NDA develops ground-breaking programme for waste management

News story

Last week, the NDA group held its first Integrated Waste Management virtual event announcing its plans for an Integrated Waste Management (IWM) Programme.



Integrated Waste Management Programme

The NDA's Radioactive Waste Strategy, published in September 2019, included a commitment to create an IWM Programme, which would enable the whole of the nuclear industry to manage its radioactive waste in a more sustainable, efficient and integrated way, driving greater value for the UK taxpayer.

Corhyn Parr, the NDA's Director of Integrated Waste Management, said: "We're right at the start of our IWM journey, but we're looking to reduce the costs of decommissioning, avoiding unnecessary use of resources such as waste packaging conditioning and storage to make our sites safer, sooner.

"Working together, we will create a common approach to radioactive waste management, share good practice and learning from experience — from within the UK and internationally."

The IWM Programme supports closer and more collaborative working across the NDA group's waste activities, allowing waste producers to manage their radioactive waste more flexibly and effectively, using proportionate waste management solutions.

During the event, representative from right across the NDA group shared their views on how the IWM Programme holds the potential to deliver real impact.

This was the first opportunity to discuss the new approach of managing radioactive waste with various independent stakeholders, including regulators, local authorities and the supply chain.

Game Changers projects hit record high

The 9 projects were chosen for funding from more than 40 entries, all showing an incredible high quality of ideas and innovation.

All 3 challenges called for innovative solutions to land remediation requirements.

Around 130 attendees from more than 70 organisations joined Game Changers webinars organised to detail 2 challenges — one focused on the characterisation of landfill and disposal areas, the other on making better use of existing in-ground monitoring infrastructure to develop better understanding of groundwater hydrology and subsurface contamination, especially around our Magnox Swarf Storage (MSSS).

The third challenge — the KTN-iX competition, launched by the Knowledge Transfer Network (KTN), focused on leak mitigation and groundworks near sensitive structures. One of the central aspects of this challenge also focussed on the decommissioning of MSSS.

All the applications received were reviewed by a specialist panel of Sellafield Ltd experts and Game Changers team leaders.

Feasibility funding has been awarded to a total of 10 organisations working on 9 projects spread across the 3 challenges as follows:

Characterisation of landfill and disposal areas

University of Birmingham, Ground-Gas Solutions Ltd, ANAMAD Ltd and Hydrock working in partnership with Createc.

Groundwater monitoring

Hybrid Instruments Ltd, University of Liverpool and Gutteridge, Haskins and Davey Ltd.

Leak mitigation and groundworks near sensitive structures

Aubin Ltd and Resolute Engineering Services.

Each organisation will now use the funding to work with Sellafield Ltd to

learn more about their challenge and shape their ideas, working towards a full business case.

John Heneghan, Contaminated Land Specialist at Sellafield Ltd, said:

We've been genuinely impressed both by the quality and the range of the technology presented in the applications. It made our job of selection very difficult but I'm confident we will see promising potential realised.

Game Changers is an innovation programme that identifies and develops cutting-edge technologies that could provide significant advances in nuclear science and engineering.

The programme is delivered by the National Nuclear Laboratory (NNL) and FIS360, specialists in supporting innovative technologies from concept through to commercial production.

Game Changers publish details of challenges on behalf of partner organisations; Sellafield Ltd, NNL and Dounreay.

The challenges are open to anyone from any sector who can offer a viable solution, from small and medium-sized enterprises to universities and large corporate organisations.

Solutions could be found in technologies already used in other sectors such as oil and gas or bio-engineering which could be developed for the nuclear arena. Ideas are submitted through a very simple application process.

To find out more visit the Game Changers website

<u>Suffragan Bishop of Dorchester: 24</u> November 2020

Press release

The Queen has approved the nomination of the Venerable Gavin Andrew Collins MA to the Suffragan See of Dorchester.



The Queen has approved the nomination of the Venerable Gavin Andrew Collins MA, Archdeacon of the Meon, in the diocese of Portsmouth to the Suffragan See of Dorchester, in the diocese of Oxford, in succession to the Right Reverend Colin William Fletcher OBE who resigned on 16 November 2020.

Background

Gavin was educated in Law at Trinity Hall, Cambridge, and worked as a solicitor in the City of London, before training for ministry at Trinity College Bristol. He served his title at St Barnabas, Cambridge, in the diocese of Ely and was ordained Priest in 1998.

In 2002, Gavin was appointed Vicar at Christ Church, Chorleywood, in the diocese of St Albans and, from 2006, he additionally served as Rural Dean of Rickmansworth.

In 2011, Gavin took up his current role as Archdeacon of The Meon in the diocese of Portsmouth.

Gavin is married to Christina, who is a Health Visitor, and they have three young adult children.

Published 24 November 2020

Government investment in fusion energy boosts British economy by £1.4 billion

The British economy has gained £1.4 billion from the Government's direct investment in fusion energy over the past decade and an average of 4,000 jobs each year.

The findings were revealed in an <u>economic study conducted by London Economics</u> and <u>released today by the Department for Business, Energy and Industry Strategy</u>.

