

# News story: Collaborative decommissioning research TRANSCENDS the individual approach

The research will span 40 projects lasting up to 4 years each, helping to build the next generation of nuclear experts as well as developing technical solutions.

Building on a core grant of £4.6 million from the [Engineering & Physical Sciences Research Council \(EPSRC\)](#), AWE, Cavendish Nuclear, Low Level Waste Repository Ltd, National Nuclear Laboratory, Radioactive Waste Management Ltd, Sellafield Ltd and TUV SUD Nuclear Technologies are all supporting the programme through direct funding and/or supervisory expertise, use of facilities and researcher training, resulting in the total funding pot of more than £9 million.

Those working on the projects will include a mixture of PhD students and Post-Doctoral Researchers, each with academic and industrial supervisors, the latter being technical experts from within industry to ensure maximum 2-way knowledge transfer.

Known as TRANSCEND (Transformative Science and Engineering for Nuclear Decommissioning), the work builds on 2 previous programmes, DIAMOND and DISTINCTIVE, the former having concluded in 2013, with the latter due to finish in early 2019.

The consortium of 11 universities will be led by the University of Leeds and includes:

- Imperial College London
- Lancaster University
- Queen's University Belfast
- University of Birmingham
- University of Bristol
- University of Leeds
- University of Manchester
- University of Sheffield
- University of Southampton
- University of Strathclyde
- University of Surrey

The research topics to be explored by the TRANSCEND consortium align with the NDA's key themes of:

- Integrated waste management
- Site decommissioning and remediation
- Spent fuel
- Nuclear materials

TRANSCEND's work will build on the significant progress made in these areas by the DISTINCTIVE consortium, contributing to tackling the UK's nuclear legacy.

NDA Research Manager Dr Rick Short said:

Our industry benefits hugely when high-level academic research is focused at some of the challenges we face in decommissioning our nuclear legacy. We welcome this collaboration and look forward to seeing the progress that these important projects will deliver. Equally valuable will be the development of knowledge and expertise for the participants – we hope their skills will be with us for many years ahead.

Jon Martin, Head of Research at RWM, said:

Research is critical to exploring and understanding all aspects of the science associated with a future geological disposal facility that will be required to keep radioactive waste safe for many thousands of years. We welcome the news that the TRANSCEND collaboration has received approval and look forward to working in partnership with the many world-class research institutions and industry representatives involved.

NNL's Science Ambassador, Gareth Headdock, said:

As a national research lab, NNL will provide the key integrating interface between those carrying out the research and those needing solutions, to ensure they are aligned. This is primarily through the provision of industrial supervision and access to the world-leading facilities in our Central Laboratory on the Sellafield site.

We know that to achieve transformational developments in the way we approach waste management and decommissioning, we need to think differently, disrupt the established ways of working and collaborate with others like never before.

Geoff Randall, Senior Scientist at Sellafield Ltd, said:

The previous programmes have led directly to the development of new equipment like Acoustic Back Scattering technology that is being installed in a settling tank for Pile Fuel Storage Pond sludge removal. We've also been able to accelerate hazard reduction, partly as a result of fundamental research into Magnox Swarf Storage Silo materials, and prepare the next generation of

engineers and scientist to face our challenges. We are pleased to be part of this exciting new programme.

Principal Investigator for the DISTINCTIVE and TRANSCEND programmes, Professor Michael Fairweather of the University of Leeds, said:

This research consortium represents an important activity in reinforcing the industry-academia links that have grown significantly in recent years, and provides key support to underpin an academic skill base in this crucial area for the UK. The world-leading team of academic experts provides both depth and breadth across all areas of current research need, and the strong support of our key industry partners validates the usefulness of the research programme we will undertake.

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## **Notice: TS23 1PX, Tees Eco Energy Ltd: environmental permit issued**

The Environment Agency publish permits that they issue under the Industrial Emissions Directive (IED).

This decision includes the permit and decision document for:

- Operator name: Tees Eco Energy Ltd
- Installation name: Billingham Reach Energy for Waste
- Permit number: EPR/NP3537YY/A001

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## **Press release: Bluetongue virus detected and dealt with in two imported cattle**

The UK's Deputy Chief Veterinary Officer has urged farmers to remain vigilant for bluetongue virus after the disease was successfully picked up in two cattle imported from France through our routine post-import testing regime.

The Animal and Plant Health Agency (APHA) and the Pirbright Institute

identified the disease in the animals when they were brought to North Yorkshire in England from an assembly centre in Central France, where bluetongue continues to slowly spread.

Bluetongue does not affect people or food safety. The virus is transmitted by midge bites and affects cows, goats, sheep and other camelids such as llamas. It can reduce milk yield and cause infertility and in the most severe cases is fatal for infected animals. The midges are most active between May and October and not all susceptible animals show immediate signs of contracting the virus.

