



## Stakeholder Case Study

Sally O'Brien



EPSRC & NERC Industrial CDT  
for Offshore Renewable Energy [www.idcore.ac.uk](http://www.idcore.ac.uk)



*SSE are currently sponsoring three separate IDCORE projects, each placed in a different business unit within the company. This has been driven by the SSE's Academic Partnerships Team, which serves all business units within the company. The work of this team is bringing enormous benefits to us - developing relationships that are more effective than we could achieve on our own.*

*We have always recognised the need for collaboration between industry and academia, but colleagues had often encountered a disjoint between academic findings and their application in industry. Having graduated from a Centre for Doctoral Training myself, I understand how these problems can arise, but I also know the benefit of overcoming them.*

*By working closely with industry, IDCORE is delivering more effective collaborations, and I am seeing this delivering value across multiple engagements, not just those with IDCORE. I have been really impressed by what their research engineers are achieving, and I was delighted to accept when IDCORE asked me to become a member of their Independent Advisory Board.*

Sally O'Brien,  
Senior Project Manager, SSE Thermal

### Wider benefits

SSE are finding that collaborating with academia and creating links with local universities in key locations is helping them to win funding competitions. It also supports recruitment, but perhaps more importantly, particularly in the context of the IDCORE projects, it is creating effective answers to real problems.

The project that Sally is personally supervising is helping to cut through the sales pitches of commercial suppliers, providing evidence to senior management that is leading to better decisions around digital twins, increasing the efficiency of the organisation. It is helping them to identify additional digital capabilities that will add value to a range of projects, covering issues such as emissions modelling and how this feeds into permits, or trading forecasts – predicting when would and where you would want to supply hydrogen. Where projects have complex funding support, effective digital tools can even help maximise subsidies or optimise maintenance regimes.



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## Direct Value

Sally is a Senior Project Manager in SSE's Hydrogen Development Team. She has responsibility for taking projects through the front-end-engineering-design process to the point where they are ready for a financial investment decision. This is a 'gated' process requiring input from a range of internal teams. Currently, Sally's main project is the Aldbrough Pathfinder Project, a flagship hydrogen project within SSE's Thermal Business Unit.

It is cutting edge work, which has made it a perfect candidate for support from an EngD researcher, and in this case, Sally is expecting the outputs of the work to be generically applicable across a range of project 'archetypes'. This will create benefits for Sally's wider team as well as for her personally. It is helping her to re-engage with a specific area of research, since one of her business objectives is to keep a foothold in this field.

## Reflections on IDCORE

Having trained in a Centre for Doctoral Training herself, Sally recognises the very specific value that these centres deliver. SSE envisages a future energy system comprising of predominantly renewable energy sources, coupled with flexible generation - including hydrogen and CCS technologies - providing low carbon/net zero power availability at times of need.

As IDCORE also prepares for that future, Sally is keen to see them reflect on how they can support that drive for flexibility, recognising issues like the inherent inefficiency of converting renewable electricity into hydrogen and then back to electricity again. This will require IDCORE to take a strategic approach to the organisations they engage with, not least to build on the work they are already doing with the supply chain in wider collaborations that develop capabilities and bring others along the journey with them.



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