



Developing the offshore renewable energy supply chain

**TARGETED CALL FOR
KNOWLEDGE TRANSFER PARTNERSHIPS
SEPTEMBER 2012**

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Summary

The Technology Strategy Board and the Natural Environment Research Council (NERC) are to invest up to £1.2m to establish new Knowledge Transfer Partnerships (KTPs) in the field of offshore renewable energy. This targeted call for KTPs aims to stimulate and support innovation in the offshore renewable energy supply chain. It is part of an £11.2m programme and is running in parallel with a £10m investment in developing the offshore wind supply chain by the Technology Strategy Board and the Department of Energy and Climate Change (DECC). Up to £3m will be invested in feasibility studies to develop innovative early-stage technologies and up to £7m in development and demonstration of component technologies for offshore wind. This KTP call also follows the recent £10.5m *Marine energy: Supporting array technologies competition* (March 2012), which was co-funded by the Technology Strategy Board, Scottish Enterprise and NERC.

While we welcome applications relating to power generation from offshore wind, wave, tidal stream and tidal range energy sources, there is an opportunity for KTP applicants to link their projects to feasibility or development and demonstration applications in the parallel offshore wind competition where appropriate, although it is not a requirement to do so. We welcome complementary applications, but organisations applying both to this targeted call and for feasibility or development and demonstration funding should ensure that their proposals can stand alone and are not dependent on both applications being successful.

This call for KTPs will help businesses to integrate sustainable innovation into their organisations, and will provide new opportunities for open innovation and knowledge exchange across the sector. We aim to bring new innovation capacity and capability to UK businesses by promoting the commercialisation of knowledge, technology and expertise.

We aim to establish a group of KTPs that will run together as a cohort, supported by a programme of networking between the partners. The cohort approach will encourage knowledge-sharing across projects, potentially giving the businesses involved access to knowledge and expertise held by a range of academic groups with different perspectives on the high-level challenges facing the sector.

We will part-fund KTPs. The targeted call opens on **13 September 2012** and the deadline for applications is noon **24 April 2013**. A briefing event will be held on **13 November 2012**.

NB: This document provides information on the targeted call for KTPs only. Those wishing to apply for feasibility studies or development and demonstration of component technologies should visit www.innovateuk.org and look under Competitions.

Background and challenge

Offshore renewable energy comprising wind, wave and tidal power is expected to play a large role in the UK energy system over the coming decades as emissions reduce to meet legislation. This creates a significant opportunity for innovative UK businesses. For example, continued innovation in the offshore wind sector will allow UK firms to compete better in UK and global markets, bringing up to £35bn extra GVA (gross value added) to the economy to 2050, according to the recent offshore wind technology and innovation needs assessment.

The main challenges facing these industries are how to reduce costs and risks in deploying these relatively young technologies. Innovation is key to this, with opportunities for cost and risk reduction across the system, from project development through design, manufacture and installation, to operation, maintenance and eventual de-commissioning.

Through academic research, the UK has developed specific expertise in areas including the following:

- offshore engineering, operations and maintenance
- environmental monitoring
- high-voltage power transmission and conditioning
- automation and methods for scale manufacture
- advanced materials and corrosion resistance.

This targeted call for KTPs offers businesses the opportunity to work in partnership with the academic research base (higher/further education sector or research and technology organisations) to address the industry challenges and embed sustainable innovation.

In addition, as the UK's main public funder of world-class science that increases knowledge and understanding of the natural world, NERC has supported a considerable body of research which has the potential to reduce marine energy costs by de-risking the consenting and deployment processes. NERC wishes to encourage and facilitate partnerships between businesses and environmental scientists to understand, minimise and 'design out' environmental impacts at an early stage.



Scope

We want to support KTPs that will promote knowledge transfer to help UK businesses realise tangible benefits from the exploitation of future UK and global markets in offshore renewable energy. These will

- involve businesses already engaged in the offshore renewable energy sector but in need of further support to grow faster and accelerate development of their innovation capability
- involve businesses interested in entering the offshore renewable sector but which currently lack the necessary capability or capacity to innovate
- exploit current and innovative technologies and methodologies to address the identified challenges to cost and risk reduction in the offshore renewable energy sector.

We will support businesses looking to bring forward innovative projects that involve any part of the system of power generation from offshore wind, wave, tidal stream or tidal range. In particular, there are opportunities for businesses to expand their innovation and expertise in areas where the UK has specific research strengths, such as those identified earlier, as well as in the following areas of specific interest to NERC (although any application of previously funded NERC research will be considered):

- underwater noise: monitoring and mitigation systems (especially for pile driving)
- marine life collision risk: models and risk-based approaches to assess, predict and manage collision risks
- data access and management: improved data collection, management, and real-time decision support methods

- cost-effective monitoring: development of advanced surveying, monitoring methods and tools
- cumulative impact assessment: tools and guidance to inform decision-making.

