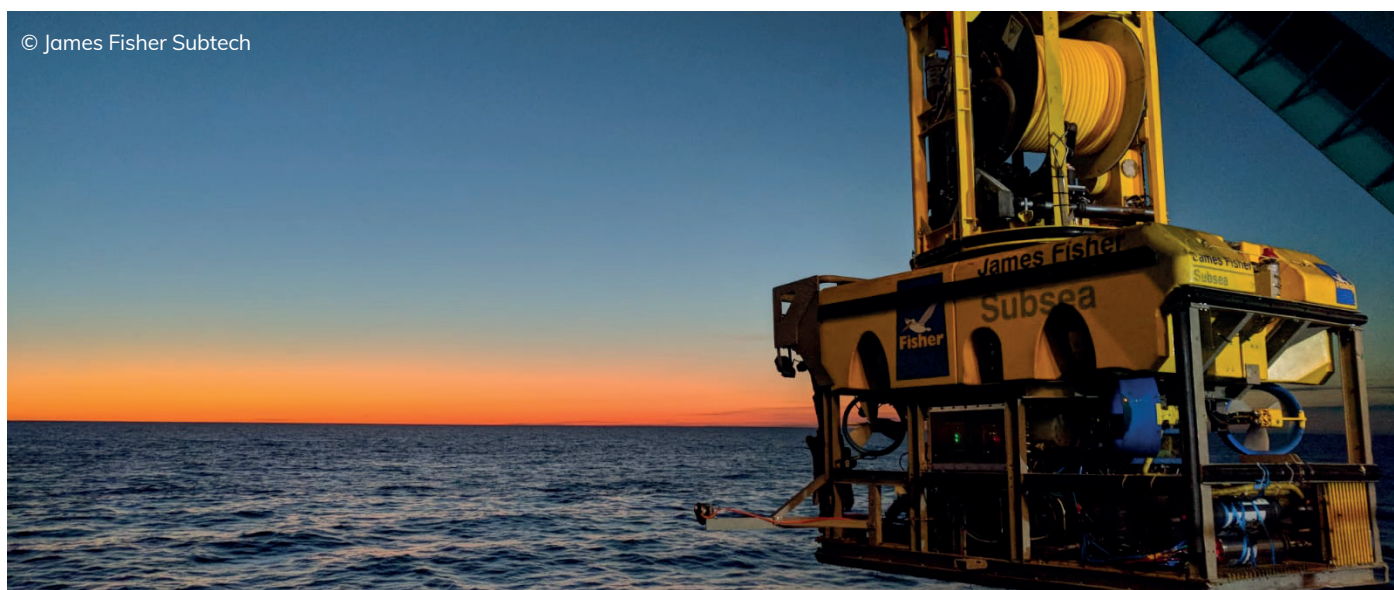


Coastal Energy Internship Programme 2023

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Summary

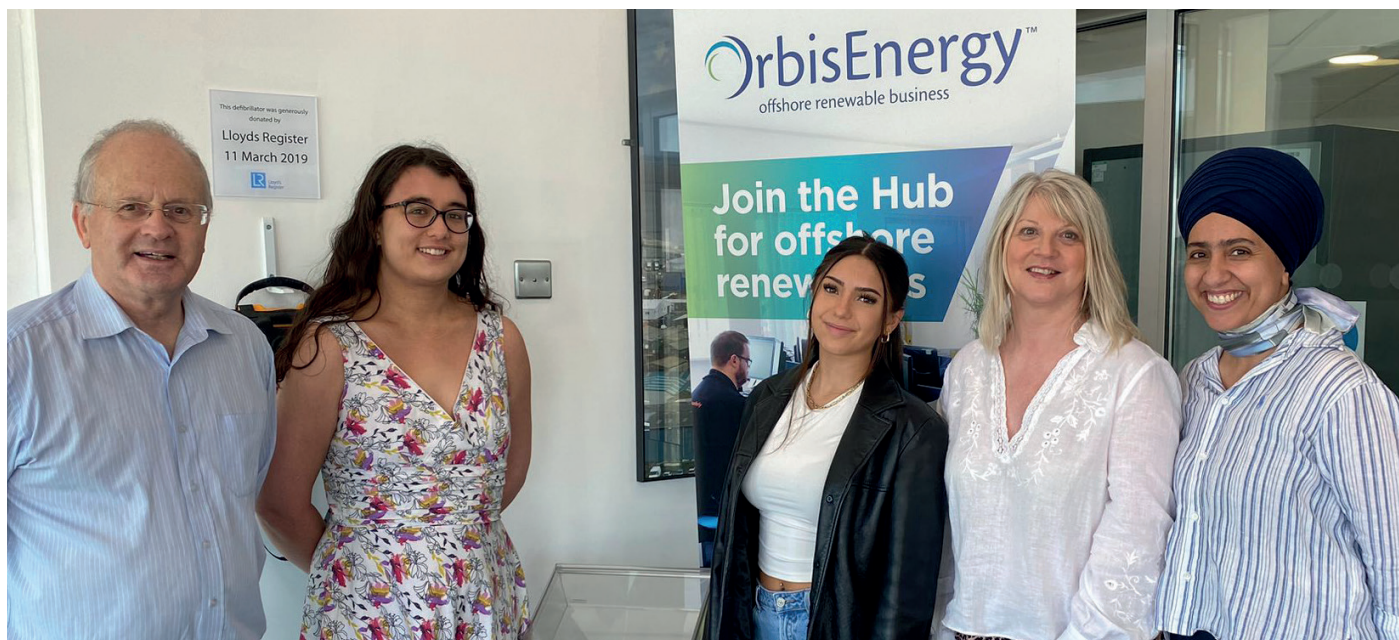
The Coastal Energy Internship programme, supported and administered by The Ogden Trust, began in 2016. This year's programme included placements in East Anglia, Barrow-in-Furness, and Ulverston; the programme also expanded to include placements at companies in the Port of Blyth.

