

Robotic superhero meets identical twin in fusion energy machine

A Jenga-playing robot with a human touch used to maintain a fusion energy machine – where temperatures can be hotter than the sun – has been reunited with its identical superhero twin for the first time since 1999.

Both known as MASCOT, the highly dextrous manipulators are being put through their paces in a series of practice ‘rescue missions’, where each saves its stranded sibling to limit potential disruption to world-leading fusion energy research at the UK Atomic Energy Authority (UKAEA), Oxfordshire.

The development of ‘self-recovering’ robots to go where humans can’t, is key to making fusion energy a safe, sustainable, low-carbon energy source for generations to come.

The £1.5 million, 32-month project has been funded by the EUROfusion programme and worked on by over 40 engineers at UKAEA’s robotics laboratory, RACE (Remote Applications in Challenging Environments) to support future science experiments on fusion energy machines including JET and its successor, ITER, in the south of France along with fusion powerplants.

Gary Hermon, Remote Handling Lead Technologist at UKAEA, said: “Robotic systems are an integral part of putting fusion energy on the grid for the design and maintenance of future fusion powerplants. We can’t afford to have a robot that gets stuck!

“The second MASCOT is now in place to train our remote handling team in rescue tasks ensuring its twin can always be saved when working on the maintenance of JET, our machine where EUROfusion researchers set a sustained fusion energy record announced earlier this year.”

JET is the currently the only fusion energy machine in the world that uses remote handling and robotics for maintenance, placing the UK at the forefront of this technology and expertise.

The meeting of the two MASCOTs is shown in this [video](#) where engineers compete in a game of Jenga to hone their skills.

Each MASCOT has two arms with grippers that can operate over 900 bespoke tools. The MASCOTs are each deployed into JET – or its replica training vessel – on the end of an articulated 12-metre boom, driven by UKAEA’s remote handling team from a control room fitted out with live camera feeds and VR screens for additional precision views.

Skilled operators use two robot arms to control each MASCOT as it performs tasks including replacing tiles, welding, cutting, dust collecting and surveying to maintain UKAEA’s fusion energy machine.

Robotics and other advanced technologies developed for fusion are expected to

be useful for applications across other sectors such as nuclear decommissioning, space exploration, mining, healthcare and transport.

To find out more about remote handling and robotics at UKAEA, visit race.ukaea.uk.

Companies House London office and counter services will not be re-opening

News story

The Companies House London office and our counter services in Belfast, Edinburgh and Cardiff will not be re-opening.



In response to the coronavirus (COVID-19) pandemic, the Companies House office in London and the public counters in Cardiff, Belfast and Edinburgh were closed.

Working with customers, we've put new ways in place to submit documents, enhancing our digital offering and reducing reliance on public counters.

As we continue to transform our services to provide a truly modern and digital service, it's been decided that our public counters will not re-open.

This means that the Companies House office in London, which has been closed since March 2020, will also not be re-opening.

It's quicker and easier to file information online. [Our online services](#) are available 24 hours a day, 7 days a week.

[Watch our YouTube videos](#) for guidance on how to use our online services.

ASOS, Boohoo and Asda investigated over fashion 'green' claims

- CMA to get to the bottom of whether the firms' green claims are misleading customers
- Wider investigation into fashion sector to continue as the CMA will also consider whether to put additional firms under the microscope
- CMA interim Chief Executive says: "Should we find these companies are using misleading eco claims, we won't hesitate to take enforcement action – through the courts if necessary"

The Competition and Markets Authority (CMA) will be scrutinising eco-friendly and sustainability claims made by ASOS, Boohoo and George at Asda about their fashion products, including clothing, footwear, and accessories. The move comes as part of its [ongoing investigation into potential greenwashing](#) and follows concerns around the way the firms' products are being marketed to customers as eco-friendly.

In January this year, the CMA turned its eye to the fashion sector, where an [estimated £54 billion is spent by consumers annually](#), and its initial review identified concerns around potentially misleading green claims. These included a number of companies creating the impression that their products were 'sustainable' or better for the environment – for example by making broad claims about the use of recycled materials in new clothing – with little to no information about the basis for those claims or exactly which products they related to.

Today, the CMA has launched investigations into ASOS, Boohoo and George to get to the bottom of its concerns. Among other things, these include whether:

- the statements and language used by the businesses are too broad and vague, and may create the impression that clothing collections – such as the 'Responsible edit' from ASOS, Boohoo's current 'Ready for the Future' range, and 'George for Good' – are more environmentally sustainable than they actually are
- the criteria used by some of these businesses to decide which products to include in these collections may be lower than customers might reasonably expect from their descriptions and overall presentation – for example, some products may contain as little as 20% recycled fabric
- some items have been included in these collections when they do not meet the criteria
- there is a lack of information provided to customers about products included in any of the companies' eco ranges, such as missing information about what the fabric is made from

- any statements made by the companies about fabric accreditation schemes and standards are potentially misleading, such as a lack of clarity as to whether the accreditation applies to particular products or to the firm's wider practices

Sarah Cardell, interim Chief Executive of the CMA, said:

People who want to 'buy green' should be able to do so confident that they aren't being misled. Eco-friendly and sustainable products can play a role in tackling climate change, but only if they are genuine.

