

# Genetic Technology Bill to take on most pressing environmental problems of our time

Legislation to unlock new technologies to boost food production and support farmers to grow more productive crops will return to Parliament today – paving the way for Britain to become the best place in the world to invest in agri-food research and innovation

Third Reading of the Bill is scheduled for today (Monday 31 October) and is expected to be introduced in the House of Lords the following day.

By introducing a more proportionate and science-based regulatory system for precision-bred plants and animals, it will unlock opportunities to develop crops that are more resilient against disease and the effects of climate change such as drought and flooding, and less reliant on pesticides.

Farming Minister Mark Spencer said:

We are already seeing how new genetic technologies can increase yields, make our food more nutritious and result in crops that are more resistant to disease and weather extremes.

British scientists are leading the world in precision breeding and this Bill will put Britain at the forefront of agri-research and innovation – opening the door for more investment and continuing our work to provide farmers with the tools they need to innovate and use new, smart technologies.

The Genetic Technology (Precision Breeding) Bill covers precision-bred plants and animals developed through techniques such as gene editing, where the genetic changes could have occurred naturally or through traditional breeding methods. This is different to genetic modification (GM), which produces organisms containing additional genes.

While there is great potential for increasing innovation, the government recognises that there is a need to safeguard animal welfare in the new regulatory framework. That is why we are taking a step-by-step approach, enabling use of precision breeding technologies with plants first followed by animals later.

Defra's Chief Scientific Adviser Gideon Henderson said:

This is an important time for agricultural science. The ability to use gene editing to make precise, targeted changes to the genetic code of organisms, in a way that can mimic traditional breeding,

enables development of new crop varieties that are more resistant to pests, healthier to eat, and more resilient to drought and heat as climate changes.

For centuries, traditional breeders have made use of our understanding of genetics to breed plant varieties with desirable characteristics. Gene editing allows precision breeding to make the same type of genetic changes in a far more efficient and precise way, significantly reducing the time needed to create new varieties. Precision breeding is a powerful and important tool to help us tackle the challenges of biodiversity and climate change, while feeding a still growing global population.

Professor Nigel Halford, Crop Scientist at Rothamsted Research, said:

It is tremendously exciting to see this Bill progress to the House of Lords because it will pave the way for this powerful technology to be used in crop improvement rather than just research.

We are already behind much of the world in the application of precision breeding techniques and we are keen to see the Bill become law as soon as possible.

#### **Further information:**

##### **The Bill will:**

- Remove plants and animals produced through precision breeding technologies from regulatory requirements applicable to the environmental release and marketing of GMOs (Genetically Modified Organisms).
- Introduce two notification systems; one for precision bred organisms used for research purposes and the other for marketing purposes. The information collected will be published on a public register on GOV.UK.
- Establish a proportionate regulatory system for precision bred animals to ensure animal welfare is safeguarded. We will not be introducing changes to the regulations for animals until this system is in place.
- Establish a new science-based authorisation process for food and feed products developed using precision bred plants and animals.

##### **Opportunities brought by the new legislation:**

###### **Climate resilient wheat**

- Developing wheat that is resilient to climate change will help to increase food production from a crop that 2.5 billion people are dependent on globally.
- Researchers at the John Innes Centre in Norwich have used gene editing techniques to identify a key gene in wheat that can be used to introduce traits such as heat resilience whilst maintaining high yield.

- This discovery presents an exciting opportunity to identify variations of the gene that can give wheat varieties resilience to climate change.

### **Non-browning banana**

- Bananas are a key food crop globally – but there is significant wastage with over 50% not consumed and 10% – 15% lost due to fruit bruising post-harvest.
- Tropic, a leading agricultural biotechnology company in the UK, has recently developed a non-browning banana using precision breeding techniques.
- Given the fruit's high perishability, this innovation has the potential to reduce the amount of bananas that are wasted, reduce carbon emissions and provide higher farmer revenues.