KTP projects can last between six and 36 months. We expect the KTP projects in this targeted call to last for typically 24 months, although shorter or longer timescales will be considered on their merit. This is intended to ensure that a challenging programme can be undertaken and that business outcomes are realised in a time frame appropriate to the needs of the sector.

The Technology Strategy Board may adopt a portfolio approach to the selection of cohort members to achieve a wide spread of specific topic areas.

Knowledge sharing

We will support knowledge sharing between the resulting KTPs by:

- holding knowledge-sharing events while the KTP projects are running, enabling the cohort to meet and discuss matters of wider interest, such as generic challenges and breakthroughs
- setting up a dedicated group on the **_connect** site (**www.innovateuk.org/_connect**) for the partners to communicate and share information
- working to promote the success of the individual KTPs and of the whole cohort
- bringing the cohort together with other relevant Technology Strategy Board funded projects.

What is KTP

KTP is Europe's leading programme helping businesses to improve their competitiveness, productivity and performance through the better use of the knowledge, technology and skills that are available within the UK knowledge base. The programme is UK-wide, headed by the Technology Strategy Board, and supported by 12 other public sector funding organisations.

A KTP involves the formation of a partnership between a business, an academic institution (or knowledge base partner) and a recently qualified person, known as the Associate. The aim of the partnership is to facilitate the transfer of knowledge and embedding of new capability within the business.

Through collaboration, these partnerships can:

- access highly qualified people to spearhead new projects
- access experts who can help take their organisation forward
- develop innovative solutions to help their organisation grow
- develop the capacity and capability to innovate more effectively beyond the KTP project.

Funding

We will fund part of the cost of running the KTP project. The level of grant that the KTP can receive depends upon the size of the company. The grant is paid through the academic partner and the level also depends on whether the academic partner uses a full economic cost model.

As an example, a small or medium-sized enterprise might contribute around a third of the project costs with the remainder of the costs being paid as grant. Currently average annual project costs are around

£60,000. Larger companies generally receive a lower level of funding. For this targeted call, previous involvement of the company in KTP will not be taken into account in determining the grant level.

Your regional KTP Adviser will be able to provide more details on funding levels.

Application process

To take part in this targeted call a business should contact one of our KTP Advisers. The KTP Advisers provide advice on eligibility and timescales, and work with all the potential KTP partners to develop the joint proposals.

The application process involves:

Stage 1: Expression of interest (EOI)

Stage 2: Approved EOIs invited to submit a grant proposal and application form

Stage 3: Our Partnership Approvals Group (PAG) makes a funding recommendation

Stage 4: For this targeted call there is also a further assessment involving the Technology Strategy Board technologists and NERC.

Both the EOI and application must be agreed by a KTP Adviser before submission by the academic partner for consideration by the Partnership Approvals Group.

KTP projects may be independent of, or complementary to, applications for the *Developing the offshore wind supply chain* competition for funding running in parallel with this KTP targeted call. However, organisations applying for both KTP and feasibility or development and demonstration

funding should ensure their proposals can stand alone and are not dependent on both applications being successful. For details of the *Developing the offshore wind supply chain* competition visit www.innovateuk.org and look under Competitions.

Visit www.ktponline.org.uk and go to 'contact us' to locate your local KTP office and/or KTP Adviser.

KTP proposals in response to this targeted call must be submitted by noon **24 April 2013**.

High-quality KTP proposals that are not selected as part of the cohort may be funded as part of the wider KTP programme.

If you have a proposal that is not within the scope of this targeted call, you may still be eligible for a KTP grant. The scheme runs throughout the year and supports projects in many fields. You should contact your local KTP Adviser in the first instance (www.ktponline.org.uk).

Further information

For more information about KTP eligibility or suitability of projects for this targeted call please contact your regional KTP Adviser. Adviser contact details are available on the KTP website www.ktponline.org.uk at the 'contact us' tab.

KTP helpline: 0300 321 4357

Email: KTP_Help@tsb.gov.uk

Publicity

As part of the application process all applicants are asked to submit a public description of the project. This should adequately describe the project but not disclose any information that may impact on intellectual property, is confidential or commercially sensitive. The titles of successful projects, names of organisations, amounts awarded and the public description will be published once the award is confirmed as final. Information about unsuccessful project applications will remain confidential and will not be made public. E-mail pressoffice@tsb.gov.uk with any queries.

The Technology Strategy Board is a business-led executive non-departmental public body, established by the Government. Its role is to promote and support research into, and development and exploitation of, technology and innovation for the benefit of UK business, in order to increase economic growth and improve quality of life.

The Knowledge Transfer Partnerships programme is part of the Government's Solutions for Business portfolio.

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Key dates

Targeted call opens	13 September 2012
Optional briefing event	13 November 2012
Deadline for applications	24 April 2013 noon
Partnership Approvals Group (PAG) meeting	16 May 2013
Funding outcomes/cohort membership announced	June 2013