This year, 48 students from nine colleges took part in the Coastal Energy programme and were hosted at 33 different companies, more than doubling the number of participating students and companies from last year. Internships took place over the summer between June and September. Students worked on short projects devised by the host companies; this ranged from researching 'the carbon saving potential of hybrid crew transfer vessels' to 'refurbishing a paint filling head'.

The projects were designed so they could be written up and submitted for CREST awards – an award scheme run by the British Science Association.

This year's expansion into the Port of Blyth was made possible thanks to a new working relationship with Steve Rutland and Energy Central Campus, which focuses on STEM education, sector-led training, higher level skills, innovation, research and development to further support growth in the clean energy sector in Blyth and the wider Northeast. This new collaboration facilitated seven student internships from three local colleges in its first year and shows potential for further growth, with local companies and schools keen to engage further with the programme in 2024.

The successful lessons learned in East Anglia and Blyth can hopefully be applied to develop the programme in Barrow-in-Furness and Grimsby where building engagement is currently proving to be more challenging.



(from left to right) John Best (Ogden consultant), Choong Ling Liew-Cain (Ogden programme officer), Grace Davey (intern at EEEGR), Karen Freeman (Grace's supervisor), and Daljit Kaur (STEM Learning).

Programme finance

Interns were paid an educational bursary of £850 each; this was increased from £750 in 2022 to reflect the increase in the cost of living. The Ogden Trust also covered the cost of submitting for a CREST Award. The administrative costs (including programme support from John Best and Steve Rutland) were absorbed by The Ogden Trust.

Funding from Norfolk County Council's Gearing up to Grow project covered the cost of six bursaries. The following companies contributed financially to the Coastal Energy programme this year: Vattenfall, ScottishPower Renewables, Next GeoSolutions, 4C Offshore, and Equinor. Students hosted by Siemens Energy were paid directly by them. We would like to thank the companies who contributed financially as it enables the internship programme to expand and ensure its future sustainability.

Participants	Number of participants
Students	48
Colleges and sixth forms	9
Companies	33

College or Sixth Form	Number of students
East Norfolk Sixth Form (East Anglia)	17
East Coast College (East Anglia)	2
Lowestoft Sixth Form (East Anglia)	7
University Technical College Norfolk (East Anglia)	7
Barrow College and Furness Sixth Form (Barrow)	2
Ulverston Victoria High School (Ulverston)	5
Bede Academy (Port of Blyth)	3
Northumberland College (Port of Blyth)	2
Dukes Sixth Form (Port of Blyth)	2

Programme evaluation

“What about the Coastal Energy programme interested you?”

Before they started their placements, most students (55%) wanted to gain work experience; developing their skills (27.5%) and wanting to learn more about the energy industry (20%) were also significant factors.