### **Disease resistant chickens**

- Bird flu is a major threat to farmed chickens worldwide, with some strains killing up to 100 per cent of birds in a flock. In some cases, variants of the virus can infect people and cause serious illness.
- In a collaboration between Imperial College London, the Pirbright Institute and the Roslin Institute, a research study has shown potential in using gene-editing to produce chickens that are resistant to the disease. The virus was no longer able to grow inside cells with the genetic change.
- The use of gene editing could help to control the spread of the disease which is urgently needed to protect chickens and to reduce the risk to human health.

### **On Rothamsted Research:**

[Rothamsted Research](#) is a world-leading, non-profit research centre that focuses on strategic agricultural science to the benefit of farmers and society worldwide.

It is also the longest-running agricultural research institution in the world dating back to 1843.

Its key aims include:

- Deliver know-how, data, better practices and new technologies to improve performance, resilience and value.
- Raise the productivity of crop and livestock systems.
- Tackle weed, disease and insect resistance to agrochemicals and improve soil health.
- Enhance natural capital and reduce agriculture's carbon and nutrient footprint.
- Add novel nutritional, health and bioeconomical value to crops and other products.

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# Review of government counter-terror strategy to tackle threats

The government will carry out a wholesale refresh of the UK's counter-terrorism strategy, to protect its citizens from new, emerging and persistent threats.

In the UK and overseas, there has been a shift towards self-initiated terrorists operating independently from organised groups with increasingly personal ideologies, warped views used to justify violence.

The tactics and methodologies used by terrorists are diversifying and becoming increasingly fragmented.

To meet those threats, the counter-terrorism strategy (CONTEST) will be updated to reflect these new challenges. This will involve seeking a diverse range of views and engaging security experts from across the UK and overseas, so that CONTEST continues to robustly protect the British public from terrorist threats.

Security Minister, Tom Tugendhat, said:

Terrorists seek to divide us and sow hatred. We will not let them. Our commitment to the values we cherish is too strong.

But as the nature of terrorism continues to evolve and endure, so must we.

We will ensure that our response to the terror threat continues to be world-leading and ensure we have a strategy that allows people to go about their lives freely and with confidence.

The update will take into account a series of important reviews, including the second volume of the Manchester Arena Inquiry, set to be published next week.

In addition, the findings from the Independent Review of Prevent, led by William Shawcross, will strengthen the government's ability to stop individuals being drawn into terrorism in the first place.

The government will do everything possible to strengthen the UK's protection against terrorist attacks.

This includes a renewed commitment to introduce the Protect Duty, which will enhance the safety of public venues while avoiding placing additional burden on small businesses.

The UK counter-terror system already encompasses the efforts of more than 20 government departments and agencies.

Since 2017 alone, more than 200 recommendations have been implemented in response to terrorist attacks, including the creation of the world's first multi-organisational Counter Terrorism Operations Centre, in London in June 2021.

Head of Counter Terrorism Policing, Matt Jukes said:

Since its launch in 2003, CONTEST has proved to be an enduring and effective strategic framework for the UK's counter terrorism response, but it shouldn't stand still.

Today's threat is dominated by increasingly fragmented ideologies, self-initiated terrorism, and the reach of hateful online ideologies into the lives of the young people.

It is vital that any future strategy reflects these learnings and also looks forward to the collaborations we will need in the future to keep people safe.

Counter Terrorism Policing, uniquely, has made an evolving contribution to all four pillars of the CONTEST strategy and will continue to be at the heart of our preparedness for the terrible moments when attacks happen.

The government expects to publish an updated and enhanced version of CONTEST next year. In the meantime, it will continue to deliver a counter-terror strategy to keep the public safe.

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## [UN Security Council Counter-Terrorism Committee meeting: UK Foreign Secretary's speech](#)

Madame Chairman, your Excellencies, Ladies and Gentlemen,

May I start by thanking India, our hosts, and Dr. Jaishankar for his key note speech.