We'll be scrutinising green claims from ASOS, Boohoo and George at Asda to see if they stack up. Should we find these companies are using misleading eco claims, we won't hesitate to take enforcement action – through the courts if necessary.

This is just the start of our work in this sector and all fashion companies should take note: look at your own practices and make sure they are in line with the law.

The CMA has written to the 3 firms outlining its concerns and will use its information gathering powers to obtain evidence to progress its investigation. How the review develops will depend on the CMA's assessment of the evidence before it. Possible outcomes include securing undertakings from the companies to change the way they operate, taking the firms to court, or closing the case without further action.

The move comes after the CMA published its [Green Claims Code](#) in September 2021. The code aims to help businesses understand how to communicate their green credentials, while avoiding the risk of misleading shoppers.

The CMA's [wider investigation into misleading environmental claims](#) is ongoing and other sectors will come under review in due course.

1. ASOS sells fashion items through the website ASOS.com. George at Asda sells fashion items online at direct.asda.com/george and in store. Boohoo sells fashion items through a number of websites, including Boohoo.com, BoohooMan.com, DorothyPerkins.com, Oasisfashion.com and PrettyLittleThing.com.
2. The CMA is at the initial stage of its investigation. Accordingly, it should not be assumed that any business under investigation has broken consumer protection law.
3. The key piece of consumer protection legislation relevant to the CMA's Green Claims Code, and to the enforcement cases announced today, is the Consumer Protection from Unfair Trading Regulations 2008 (CPRs). The CPRs contain a general prohibition against unfair commercial practices and specific prohibitions against misleading actions and misleading omissions.
4. Examples and case studies can be found in the CMA's [The Green Claims Code: Environmental Claims on Goods and Services](#).

5. Read more about how the CMA is supporting low carbon growth in its [2022/23 Annual Plan](#).
 6. Media enquiries should be directed to press@cma.gov.uk or 020 3738 6460.
 7. All enquiries from the general public should be directed to the CMA's General Enquiries team on general.enquiries@cma.gov.uk or 020 3738 6000.
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Military families to benefit from £3,000 of childcare support

- Service families with children aged 4 to 11 years to benefit from wraparound childcare
- More than 20,000 service children will be eligible for 20 hours free childcare per week
- Defence Secretary outlines further family support for UK Armed Forces personnel

The Wraparound Childcare (WAC) scheme will provide up to 20 hours per week of free childcare before and after school during term time for eligible military parents with children aged 4 to 11 years.

Its roll-out follows successful trials at pilot sites around the country over the last two years and from the Autumn school term will be open to more than 20,000 children across the UK.

While childcare costs vary across the UK, serving personnel are expected to save around £3,000 per child per year based on typical costs.

The wraparound childcare scheme provides practical support to some of the unique challenges faced by service families, such as frequent relocations that require military families to move home, find new schools and childcare provision, and adjust their lives. This is part of the Armed Forces' commitment to being an inclusive, modern and flexible employer.

Defence Secretary Ben Wallace said:

Our Armed Forces personnel sacrifice a great deal in the service of their country and whether it is providing flexible working or accommodation options, I am determined they feel supported in their family life.

Providing free wraparound childcare is another clear way of supporting the unique challenges they face as parents and will go a long way to helping them to enjoy a thriving family life as well as a thriving career.

Corporal Vicki Taylor, Royal Air Force said:

Everyone I have spoken to who also benefits from wraparound childcare agrees that it's a fantastic scheme. For my family it saved us financially, reduced our stress levels, and has given us more quality time with our children.

The wraparound childcare [pilot scheme](#) began in September 2020 and an expansion in September 2021 meant six sites – Woolwich Barracks, RAF High Wycombe and RAF Halton, Catterick Garrison, and in Lincolnshire and the Plymouth area – took part. Over 1,900 children benefited from support at these sites during the pilot.

This scheme is part of the wider package of support to service personnel and their families, as laid out in the [Armed Forces Families Strategy](#), and has already had a positive impact on service families involved. Recent feedback shows an improvement in family wellbeing, increased contentment with service life for non-serving partners as well as the huge financial savings.