Top 10 reasons to apply	Count (n=40)	Percentage
Work experience	22	55
Develop skills	11	27.5
Experience of the energy industry	8	20
Interest in engineering	6	15
Interest in renewable sector	5	12.5
Opportunity is local	3	7.5
Applied physics	2	5
Variety of companies and projects	2	5
Networking opportunity	2	5
Previous experience with the company	2	5



“I applied as I wanted to challenge myself and expand my skills base, learning about a sector (sustainability) that I’m looking to pursue a career in in the near future.”

Lily, intern at Siemens Gamesa Renewable Energy

“It was an amazing opportunity both for the value of experience on offer as well as being located locally. The chance to work in a professional environment is extremely valuable to me.”

Lewis, intern at 4C Offshore



“Tell us about the kinds of jobs and/or sectors you are interested in.”

Before beginning their internships, common responses to this question included renewable energy (35%), a specific field of engineering (eg. mechanical, automotive; 20%) or engineering in general (10%), the environmental sector (10%), or IT and software (10%). After their internship 84.4% of interns said that the internship affected their potential job plans, either by confirming their current plans or by showcasing other potential careers.



“It was really useful to reinforce my current ideas on wanting to go into aerospace industry in the future, as well as adding ideas of materials science in the mix too.”

Ben, intern at Oxley Group





“I never would have thought I would be interested in the engineering sector. I always had my heart set on studying law. However, after this internship and learning so many amazing new skills and understanding the importance of engineering for our future it really has made me consider what I want to do!”

Inaya, intern at Proeon



The interns who stated that the internship did not affect their plans for a future job (11.1%) described gaining useful employable skills.

Skills development

In the evaluation, communication, time management, teamwork and research were the areas of development most frequently identified by the interns. Learning to use specialist software did not feature in the top 10, but was mentioned in over 11 per cent of the responses.

Skill/quality: top 10	Number of mentions	Percentage
Communication	23	51.1
Time management	15	33.3
Research skills	10	22.2
Teamwork	10	22.2
Confidence	9	20
Technical knowledge	8	17.8
Data analysis/working with data	7	15.6
Presenting	6	13.3
Report writing	6	13.3
Problem solving	6	13.3



“This internship has not changed my plans for the future but has instead given me experience with working with new people and also given me the opportunity to work both virtually and in an office.”

Alice, intern at ScottishPower Renewables

“Having to work with a range of people, mostly outside my peer group, definitely helped boost my confidence. This is something I tend to struggle with, so general exposure has been helpful to me. Also, I found writing my report to be very helpful as practice for my upcoming work at university, as I had not written anything similar before.”

Eszter, intern at Windcat Workboats





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The Coastal Energy celebration event in Blyth.



“One of the biggest skills I personally felt that I developed was the ability to work well in a professional environment and communicate my progress effectively. This was a really important skill, as it is far different communicating your work and ideas in a professional industry than in college.”

Joshua, intern at Next GeoSolutions

“It has given me many opportunities that I would not normally get and it has got me started in the renewable energy industry by giving me the chance to form connections within the industry.”

James, intern at ABP





“This internship has been an eye-opening experience and I have loved every day being an intern. This is an industry I didn’t know much of before I started, and this internship was an amazing experience and motivated me more to push into this industry.”

Malachi, intern at Siemens Gamesa Renewable Energy

“I would definitely advise anyone to do an internship it has provided me with an insight on the industry and has given me so much experience and knowledge which will help me later in life, I would say it is a very beneficial experience and would definitely recommend.”

Callum, intern at Galliford Try



CREST Awards

As part of the Coastal Energy Programme, students were encouraged to submit project reports for a CREST Award. CREST is a nationally recognised scheme for student-led project work in STEM (science, technology, engineering, and maths) subjects. It is respected by universities and employers and can be used as part of a student’s UCAS personal statement.

We encouraged students to work towards a Gold CREST Award. This is for a project that makes an original contribution to a STEM field of study and requires 70+ hours of work (a Silver Award requires 30+ hours).

