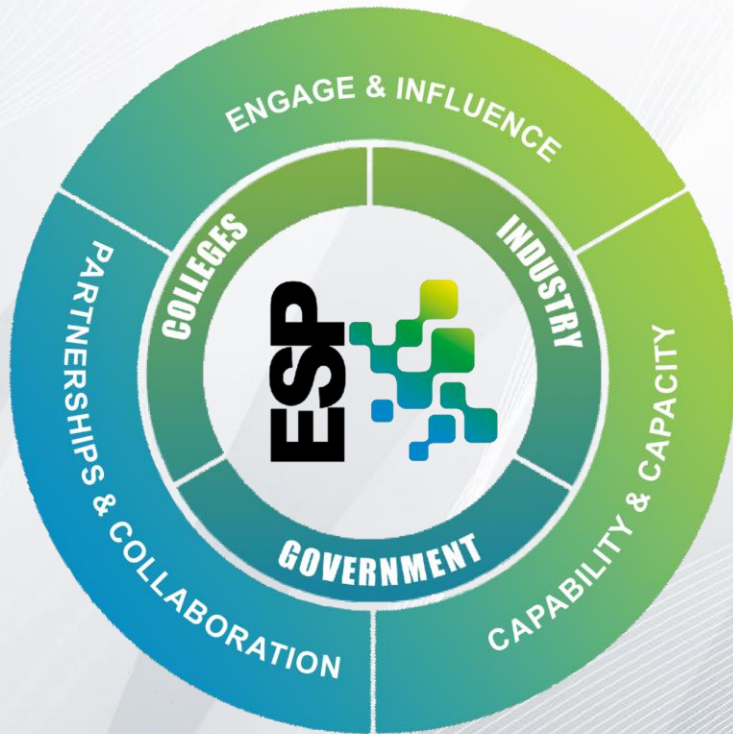
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Scotland's colleges – delivering skills for the energy, engineering and construction sectors



About ESP

ESP is a collaboration of Scotland's colleges and industry partners established to increase the capability and capacity to deliver the right skills for the Energy, Engineering and Construction sectors with a lead role for STEM.



Vision

A college sector working in partnership with Government, agencies and industry to meet national and regional skills needs, maximising investment and job opportunities aligned with emerging technologies, the Climate Emergency and the Just Transition to Net Zero.

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Engage and Influence

POLICY DRIVERS

Climate Change Plan

Climate Emergency Skills Action Plan

The National Strategy for Economic Transformation

Energy Strategy

Making Scotland's Future

Energy Efficient Scotland

Offshore Sector Deal

North Sea Transition Deal

COLLEGE SECTOR

Colleges Scotland

College Development Network

Climate Emergency Expert Group

College Principals' Group

Vice Principals' Group

Business Development Directors' Group

INDUSTRY

Energy Transition

SOWEC
Energy Skills Alliance
Scottish Renewables
RenewableUK
SHFCA
ORE Catapult

Engineering

ECITB
Enginuity
IET
Scottish Engineering

Transport

IMI

Construction

CITB
Historic Environment Scotland
Federation of Master Builders
Scottish Decorator Federation
Scottish Builders Federation
Select
SNIPEF

PUBLIC SECTOR

Scottish Government

Wind
Hydrogen
Energy Efficiency
Transport
Crown Estates Scotland

Scottish Funding Council

Skills Development Scotland

Enterprise Agencies

Scottish Development International

Energy Saving Trust

Transport Scotland

Education Scotland

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Joining the Dots

OWIC

Offshore Wind Industry Council

- Offshore Wind Sector Deal



SOWEC

Scottish Offshore Wind Energy Council

- Scottish Governments Response to Offshore Wind Sector Deal
 - Skills
 - Supply Chain and Clusters
 - Developers
 - Innovation
 - Barriers to Deployment



ESA

Energy Skills Alliance

- North Sea Transition Deal

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SOWEC- Vision and Goals Review

<https://www.offshorewindscotland.org.uk/sowec/>

SOWEC



The Scottish Offshore Wind Energy Council (SOWEC) is a partnership between the Scottish public sector and the offshore wind industry, co-chaired by Ivan McKee, Minister for Business, Trade, Tourism & Enterprise and Brian MacFarlane of SSE.