London Economics looked at the financial and economic impacts of the UK's public investments in the UK Atomic Energy Authority's (UKAEA's) fusion research from 2009-2019 and found:

- Allocated funding of £346.7 million resulted in a direct gain of £1.4 billion
- For every £1 invested in UKAEA, approximately £4 is generated in return
- Approximately 36,900 direct and indirect job years were created through direct employment and related activities — equivalent to the creation of 4,000 jobs on average each year
- The UK economy gained up to £363.7 million from contracts directly won by UK organisations for the international fusion megaproject, ITER
- UKAEA's contribution to understanding of fusion energy was identified to be significant, with UKAEA having increased the volume, quality and reputation of UK fusion and related research. Without UKAEA, the field of fusion research in the UK would likely be heavily fragmented with far less cooperation
- Advances to "fusion-adjacent" technologies through technology transfer from fusion. These include advancements in robotics, developments of new materials and contributions to computing and artificial intelligence. Future applications are expected in other fields, such as space exploration, mining and healthcare, and transport.
- Indirect benefits in upskilling of the UK workforce through an improvement in skills, knowledge transfer between academia and industries, improved fusion reactor designs and the creation of standards for fusion and contribution to public policy and strategy.

Fusion energy is a form of low-carbon energy whereby the power of the sun is replicated on earth.

At equal mass to traditional energy sources, fusion energy releases nearly four million times more energy than the burning of coal, oil or gas, and four times as much as nuclear fission reactions.

It promises minimal impact to the environment, long-term reliability and weather independence.

In addition to the direct benefits listed in the report, fusion research is expected to deliver numerous additional economic gains, such as market, network and knowledge spillovers, which arise when economic activities in one part of a market have effects elsewhere.

The study provides strong evidence that there are already significant benefits flowing from the UK Government's investment in fusion.

This points to significant future benefits to the UK economy from further development, demonstration and commercialisation of fusion technology over the coming decades.

Since the report was compiled, the UK Government has announced £220 million of funding for UKAEA's <u>Spherical Tokamak for Energy Production ('STEP')</u> <u>fusion power plant programme</u>.

Professor Ian Chapman, UKAEA CEO, said: "The report highlights much that is positive about UKAEA's work.

"However, this is just the tip of the iceberg with regards to UKAEA's capabilities and fusion energy's projected contribution to our shared economic, ecological and social future.

"Fusion energy research and development needs long-term and large-scale investments.

"There are substantial benefits fusion research and development can deliver not only to the economy, but also to the UK's net zero target by 2050, which means going beyond the decarbonisation of electricity.

"Our mission is to lead the delivery of sustainable fusion energy and maximise scientific and economic benefit."

For more information please contact Nick Holloway in UKAEA's Communications Team at nick.holloway@ukaea.uk.

Farmers and waste companies urged to check waste management processes or face enforcement action

Farmers, agricultural businesses and waste companies are being urged to check their waste management processes or face enforcement action following a concerning increase in contaminated agricultural plastic waste being intercepted at shipping ports, bound for illegal export.

This year the Environment Agency (EA) has intercepted numerous illegal shipments of contaminated agricultural plastic waste, including silage wrap, which were destined for countries around the world.

In order to legally export contaminated agricultural plastic waste including silage wrap, prior consent is required from both the source country and its destination, alongside all countries through which it travels. These wastes cannot be exported unless the permission of the EA and applicable overseas authorities has been obtained in advance.

Malcolm Lythgo, Head of Waste Regulation at the Environment Agency, said:

We take waste crime very seriously, with teams stationed across the country to disrupt illegal activity. It risks real damage to people and natural environments both at home and abroad. "We know that farmers and the agricultural sector care deeply about the

environment and don't want to see their waste being illegally exported, but unfortunately we are stopping an increasing amount of contaminated agricultural plastic waste, and it's vital that everyone knows where their waste ends up.

That is why we want to remind farmers and agricultural businesses that they have a legal duty of care to conduct checks on those who collect, store or treat their waste. Anyone involved in its illegal export, from the producer to the exporter, is liable and could face severe penalties.

To ensure that waste is handled properly through to its final recovery or disposal point, farmers and agricultural businesses should always:

- <u>use the EA website to check that the waste firms they are dealing with</u> have the necessary authorisations for carrying, dealing or brokering waste:
- ensure the waste is accurately described on waste transfer documentation;
- ask where the waste is going;
- ask for evidence that the waste company is authorised to store or treat it and what they intend to do with the waste afterwards.

To disrupt the illegal international waste trade, the Environment Agency continues to visit sites and intercept those who deliberately misdescribe waste as suitable for export without the necessary permissions, as well as targeting illegal shipments at ports. The EA also continues to target those who fraudulently claim packaging export recovery notes against non-packaging material including silage wrap.

The Agency is also a member of the newly formed <u>Waste Compliance Taskforce</u> (<u>WACT</u>) and is working with industry to tackle the illegal export of waste.

Steve Morgan, WACT member and Policy & Infrastructure Manager at plastics recycling charity RECOUP, said:

We have created an Export Waste Crime Working Group which is initially focusing on plastic and brings together experts from across industry and government to increase resilience against waste crime and engage with the UK's environmental regulators to support more effective ways to prevent and tackle the illegal activity blighting our industry.

There are no quick or simple fixes to these challenges, but already we have seen positive steps in terms of engagement and open dialogue with the Environment Agency, and we look forward to carrying this positive activity forward to both tighten the controls around illegal exports and increase confidence in the UK as a quality exporter of material.

Further information about complying with waste duty of care can be found on the Environmental Services Association's 'Right Waste Right Place' website.

Anyone with information regarding the illegal export of waste including agricultural plastics can contact the EA's Illegal Waste Exports team at intelligence@environment-agency.gov.uk or anonymously via Crimestoppers on 0800 555 111.

For advice on applying for an export notification from the Environment Agency, please contact <u>AskShipments@environment-agency.gov.uk</u>.