



Renewable Energy skills



COLEG Sir Benfro
Pembrokeshire COLLEGE

SDG focus

- ☑ Goal 4 - Quality education
- ☑ Goal 7 - Affordable and clean energy
- ☑ Goal 9 - Industry, innovation and infrastructure

What did you do?

The renewable energy skills theme was delivered at Pembrokeshire College through the bilingual Destination Renewables programme—an Extended Project Qualification (EPQ) co-developed with EDF Renewables UK, DP Energy, Pembrokeshire Coastal Forum, and others. Aimed at 16–18-year-olds, it provides an introduction to wave, tidal, offshore and onshore wind, and solar technologies, helping bridge the gap between education and industry. Since 2022, over 110 learners have taken part. The programme is now delivered at Neath Port Talbot College, Colchester Institute, Chelmsford College, and Falmouth Marine School, with further interest from institutions in Scotland and England. A key strength is its collaborative model: over 45 companies and 62 industry professionals contribute guest lectures and site visits, offering students real-world insight into renewable energy project lifecycles and career pathways.

What were the benefits and outcomes?

1. Empowering Students with Career Clarity and Confidence. Students gained a clear understanding of renewable energy career pathways and developed key employability skills. Over 200 learners have engaged with the programme to date, with structured opportunities for site visits, industry seminars, and expert mentoring, helping learners align their studies with real-world opportunities. "Destination Renewables aims to inspire students to explore future career options in the

renewable energy sector needed to build the net zero energy system of the future. Working with the lead partners to expand this course to reach additional learners is very exciting and we look forward to working with the new education partners to empower tomorrow's leaders." (Mark Hazelton, Project Director, EDF Renewables UK)

2. Strengthening Industry-Education Partnerships. The programme created sustained links between further education providers and industry partners, improving relevance of curriculum content and creating direct pathways into work experience and employment. "The engagement from industry has been significant– it's not just presentations, it's hands-on and engaging learning. Building links with industry and providing the learners with real world examples is crucial." (Arwyn Williams, Head of Faculty, Pembrokeshire College)
3. Raising the Region's Profile as a Net Zero Skills Hub. Destination Renewables helped position Pembrokeshire—and wider South West Wales—as a leader in renewable energy skills development. In addition to its award wins, the programme has secured further investment via the Skills and Talent Programme, and has been delivered in Cornwall and Essex, extending the benefits beyond Wales.

What barriers or challenges did you encounter in embedding sustainability into your learning and teaching practice and how did you overcome them?

1. Initial engagement from industry partners – Overcome by establishing a strong lead partnership model with EDF Renewables UK, DP Energy, and Pembrokeshire Coastal Forum, which encouraged wider sector participation.
2. Curriculum alignment with existing qualifications – Resolved through mapping the programme to the EPQ framework, ensuring formal recognition and academic rigour
3. Resource and staff capacity – Addressed by embedding flexible delivery formats (guest lectures, hybrid sessions, etc.) and securing co-investment through the Swansea Bay City Deal's Skills and Talent programme, funded by UK and Welsh Governments

What are your conclusions and recommendations for others?

Destination Renewables demonstrates that embedding industry collaboration into the curriculum is both impactful and scalable. The programme has proved highly successful in equipping young learners with knowledge, inspiration, and pathways into the renewable energy sector—supporting the wider net zero agenda.

Key to success was co-design with industry, a flexible and modular structure, and formal alignment to a recognised qualification (EPQ). These factors allowed the programme to be adapted for roll-out at other institutions while maintaining high-quality, context-rich delivery.

We recommend that other institutions seeking to integrate similar themes:

- Establish strong, early partnerships with key employers in the sector.
- Build in flexibility to allow local context and industry variation.
- Align with nationally recognised qualifications to aid adoption and learner outcomes.
- Secure sustainable funding through strategic partnerships and regional initiatives.

Web link to further information:

<https://www.edf-re.uk/news-and-views/powering-up-green-education/>

<https://www.westerntelegraph.co.uk/news/24668683.pembrokeshire-initiative-scoops-wales-stem-awards-2024/>