Vision

A world-class offshore wind sector that underpins the transition to net zero by 2045 and maximises the value to Scotland.

Mission

To coordinate and grow the sector, ensuring the Scottish offshore wind industry is more sustainable, competitive, and commercially-attractive, both domestically and in the global offshore wind market.

Goals



1. Deliver 11GW of fixed and floating offshore wind in Scottish waters by 2030.
2. Establish Scotland as a world-class offshore wind sector at the leading edge of technology innovation, driving excellence in efficiency, productivity, safety, and sustainability.
3. A transformational and rapid increase in economic value, delivering a world-class supply chain in Scotland.
4. Develop a highly skilled and diverse workforce, support new entrants, expand apprenticeships and enable transitioning from existing sectors whilst inspiring the future talent pipeline.
5. Champion floating and fixed offshore wind's contribution to achieving Scotland's net-zero commitment by 2045, incorporating the oil and gas transition, hydrogen and wider energy system integration.

Skills Group Update

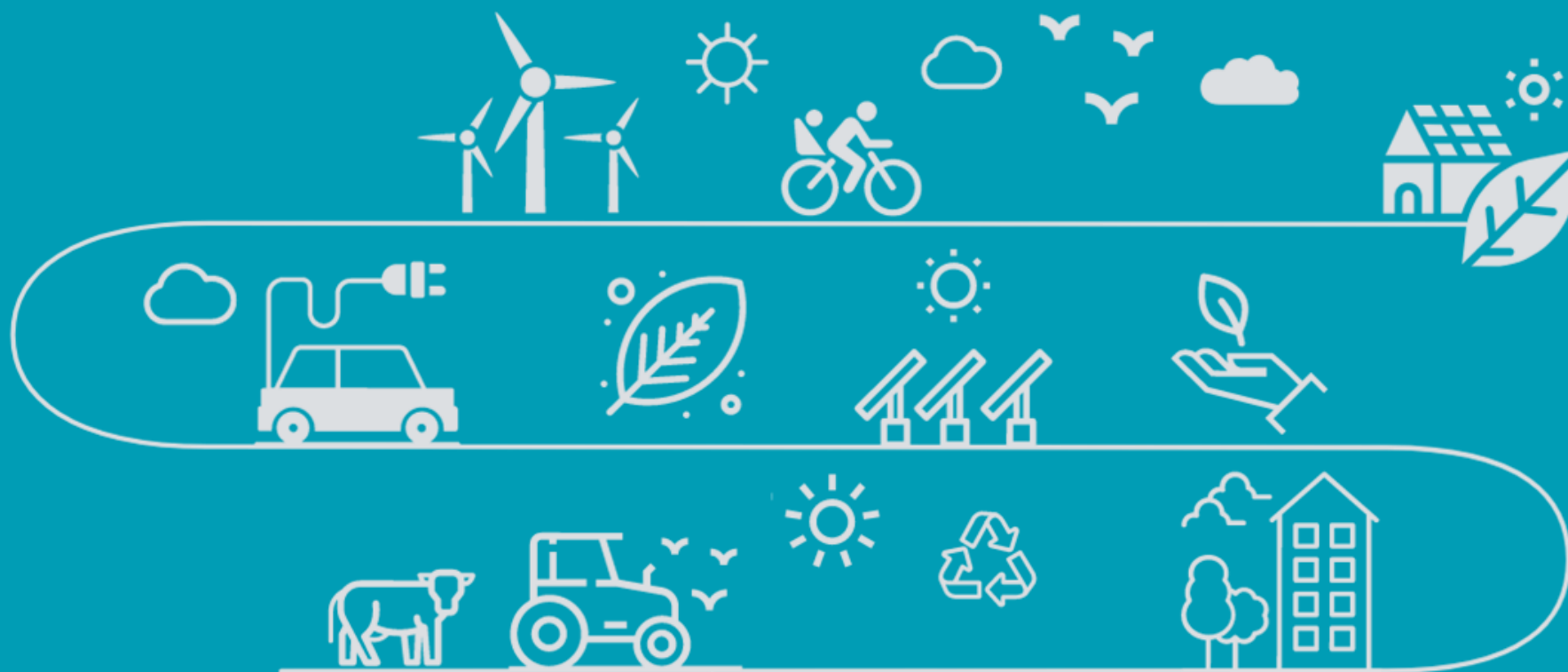
- **Membership** – now including four developers
- **Inward Investor Support**
- **Skills Intelligence Model** - year 3 survey now out to industry - **please submit your response**
- The development of a **Skills Portal** aligned with the Offshore Wind Scotland website – awaiting final funding decision.
- **Skills capability and capacity**
 - Wind Training Network (O&M)
 - Fabrication and Welding Training Network (established in response to inward investor interest)
 - Composites – in talks with two blade manufacturers and looking at plan.
 - Advanced Manufacture
 - Marine and Maritime
 - These require investment but none available
- **CESAP** – work plan aligned with CESAP and member of the Implementations Steering Group
- **STEM Activity**
 - Extending involvement in First Lego League (STEM competition for 9-16 years) as the 2022/23 theme is renewable energy: Superpowered. 12 Tournament planned for 2022/23 across Scotland.
 - ESP have been asked to establish a Wind Competition by WorldSkills UK with a demonstrator event planned for Edinburgh in November.
 - Consideration being given to re-establish the Junior Saltire Award
- **Skills Summit** – building on the Supply Chain Summit we are working with SG colleagues on a Skills Summit scheduled for 2 November
- **SC&C and Skills events** – 17 and 23 November