You are right that countries must do more nationally and internationally to counter the threat of terrorism. The UN and an effective CTC, both have a

significant role to play in this endeavour.

Just outside my office in London is an elegant memorial to those to those who were killed in the Bali bombing of 2002. 202 victims that came from more than 20 countries, including 23 from the UK.

When terrorists struck London in 2005, one of the 52 people they murdered was 37 year old Neetu Jain, a biochemist graduate, who was born in Delhi.

And the victims of the 2008 Mumbai attacks, who we honoured yesterday, came from every continent.

Terrorism is a global problem, and a global threat, so I am incredibly grateful for Foreign Minister Jaishankar for using India's Security Council Presidency to focus on this crucial issue, and advance his 8 point plan.

The UK's partnership with India is hugely important to me. And I'm pleased to be taking forward our CT cooperation this weekend. But let me now turn to the technological advances which offer terrorists new opportunities that we must counteract.

Within the space of just two decades, terrorists have gone from circulating crackly voice recordings from the depths of Tora Bora, to global online recruitment and incitement campaigns, to live-stream attacks. And online incitement and racialisation of vulnerable people in far off countries, who have then gone on to use simple rental vans as weapons of terror. So we must continue to work together to fight terrorist ideologies online.

In 2015 we set up the Counter Daesh Communication Cell in London, in partnership with the United States of America and the Government of the United Arab Emirates. Together we have worked with governments, civil society and communities to challenge Daesh's narrative.

We are also working with the G7 and Global Internet Forum to counter terrorism. And we continue to press tech companies, amongst whom are some of the internet's biggest players, to crack down ever harder on extremist online content.

Technologies that advance the online world also powers the real world. But both are open to exploitation. Tech designed with the best intentions can be repurposed for the worst of aims.

From a garden – our Ambassador's Garden – in Abu Dhabi, in January of this year, I saw the UAE's Air Defence System interdict Houthi missiles. And only a few weeks earlier, drones had killed three people in Abu Dhabi. Drones are being used currently to target critical national infrastructure and civilian targets in Russia's brutal invasion of Ukraine. So from the UAE to Ukraine, unmanned aerial systems from relatively cheap and unsophisticated, to those with military specifications, are used to inflict terror, death and destruction.

This is why we have sanctioned three Iranian military commanders and one Iranian company involved in the supply of drones and why we must also do more

to stop these technologies getting into terrorists' hands.

In 2019 the UK government launched our Counter-Unmanned Aircraft Strategy and we are funding new counter-drone technologies.

And we are working through the Global Counter Terrorism Forum, to ensure we all do more to stop terrorists from misusing drones.

The internet has also given terrorists groups murky new routes to conceal their finances and sustain their activities. We work with industry and international partners to understand and disrupt terrorist finances, including in Somalia and North Africa. We have made tackling illicit finance a core pillar of our cooperation with international partners like the UAE. And we look forward to India's 'No Money For Terrorism Conference' in November.

This is vital work. The threat from terrorism has not gone away. We know that a repressive response will only exacerbate the problem.

And if we are to keep our people safe, we must comply with human rights, and we must continue to work together, and with industry, and all parts of our communities, to discredit the narratives of hate.

To counter radicalisation. To infiltrate networks. To foil plots. And to starve terrorists of the finances and emerging technologies that they would use to do us harm.

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## **UK government approves agreement between Bulb and Octopus Energy, providing certainty to 1.5 million customers**

- UK government approves deal between the special administrators of Bulb and Octopus Energy to acquire Bulb's 1.5 million customers
- following an extensive and competitive sale process, the move provides a stable new home for Bulb's customers and 650 employees
- Bulb customers do not need to do anything and won't experience any disruption as organisations work together to deliver a smooth, market-led exit from its special administration

An agreement was reached overnight between special administrators of Bulb and Octopus Energy, the UK government confirms today, in a move that will protect consumers and taxpayers.