The Ministry of Defence is committed to supporting service families and has also introduced [flexible working arrangements](#), expanded offerings to co-habiting couples and extended [Help to Buy](#), giving our armed forces the chance to get a foot on the housing ladder.

[£54m heat network funding helps households ditch fossil fuels](#)

- Over £54 million in UK government funding will enable the supply of clean energy to nearly 28,000 homes and businesses in England
- cash will support the rollout of heat networks helping reduce energy bills and support local regeneration
- move away from costly fossil fuels will see heat networks also help shore up the UK's energy independence

Nearly 28,000 homes and businesses will be shielded from costly fossil fuels as the UK government awards more than £54 million to innovative heat network projects in England.

Funding announced today (Friday, 29 July) will support the development of schemes in London, Bedfordshire and Woking that use low-carbon heat sources such as heat pumps and energy from waste to warm properties.

The move will mean home and business owners can ditch boilers fuelled by more costly oil and gas, helping reduce energy bills and boost the country's

energy independence. The cash injection will enable the projects to develop and complete construction of the networks providing energy to households and commercial sites including shops, offices and public buildings.

As well as helping households move away from expensive fossil fuels, the funding helps address the urgent need to reduce the carbon footprint of heating homes and workspaces, which makes up almost a third of all UK carbon emissions. The annual carbon savings from these 4 projects is the equivalent to taking over 5,500 cars off the road or the average household use of over 400 kettles.

Minister for Business and Energy Lord Callanan said:

These projects will transform how tens of thousands of households and businesses keep their properties warm.

By investing in cutting-edge low-carbon heating technologies we are helping to secure a lasting move away from using fossil fuels and protecting consumers from the costs that are driving up energy bills at a time of high global prices.

Almost £28 million will fund 2 innovative heat network projects in Haringey in London, with nearly £17 million going to a project in Stewartby in Bedfordshire and a further £9 million for one in Woking.

A heat network is a distribution system of insulated pipes that takes heat from a central source, such as large-scale heat pumps or heat recovered from industry and delivers it to a number of domestic or non-domestic buildings.

Heat networks are uniquely able to unlock otherwise inaccessible large-scale renewable and recovered heat sources, such as large rivers and industrial heat. This allows them to reduce bills, support local regeneration and provide a cost-effective way of reducing carbon emissions from heating, whilst simultaneously boosting energy security. Heat networks which use renewable sources, such as ambient heat and geothermal, also help to increase the UK's energy independence and reduce our reliance on imported fossil fuels.

The projects receiving funding are:

- Haringey London Borough Council has been awarded £27.8 million funding for 2 heat network projects – Wood Green District Heating Network (£10.6 million) and the Tottenham Hale and Broadwater Farm District Heating Network (£17.2 million) – which will collectively supply heat to almost 10,000 homes when fully built out. Both heat networks will be supplied primarily by heat generated by the Energy Recovery Facility being built at the Edmonton Eco Park
- Thamesway Energy Limited has been awarded over £9.4 million for a major expansion to an existing heat network which supplies heat to public sector, commercial and residential customers in Woking town centre. The investment in new infrastructure will enable up to 3,450 new homes to be

supplied as part of a major infrastructure scheme in the west and south of Woking

- Vital Energi has been awarded £16.9 million to develop a heat network using waste heat from the Rookery South Energy Recovery Facility, which is located in a former brick clay extraction pit near Stewartby in Bedfordshire. Up to 12,000 homes and non-domestic buildings could eventually be connected to the scheme

Projects located across England and Wales have been awarded funding through the scheme, including in Bristol, Gateshead, Leeds and Liverpool. A total of over £250 million has been awarded since 2018, which will help households and businesses across the regions to access low carbon heating

Earlier this year the government introduced its Energy Security Bill which will increase consumers protections. For the first time Ofgem will be appointed to oversee regulation of the heat networks market – some 480,000 consumers across Britain – to ensure consumers are charged a fair price, including by enabling the regulator to investigate disproportionate prices and take enforcement action.

- The £54 million funding announced today comes from the government's £320 million [Heat Networks Investment Project](#), which supports the development of heat networks across England and Wales
- HNIP applicants are expected to adhere to Heat Trust standards of customer protection, or equivalent, as a condition of eligibility
- Heat Networks will play a vital role in decarbonising heat, which underpins the [Ten Point Plan for a Green Industrial Revolution](#), and are included in the [Energy White Paper](#)
- a list of awards announced so far can be found on the website of the [HNIP delivery partner, Triple Point](#)
- the £288 million [Green Heat Network Fund](#) is the UK government's successor funding scheme to HNIP and will support low-carbon technologies like heat pumps, solar and geothermal energy in the roll out of the next generation of heat networks
- heat network projects are further supported through the [Heat Networks Delivery Unit](#) (HNDU)