Skills Group Update

A paper has been circulated to developers with recommendation from the Skills Group:

1. Skills to be brought into the OSW Collaborative Framework
2. Principals of Engagement to be developed and agreed for Developers, Inward Investors and Supply Chain companies
3. Establish a co-investment fund to support the Skills Collaborative Framework - established to maximise the impact of developers STEM, Community Benefit and Education and Skills funds.
4. Develop a Skills Support Framework for:
 - a. Developers
 - b. OEMs
 - c. Tier 1 suppliers
 - d. Supply chain companies in conjunction with Clusters
5. OSW Skills Portal to be fully developed and ongoing maintenance
6. Skills Intelligence Model supported on an annual basis to identify predict future skills needs.

Climate Emergency Skills Action Plan



The Climate Emergency



Net-Zero by 2045

In 2019, Scottish Government was the first Government in the world to declare a Climate Emergency, committing Scotland to become a net zero nation by 2045



A 'green recovery'

In 2020, Scottish Government updated its Climate Change Plan to reflect the profound impact of the pandemic, committing to a 'green recovery' from COVID-19 which captures the opportunities of a just transition to net zero.



A Just Transition

The transition to a thriving and inclusive net zero economy is a transformational opportunity, however the pace and scale of the transition will bring with it risks and disruptions as communities, industries and supply chains adapt.



Green jobs and skills

Green jobs, skills, training and reskilling are at the centre of Government's approach, driven by the [Climate Emergency Skills Action Plan](#)



Ensuring our workforce has the skills for the transition to net-zero

Delivering on Scotland's Climate Change Plan

Embedding a partnership approach

Evidence-led

Understanding Green Jobs and Skills

Reaching net zero by 2045 requires transformational change across the economy and society, providing opportunities for:

- developing new, quality green jobs
- embedding green and circular economy skills
- increasing access to growing global green markets for Scottish businesses
- stimulating regional growth
- providing enhanced access to nature and the environment

Categories of 'green job'

New and emerging:	Existing: enhanced skills	Existing: greater numbers
e.g. hydrogen cell technicians, urban miners	e.g. architects and environmental consultants	e.g. insulation installers, energy assessors

Opportunities for growth

Energy transition Inc oil & gas, on and offshore wind, hydrogen, electricity, carbon capture and storage	Construction Inc retrofitting of housing and non-residential properties
Transport Inc road transport, railways, domestic aviation, shipping and aircraft support vehicles	Manufacturing with a focus on engineering
	Agriculture and land use management Inc forestry