Students had to:

- Develop a robust project planning module
- Identify the most appropriate project
- Plan and undertake research
- Identify and explore in greater depth areas that were of interest to them
- Present their personal analysis to highlight the learning and draw conclusions
- Prepare and submit a report

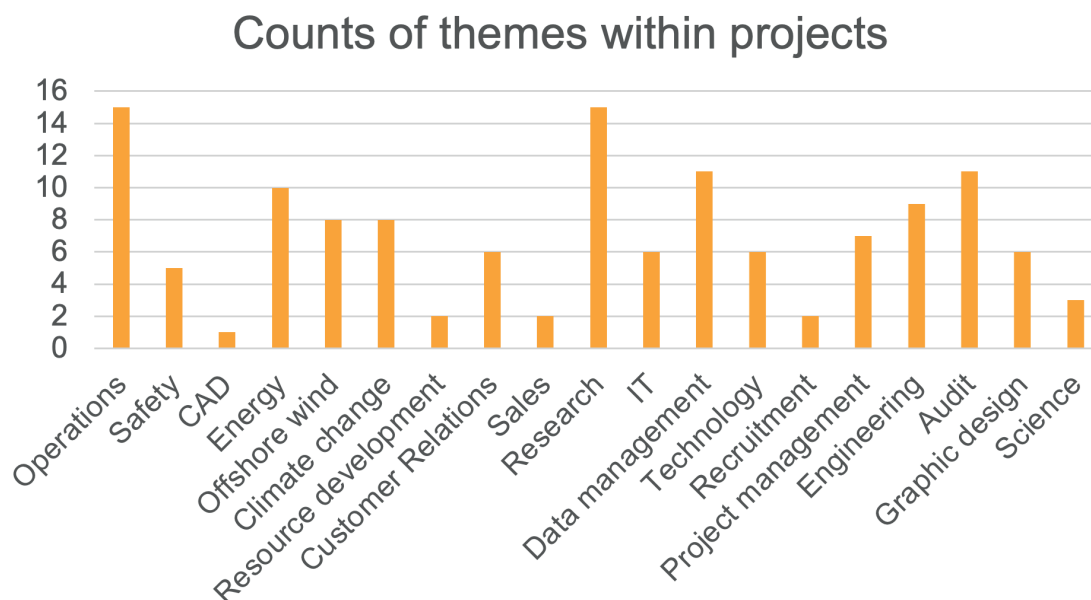


Students could select the project journey they wanted to follow. We wanted to ensure the process could provide them with personal growth, external review, and industry engagement.

This year, 32 submissions were made for CREST Awards resulting in 21 gold and four Silver Awards. The remaining seven are being resubmitted and reassessed to bring them up to Gold CREST standard.

Company feedback

In the 2023 Coastal Energy programme, we saw a wide variety of themes within the projects submitted by host companies. These included health and safety, graphic design, engineering, and sales. The most common themes across the projects were research-based projects and projects considering operational procedures (40.5%).



Companies taking part in the Coastal Energy programme are encouraged to design a project that will have an output useful to their business. In a survey sent after the internship had ended, we asked host company supervisors “how useful do you think the results of the intern(s)’ project will be to your company?” Of the 18 responses we received, 72.2% categorised the results as extremely useful and 22.2% categorised them as useful. We are pleased to see that the interns executed these projects at a standard which provided useful results.

94.4% of the companies who responded categorised the results of their intern’s project as useful or extremely useful.

Additionally, we asked “in what ways did your company benefit from taking part in the programme?” Nine of the 18 responses (50%) we received discussed of the usefulness of the project outputs. Five (27.8%) described benefiting from inspiring and building the skills of young people who could work in their industry. There were also three mentions (16.7%) for greater capacity to work on projects and for developing skills in their employees.

17 out of 18 companies either agreed (11.1%) or strongly agreed (83.3%) that they would encourage other companies to take part in the Coastal Energy programme.

