STEMOVATORS

MARINE POWER

STEMOVATORS?

Stemovators is one of Scotland's longest running and most successful science education initiatives – we work with over **10,000 young people** every year from around **250 Scottish schools** across the country. Our award-winning STEM kits and teacher training are **FREE** to Scottish primary and secondary schools.

Stemovators is an initiative delivered by Prosper (SCDI) supported by industry partners across Scotland and funded in partnership with the Scottish Government.

THE PROJECT

Stemovators is developing a new, hands-on STEM programme focused on Scotland's marine and coastal industries.

The Marine Project will engage P5 - S2 learners through practical, curriculum-aligned activities that explore real challenges faced by industries operating in and around Scotland's seas. While the contexts are marine-based, the heart of the project is skills: problem solving, teamwork, digital literacy and creative thinking — the same core competencies needed across Scotland's future workforce.

The project will launch in the 2026/27 academic year, with an initial pilot reaching 50–60 schools across multiple Scottish regions, before scaling in subsequent years.

WHY NOW?

Scotland's marine economy is growing rapidly, with increasing demand for skills across energy, engineering, digital, life sciences and environmental management. However, many young people — particularly at primary and early secondary level — have limited awareness of these careers, or how their classroom learning connects to them.

This project addresses that gap early, when attitudes to STEM subjects and future pathways are still forming. By embedding real industry contexts into practical, engaging learning experiences, pupils can begin to see:

- How science, technology and engineering are used in the real world
- The wide variety of roles available — not just "scientists" or "engineers"
- How local and national marine industries connect to global challenges such as sustainability, energy transition and food security

INDUSTRY FOCUSED

The project will explore a range of key marine and coastal sectors, which may include:

Ports, Harbours & Shipbuilding

- Designing and testing models to explore buoyancy, stability and materials
- Exploring technologies such as bathymetry and seabed mapping
- Investigating digital navigation and port operations

Offshore Energy

- Designing and testing models to explore buoyancy, stability and materials
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- Investigating digital navigation and port operations

Fisheries

- Exploring fish life cycles and stock management
- Investigating food chains, ecosystems and human impact

Biotechnology

- Investigating marine organisms and their uses in medicine, food and materials
- Linking biology to real industrial applications

Aquaculture

- Exploring water quality, feeding systems and fish health
- Considering technology and innovation in modern aquaculture

Digital Skills

- Data collection and analysis
- Sensors, monitoring and automation
- Coding, modelling and digital design (age-appropriate)

Additional Skills

- Problem solving and critical thinking
- Teamwork and communication
- Data handling and digital literacy
- Design thinking and creativity
- Understanding of sustainability and systems

These skills align strongly with Curriculum for Excellence, Developing the Young Workforce, and Scotland's wider economic and net zero ambitions.

PROJECT TIMESCALE

The project will be developed through a structured co-design, pilot and delivery model, ensuring high-quality content, strong industry relevance and meaningful impact in schools.

- January 2026: Prototyping and development begins
- January – May 2026: Pilot partnerships secured; co-design workshops with partners
- June 2026: Pilot schools recruited; project materials ordered
- July – August 2026: Project content finalised; kits assembled
- September – November 2026: Project launch; in-school CPD delivered; kits distributed
- December 2026 – April 2027: Ongoing support and training for schools
- April – May 2027: Regional project showcases at Stemovators Celebration of STEM events
- June 2027: Project evaluation, partner report and redevelopment
- 2027–28 Academic Year: Project scaled up, with iterative redevelopment based on evaluation

THE COST

£10,000 per region (no VAT)

Minimum of 10 schools per region

Includes:

- A complete, hands-on resource kit
- Teacher CPD using a train-the-trainer model
- Ongoing support and access to updated materials

£12,500–£15,000 (+ VAT) per region

For an end-of-project, multi-school **Celebration of STEM** event

- Funding can be shared across multiple partners
- Enables collaboration, co-ownership and regional impact

This model represents excellent long-term value, as kits remain in schools and can be reused year after year, amplifying impact well beyond the initial funding period.

EVIDENCE OF DEMAND & DELIVERY CAPACITY

Stemovators has a strong track record of delivering high-impact STEM programmes at scale.

- Climate Smarter is being delivered to **142 schools in 2025–26**
- 190 schools participated the previous year
- Demand from schools consistently exceeds available places
- Teacher feedback highlights the value of hands-on learning, clear career links and increased confidence

While the Marine Project explores a new thematic focus, it is built on a **tried-and-tested** delivery model with very similar pedagogy, structures and skills outcomes.

WHY PARTNER

- Inspire the next generation of Scotland's marine workforce
- Support early skills development aligned to their sector
- Reach pupils and teachers across Scotland in a meaningful, structured way
- Contribute to equity of access through fully resourced school kits
- Be recognised through project materials, events and evaluation reports
- Help shape a scalable, national education programme with long-term impact

CAREERS & INDUSTRY LINKS

A core aim of the project is to connect learning to real people and real jobs.

Industry partners may contribute through:

- Co-design of activities
- Career case studies linked to each theme
- Short classroom videos or digital content
- Optional school engagement (visits, talks or showcase participation)

Pupils will encounter a wide range of roles — including technicians, engineers, digital specialists, environmental scientists, project managers and apprentices — helping to challenge stereotypes and broaden aspirations.

FUNDING ASK

We are seeking private sector partners to support the pilot delivery of the Marine Project, at a cost of:

- £1,000 per school, and
- £12,500 – £15,000 per region for Celebration of STEM events

Funding can be shared across multiple organisations, enabling partners to collectively support a region or thematic strand while maximising reach and impact.