Action is being taken to ensure the risk of spread of the disease is reduced, with movement restrictions at the affected premises. The two cattle were isolated and have been humanely culled.

Strict rules on the movement of livestock from regions affected by bluetongue are already in place and farmers are reminded that animals imported from these regions must be accompanied by the relevant paperwork to clearly show they meet certain conditions designed to reduce disease risk, such as correct vaccination.

Following the successful interception of the infected animals, the UK remains officially bluetongue-free, the risk of the disease remains low and exports are not affected.

Deputy Chief Veterinary Officer for the UK, Graeme Cooke, said:

Bluetongue does not pose a threat to human health or food safety, but the disease impacts farming, causing reduced milk yield in cows and infertility in sheep.

This detection is an example of our robust disease surveillance procedures in action but must highlight to farmers the risks which come with bringing animals from disease-affected areas into their herds. Regulations and systems are in place for the benefit of our UK livestock industry.

It is also a clear reminder for farmers that the disease remains a threat, despite coming towards the end of the season when midges are active.

Farmers must remain vigilant and report any suspicions to APHA. Farmers should work with their importer to make sure effective vaccination needs are complied with, source animals responsibly and consider the health status of their own herd if they are not protected

Movement restrictions will remain in place on the premises for at least several weeks until testing rules out spread via local midges.

Farmers have the option to send animals without fully compliant paperwork back to France or to cull them as a measure to reduce the risk of disease spreading to susceptible UK livestock.

The UK Government has worked closely with a number of groups to raise awareness of the threat of bluetongue through the Joint campaign Against Bluetongue (JAB). The most recent case of the disease in the UK came in 2007. The UK has been officially free from the disease since July 2011.

More information about bluetongue is [available here](#).

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## **[Press release: Marking 12 months of the new Tonbridge to Pembury bypass](#)**

35,000 drivers a day are benefiting from the major upgrade on the A21 linking Hastings and London, between Tonbridge and Pembury in Kent, which was officially opened on 21 September last year.

The upgrade to this busy section introduced a new dual carriageway to speed

up journeys, improve safety, reduce congestion and boost the economy. Two new junctions were built, as well as better, safer, access to the A21 for the homes and businesses along it, with dedicated new facilities for pedestrians, cyclists and equestrians.

And residents are delighted with how much of a difference the new bypass has made. Melvyn, who has lived in the area for 34 years, said that the new bypass is his "favourite bit of road – it was terrible before but now it is absolutely brilliant!".

Jade, who has lived in the area for four years, said:

It was dreadful before. But now, a journey that used to take me forty minutes now takes four.

And Siobhan who has lived locally all her life, said:

the road was awful before. It has massively improved the flow of the traffic and it has made my commute a lot nicer.

Local businessman Mark Chapman of Gillman Car Services, said:

From a business transport perspective it's made life an awful lot better, it really has improved things... It's easier, it's quicker and frankly it's prettier.

Local people have been making use of the shared use path which runs the full length of the scheme. This is also suitable for cyclists, horse riders and pedestrians. Working with Kent County Council, Highways England extended it to tie in with Tonbridge railway station at the north end of the scheme and Pembury hospital at the south, making it even more useful to residents, commuters and the local community.

The new A21 Tonbridge to Pembury bypass

It's not just the improvements to the A21 which have benefitted the communities and road users this past year. 18 hectares of new woodland have been created as part of the project – twice that needed for construction – with cutting edge translocation techniques, to preserve its ecological make up. New areas of heathland have been created and an ancient barn has been carefully taken down, restored and reconstructed at a heritage museum.

One of the South East's few surviving timber framed barns, built originally in the late 18th and early 19th centuries, has been restored as part of a multi-million conservation project thanks to funding from Highways England.

The buildings were in the path of the widening scheme of the Tonbridge to Pembury section of the A21 in Kent, so were painstakingly moved and rebuilt

at the Weald and Downland Museum.

Simon Elliott, Highways England construction programme manager said:

I am delighted that these much-needed improvements to the A21 are delivering such a wide range of benefits, significantly improving journeys on this busy road and making life easier for cyclists, pedestrians and horse riders while simultaneously respecting the environment and our cultural heritage. We will look to take the same approach with the other road upgrades we are delivering in Kent and across the country.

One of the timber framed barns, originally in the path of the new Tonbridge to Pembury bypass, which has been moved to the Weald and Downland Living museum

Work started on the Tonbridge to Pembury bypass in spring 2015. The new road opened in phases, starting with the new flyover at Longfield Road, which partially opened in July 2017. The road layout has also been improved for properties along the A21 with a new junction to provide safer access.

### **General enquiries**

Members of the public should contact the Highways England customer contact centre on 0300 123 5000.

### **Media enquiries**

Journalists should contact the Highways England press office on 0844 693 1448 and use the menu to speak to the most appropriate press officer.