



Stakeholder Case Study

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EPSRC & NERC Industrial CDT
for Offshore Renewable Energy www.idcore.ac.uk



EDF and IDCORE

EDF was a funding partner in the Energy Technologies Institute, the organisation that funded the first phase of IDCORE. Consequently, EDF R&D have been engaging with IDCORE since the beginning, and Christophe has always been part of that engagement.

Although EDF R&D employs more than 2000 people, only a limited number of them work in offshore renewables. Collaboration with world leading research centre and universities is, therefore, key to ensuring that they have sufficient capacity and capability to deliver on projects, particularly the development of the tools and methodologies EDF needs to optimise the performance of their investments. IDCORE has created a vital link between EDF R&D and leading UK institutions working in the field. They continue to remain involved because of the high quality of the researchers that come to work with them from the Centre.

Christophe and IDCORE

Nowadays, Christophe's main area of work is in floating offshore wind and he has acted as the industrial supervisor for several IDCORE projects focussed in this area. He has also supervised projects exploring wave energy devices and generally supported the wide range of projects EDF has sponsored since the start of IDCORE, covering all aspects of their offshore renewables business.

Generally, participation in PhD projects allows the team at EDF to build their internal expertise in areas they wouldn't otherwise have time to explore. IDCORE projects have been particularly good at helping EDF to do this – knowledge they

would otherwise have to pay for from third parties. Christophe has supervised IDCORE projects that have added significantly to EDF's capabilities, including work on experimental facilities and an innovative modelling approach that has become a critical tool for the company. One IDCORE thesis, in particular, has become a highlight of Christophe's involvement in the Centre – alongside some impactful research, this document provided an excellent summary of the state of the art in floating offshore wind that Christophe still uses with new researchers joining his team.



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Building relationships with organisations like IDCORE is core to the way we operate. Bringing IDCORE's students into our labs, where they sit alongside the other postgraduate researchers we work with, helps to develop everyone's networks.

The IDCORE students come to us with significant knowledge of the offshore sector, background that we would typically have to provide through additional training for students from the other institutions we work with. Engagement with IDCORE also provides us access to key researchers in the offshore wind sector, since each project is supported by three academic supervisors from across the collaborating institutions. This is in addition to helping us to build recognition for the impact our work is having, when the students present at international conferences.

*Christophe Peyrard,
Floating Wind Expert Research Engineer, EDF R&D*



Advice and support

Christophe is now a member of the Independent Advisory Board that has been set up as part of the governance structure for Phase 3 of IDCORE. He is very clear on the benefits of close ties between industry and academia and the additional advantages of embedding postgraduate researchers in industry.

He sees on-going challenges in the sector around commercial investment opportunities and production costs: 'we need the tools to help us build cost effective infrastructure at scale.' There are also continued technical challenges, particularly in floating offshore wind, around foundations and platforms, and EDF needs to keep developing its demonstration capabilities.

This is not the expertise that has traditionally been delivered by EDF's academic partners, but it has been core to the work they have done with IDCORE, capability that they are keen to continue accessing in the future.



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