The College Response

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Management Board

Engineering Leads Forum

Construction Leads Forum

STEM Leads Forum

Wind

Hydrogen

Advanced
Manufacture

Marine
and
Maritime

Transmission
and
Distribution

Oil and
Gas

Automotive

Energy
Efficiency

SMART
Metering

Building
Information
Modelling

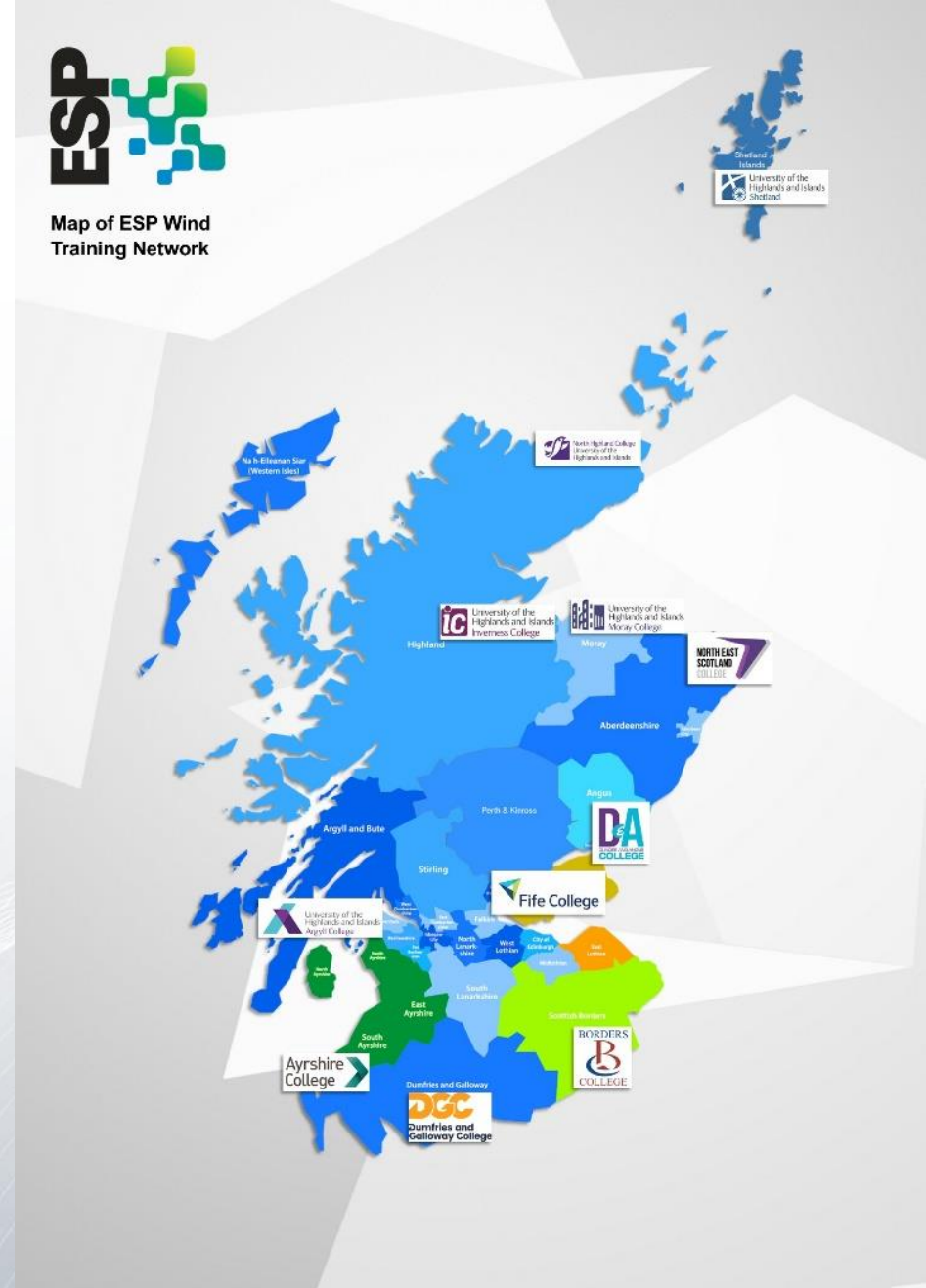
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Wind Training Network

Longest established and most recognised.

