



Case Study

Ben Moverley-Smith

Ben's Sponsor

Ben's project is with Xodus, a global energy consultancy with its head office in Aberdeen. Xodus have been expanding into the renewables space for the last seven years, especially in relation to floating wind. They were offering an open-ended project and the opportunity to work in multiple locations where they have offices, including Edinburgh, Glasgow, and London. It gave Ben the opportunity to enter the space in his interest area of materials science and data analytics without requiring a heavy engineering background.

About Ben

Ben's background in natural sciences, chemistry and physics had ignited his interest in materials science, especially for renewable energy applications. He was drawn to IDCORE as a way to transition his skills into offshore renewables and gain new skills in engineering. Delivering practical research for an industry partner was also an exciting opportunity.

Since he started working with Xodus in May 2020, Ben has undertaken several studies that have built his portfolio of work and helped inform the direction of his overarching project. This has included conducting an industry engagement survey, which explored industry professionals' projections about the costs and challenges of floating offshore wind and researching the maintenance accessibility of floating offshore wind platforms. These outputs have formed the basis of an academic paper and important results that will be presented at an industry conference.

Ben's Project

More recently, Ben has been working with Xodus to develop a final project idea that will bring real value to the industry. This will involve looking at the impact of weather conditions during the construction phase of a floating windfarm. At present, changes in weather pose a large risk to the construction, with delays caused by heavy winds and other adverse conditions meaning that currently work only takes place between April and August.

IDCORE has given me a lot of freedom while enabling me to focus on the things I find interesting and that will make me more employable. The opportunity to be involved in commercial projects has really enabled me to build my experience





XODUS

Ben's research will simulate the construction conditions of one turbine to understand how risk can best be managed, insights which can then be extended to a whole farm. This will help improve the bankability of commercial scale floating wind.

Ben has also had the opportunity to work with multiple teams and contribute to other areas of Xodus. This included working on a project conducting a cost comparison for a new design of climbing crane, providing greater understanding of how these projects and client facing interactions work in a consultancy.

The broader IDCORE experience has also been beneficial. The initial courses were interesting and enabled him to understand multiple facets of the offshore industry. In particular, the fieldtrips to offshore renewables projects and testing infrastructure have helped bring the industry to life and created opportunities to engage with top academics in the field. This knowledge means that Ben is viewed as a competent employee by Xodus, bringing value especially in relation to working on data sets.

The diversity and breadth of experience of his IDCORE cohort has also been beneficial, creating a dynamic learning environment.



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