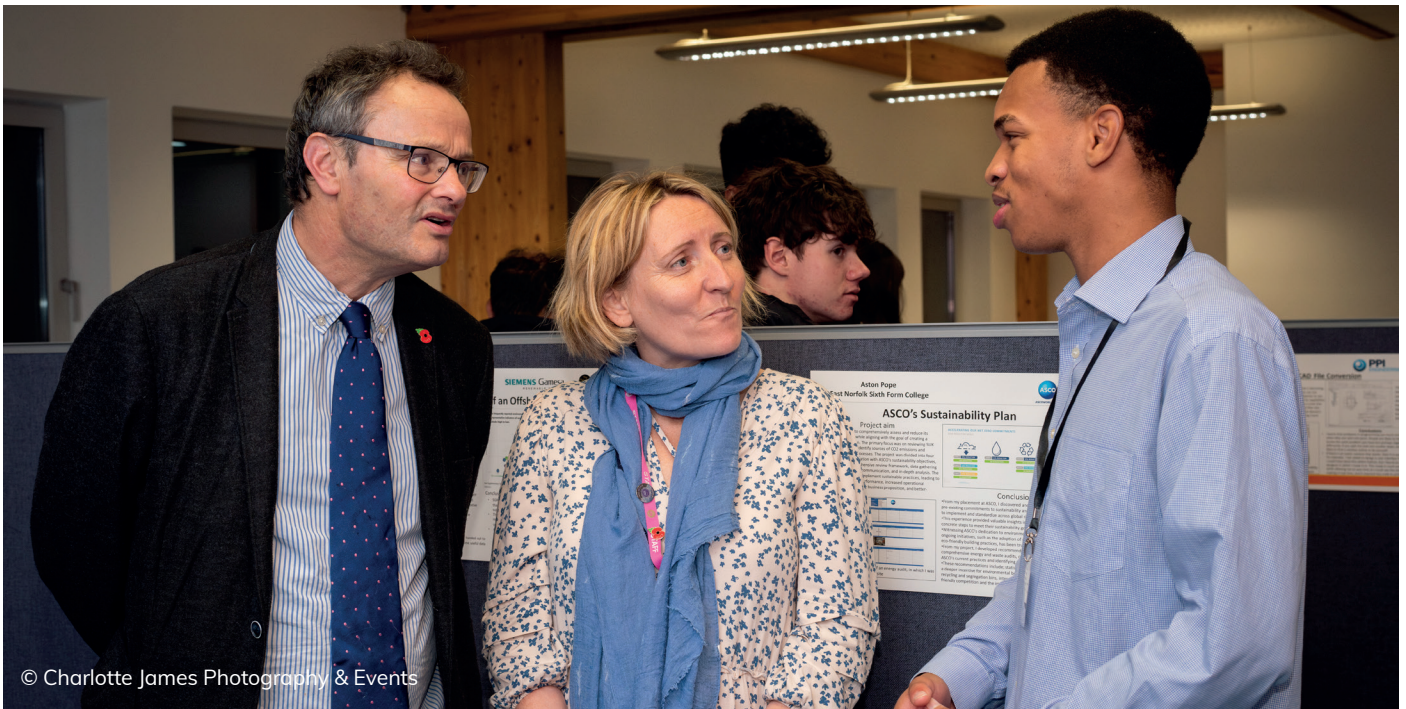


“[The intern] completed a piece of work that we needed delivered but did not have resource to cover. But more than that the team enjoyed talking about their passion for the marine environment and passing on their skills. So it improved their mentoring and management skills as well. We also all just enjoyed having [the intern] around.”

Philip, MarineSpace

“It was extremely helpful to have some help with a research area that has been on our ‘to do’ list for a while. Our student was very diligent and able to get on with the work with minimal supervision.”

Sue, TGS|4C Offshore



© Charlotte James Photography & Events

The Coastal Energy celebration event in East Anglia.

The Coastal Energy programme has celebrated and shared the achievements of the 2023 interns at regional events held in East Anglia, Barrow-in-Furness and Blyth. Students and companies were able to network and share their experiences. Local MP Peter Aldous attended the East Anglia event to learn more about the programme and its impact.



“Having students in the business who are keen to work on a real engineering challenge for four weeks and giving them an opportunity to shine, it’s a great opportunity to support our recruitment process of young talented people.”

Mike, Siemens Energy





Zack is a Year 12 student at East Norfolk Sixth Form College studying A-levels in geology, geography, and computer science. After college, he is interested in studying geology at university or undertaking a degree apprenticeship in geoscience.

Zack was placed with Clarksons Port Services and worked on the project 'Southern North Sea Offshore Renewables Base'. Zack was tasked with assessing ports to determine which would be the most suitable location to build a new offshore renewables support base. This base would provide maintenance and support for vessels used in the offshore wind industry.

Zack identified characteristics that would make a port suitable, using his learning about how offshore wind farms work. He systematically reviewed ports along the east coast of England, from Hull to Ramsgate, and ranked them on each of his chosen characteristics. Zack shared his findings in a report and presentation to staff at Clarksons Port Services.

“Coming into the internship, I was heavily focused on working in the geological industry but wasn't too sure what part of that sector I wanted to work in. Doing this internship at Clarksons Port Services gave me an insight into what working in the offshore renewable energy industry is like and has definitely opened up my mind to new industries. During the internship, I learned about all the different vessels in the offshore renewable energy sector and found out that geologists work in this sector on survey boats to help map out the seabed. This has definitely inspired me to look more into this type of work and is something I might look into doing as a future career. I have learned a vast amount of knowledge about the energy industry as well as general work life.”