- Supporting the Energy Transition
- Developing Capability and Capacity
- Supporting Industry and Individuals
- Supporting Government Priorities



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ESP - HYDROGEN TRAINING NETWORK

Hydrogen plays an important part in the transition to net zero in line with Scottish Governments target for 2045.

ESP identified the need to develop the capability and capacity of Scotland's colleges to address the significant future demand for hydrogen skills.

Hydrogen Training Network

Our Hydrogen Training Network was established in September 2019 to address the future demand for hydrogen skills.

ESP Priorities

- Industry Technology Partners
- Government and Agencies
- Hydrogen Accelerator
- Scottish Hydrogen Fuel Cell Association (SHFCA)
- European Marine Energy Centre
- Michelin Scotland Innovation Parc



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ADVANCED MANUFACTURE SECTOR **KEY FACTS**

Officially launched by the Minister of Business, Fair Work and Skills

ADVANCED MANUFACTURE CONFERENCE

140 ADVANCED MANUFACTURE STAFF SUPPORTED THROUGH CPD ACTIVITIES

WORKSHOP SESSIONS



INDUSTRY VISITS AND EVENTS



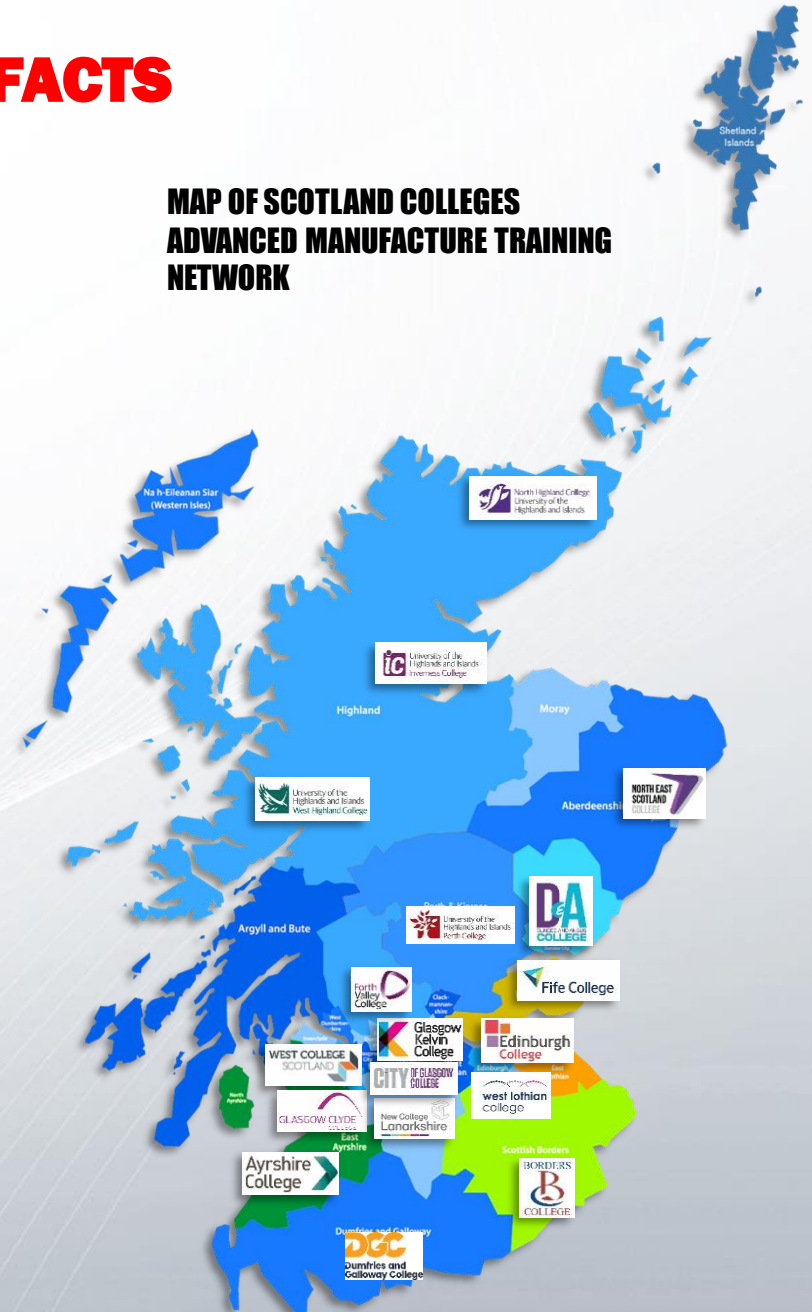
DEVELOPED 2 PDA AWARDS IN MANUFACTURE

- PDA in Advanced Manufacture
- PDA in Industrial Automation

IoT LUNCH AND LEARN SESSIONS WITH CENSIS

DIGITAL MANUFACTURE ON A SHOESTRING WORKSHOP

**MAP OF SCOTLAND COLLEGES
ADVANCED MANUFACTURE TRAINING NETWORK**



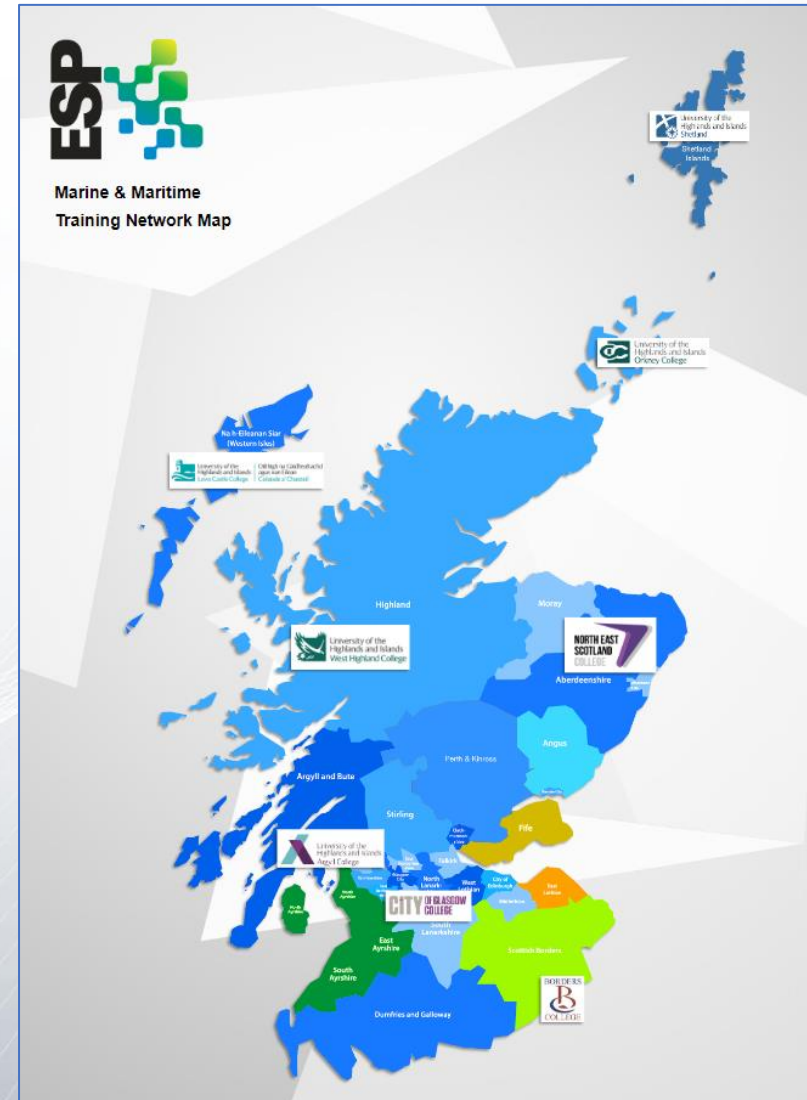
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ESP – Marine & Maritime Training Network (MMTN)

Key Facts:

- Established in 2018 with 8 colleges
- Creation of standardised learning and teaching materials across the network
- National Progression Award Maritime Studies



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Thank You

Please Engage

Questions?