

Government investment to help build robots for nuclear plants and batteries for electric aeroplanes

- £65 million government cash injection to help make the UK the global home for future technologies in battery development, robotics and advanced healthcare treatments
- part of the funding will go towards the development of robots that inspect, maintain and repair nuclear power stations, satellites and wind turbines
- the extension of the Industrial Strategy Challenge Fund will help the UK build back better by transitioning to a low carbon economy and developing solutions for an ageing society

Future technologies that could transform people's lives such as high-performance batteries for electric vehicles, advanced medical treatments and robotics will receive a £65 million government cash boost today (Thursday 10 September).

The funding will be available through the government's [Industrial Strategy Challenge Fund](#), which has been extended today to help develop solutions to some of the biggest global challenges, including climate change and tackling diseases such as cancer and Alzheimer's.

Of the investment announced today:

- nearly £44 million to develop the next generation of high-performance batteries for electric vehicles and wind turbines, which could also be used for new technologies such as electric aeroplanes. The funding will also be used to complete a first-of-its-kind [UK Battery Industrialisation Centre](#), in Coventry, West Midlands, creating 100 high-skilled jobs. Organisations across the automotive, rail and aerospace sectors will have access a unique battery production facility combining manufacturing, experimentation and innovation
- £15 million to enable universities, research organisations and businesses to build robots to inspect, maintain and repair nuclear power stations, satellites and wind turbines. The robotics will also be used to address new problems resulting from the pandemic, including ones that can operated remotely and make contact-free deliveries or move hospital beds.
- £6.5 million will be allocated to the [Advanced Therapy Treatment Centre](#) network to accelerate patient access to advanced therapies through the development of specialised infrastructure for the delivery of these

products in the NHS. These cell and gene based therapies are aimed at the treatment of life-limiting and inherited diseases such as cancer, Duchenne muscular dystrophy or cystic fibrosis.

Science Minister Amanda Solloway said:

We want to build back better by putting the UK at the forefront of new technologies to create high-skilled jobs, increase productivity and grow the economy as we recover from coronavirus.

This new funding will strengthen the UK's global status in a range of areas, including battery technologies for electric vehicles and robotics, helping us develop innovative solutions to some of our biggest global challenges and creating jobs in rewarding careers right across the country.

Challenge Director for [The Faraday Battery Challenge](#) Tony Harper said:

In order for batteries to play their full environmental and economic role in achieving Net Zero we need to deploy at scale and build supply chains for today's technology, shift from strong potential to commercial dominance in a new generation of batteries and continue to build world-class scientific capability to sustain us into the future. The announcement today confirms our commitment and determination to build on the hard-won progress the UK has made in the last 3 years on all these fronts and to accelerate progress post COVID-19.

CEO of the [Cell and Gene Therapy Catapult](#) Matthew Durdy said:

The ATTC network is a fantastic example of effective government intervention and the international community recognises this as part of the UK's leadership in the field. Bringing together companies, the NHS and regulatory bodies to make the use of cell and gene therapies easier, more cost effective, and more widespread both boosts the industry and brings these life changing medicines to patients who need them.

The fact that 12% of global clinical trials in cell and gene therapy take place in the UK and half of those involve ATTCs is a testament to the success of this highly respected programme.

Andrew Tyrer, Challenge Director for [Robotics for a Safer World](#) said:

I am delighted that the government has provided an extra £15 million funding to help academics and businesses bridge the gap to:

complete on-going deliverables set against the Robots for a Safer World Challenge, and also; utilise knowledge gained to the benefit of new sectors, ahead of this Autumn's spending review.

Established in 2017, the Industrial Strategy Challenge Fund is delivering £2.6 billion of government investment with the aim of funding world-leading research and highly innovative businesses to address the biggest industrial and societal challenges.

Today's announcement furthers the government's commitment through its [R&D Roadmap](#) to put the UK at the forefront of transformational technologies and is part of the government's wider commitment to increase R&D investment to 2.4% of GDP by 2027.

- Nearly £44 million of the funding announced today will be allocated to the government's Faraday Battery Challenge to drive forward ground-breaking research in battery development, overseen by the [Faraday Institution](#).
- the Faraday Institution anticipates that the overall workforce in automotive and electric vehicle battery sectors could grow by 29% from 170,000 in 2020 to 220,000 employees by 2040.
- through the Robotics for a Safer World challenge, the government initiative has already created nearly 300 new jobs in the UK and around the world, with the new funding expected to increase the number of high-skilled roles and attract more businesses to the robotics sector
- since the establishment of Advanced Therapy Treatment Centres in 2017, they have successfully promoted the adoption of advanced cell and gene therapies for a range of conditions including several types of cancer. The Centres are helping the UK take advantage of the global market in advanced therapies, with around 1 in 8 global trials taking place across the country
- the UK has a growing advanced therapy sector with over 90 companies operating in this area – today's announcement will help drive further growth and put the UK on the path to lead the world in advanced therapies
- the Advanced Therapy Treatment Centre network receiving funding includes the Innovate Manchester Advanced Therapy Centre Hub (iMATCH); the Midlands-Wales Advanced Therapy Treatment Centre (MW-ATTC) and the Northern Alliance Advanced Therapies Treatment Centre (NA-ATTC), coordinated by the Cell and Gene Therapy Catapult
- the Industrial Strategy Challenge Fund has supported 1,820 organisations since its inception and almost 500 projects across the UK have received government investment. Businesses can apply for funding [here](#)