Sophie Wilson, Zack's supervisor at Clarksons Port Services, told us that “[Zack] met with the colleagues in our office and quickly became one of the team.” She also noted that “the information Zack pulled together can be really useful when we look at ports and also the preliminary information can be given to new starters who have no experience in offshore wind.”

Zack's report was submitted to the British Science Association's nationally recognised CREST programme, where it received a Gold Award.

Reflections on the 2023 programme

The programme continues to build on previous years. We are seeing companies take part year after year as well as new companies join the programme. We see this reflected in our company survey where 83% of responses indicate that they would strongly recommend the programme to other companies after taking part this year.



“This time last year we were exploring how we could enable a sustainable sixth form programme and now we have successfully hosted three interns and can see how valuable it is for us all and for our industry. Do it once (and reach out for support if you need it) and you will do it again. The Coastal Energy programme transforms futures and also creates opportunities for collaborations between those in the industry. It’s magic.”

Susan, Stakeholder Manager, Equinor



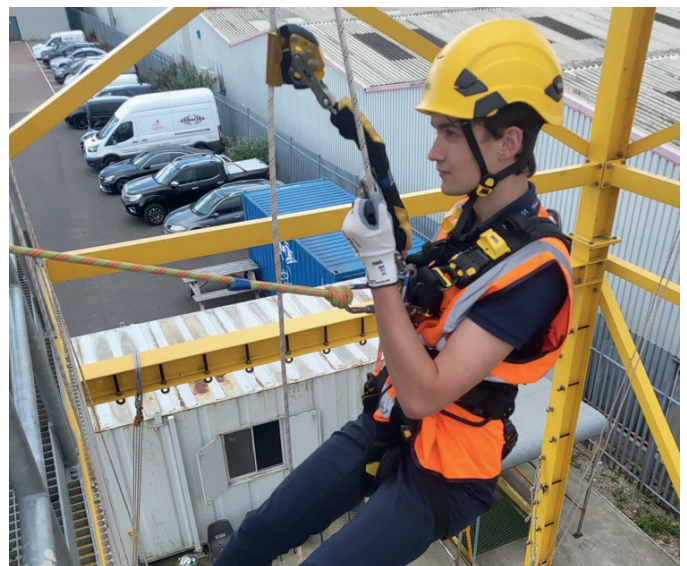
This year has seen the expansion of the programme to the Port of Blyth in collaboration with Steve Rutland. We were able to offer seven placements in this first year and participating companies and schools seemed excited to take part – the ambition for 2024 is to embed and expand the programme in this region.

While our existing programme around East Anglia has expanded, we have faced challenges increasing company engagement in Barrow-in-Furness and Grimsby, addressing this will become a greater focus for the programme in the future.

We have seen impressive outcomes for students who have participated in the programme, companies have been keen to continue engagement with their interns after the placements and several interns have subsequently been offered jobs and apprenticeships at their host companies or within the sector. Students have gained industry insight and made valuable contributions to real-world business issues, as well as building valuable transferable skills such as communication, time management, research and teamworking.



James: intern at ABP



William: intern at Armultra

Thank you

The programme has many partners, organisations and individuals who have helped contribute to its success. We would like to thank all those involved, including:

- John Best, for his continuing work on the programme. His expertise and abilities in bringing everyone together are invaluable.

John's work to develop the Coastal Energy programme was recognised this year at the East of England Energy Group Awards where he received the Skills for Energy Award – recognising his (and the Coastal Energy programme's) contribution to learning, skills and development which will help the next generation of the energy sector.

- Steve Rutland who has been instrumental in bringing companies and schools at the Port of Blyth into the programme for their first year.
- The host companies who submitted projects and the intern supervisors who supported the students.
- The college champions who promoted and supported the internships.
- Norfolk County Council and STEMPoint East for their funding and support.
- The team at the British Science Association who manage the CREST programme and their project reviewers.
- And lastly, but most importantly, the students who took part in this year's programme.



"This year's internship programme has been a great success – bringing together young people with STEM employers based near to them. It's really great to hear about the impacts of the programme on the lives of young people, and the transformative experiences they have had. The Coastal Energy programme is helping to provide the experience and build the skills that will help them in the future and opening up a range of STEM-based future careers. It's wonderful to see that this year we've had a number of students subsequently employed by the companies they were placed with as well as students who have taken part in the programme coming back to the sector after completing further studies."

Adam Boal, Programme Manager, The Ogden Trust