Bulb's special administrators have been running a competitive and extensive sale process within the market for Bulb in recent months and have now reached a final agreement which will see Bulb's 1.5 million customers transferred to Octopus Energy.

The sale will be completed following a statutory process called an Energy Transfer Scheme (ETS), which will transfer the relevant assets of Bulb into a new separate entity that will protect consumers during the transfer process. The process is subject to approval by the Business and Energy Secretary and will take effect at a time ordered by the High Court, expected by the end of November.

Bulb customers will not experience any change or disruption to their energy supplies as part of this transfer. There is no change to either Bulb or Octopus customers' supply arrangements, and credit balances are protected. This means customers do not need to take any action and all direct debits will automatically be transferred.

The government will work closely with Ofgem and Bulb's special administrators to ensure the exit from special administration and transfer of customers to Octopus achieves the best outcome practicable for Bulb customers, taxpayers, and the industry. Last night's deal comes alongside ongoing steps that the UK government and independent regulator, Ofgem, are taking to boost the financial resilience of the sector.

Business and Energy Secretary Grant Shapps said:

This government's overriding priority is to protect consumers and last night's sale will bring vital reassurance and energy security to consumers across the country at a time when they need it most.

This is a fresh start and means Bulb's 1.5 million customers can rest easy, knowing they have a new energy home in Octopus.

Moving forward, I intend to do everything in my power to ensure our energy system provides secure and affordable energy for all.

Octopus will continue to use Bulb's technology and brand for a transitional period so that there is a smooth transfer for Bulb's customers. In addition, customers will continue to benefit from Ofgem's supply licence protections, such as ensuring energy suppliers provide advice for vulnerable customers through existing financial support schemes.

Greg Jackson, CEO and founder of Octopus Energy Group, comments:

We take our responsibilities very seriously. We will work unbelievably hard to deliver value for taxpayers and to look after Bulb's staff and customers.

We started off as rivals but shared the same mission – driving a

greener, cheaper energy system with people at the heart. We know how important this is to Bulb's loyal customers and dedicated staff, and are determined that Octopus can provide them with a stable home for the future.

Matthew Cowlshaw, Senior Managing Director at Teneo and Special Administrator to Bulb Energy Ltd, said:

When the energy administrators were appointed in November 2021, our primary objectives were to enable Bulb to trade as usual while minimising the cost to the taxpayer. Following a thorough and extensive process over the course of almost a year, we examined all options and in conjunction with BEIS came to the conclusion that this transaction would provide the most value to the taxpayer.

We are pleased that we have achieved the objectives of the special administration, especially against the backdrop of wider energy market disruption, and that the transition of employees and customers will provide certainty for both going forward.

The government will provide the remaining funding necessary to ensure that the special administration is wound up in a way that protects customers' supply. The government can recoup these costs at a later date, ensuring that we get the best outcome for Bulb's customers and the British taxpayer.

The current increase in wholesale energy prices is driven by a number of factors including Putin's illegal invasion of Ukraine and weaponisation of energy, as well as the global recovery from the COVID pandemic. Recent volatile global gas prices have emphasised the need to ensure greater energy independence to protect households in the long-term through clean power generated in the country.

The Energy Price Guarantee remains in place and will continue at the same level this winter, saving the typical household around £700 this winter, based on what energy prices would have been under the current price cap – reducing bills by roughly a third. This is on top of the £400 energy bills discount for each household and additional targeted support that continues to be rolled out for the most vulnerable, including £1,200 in direct payments this year.

## **Notes to editors**

Bulb customers can read more about this deal and what it means for them on the Bulb blog and regular updates on the next steps on [Octopus Energy's information page](#)

Last night's deal follows a competitive and extensive sale process run by Bulb's special administrators.

Once the transfer becomes effective, Bulb UK Operations Limited will become customers' energy supplier without them having to do anything, as everything will be taken care of automatically under the scheme.

All terms and conditions of tariffs and credit balances remain the same and customers should continue to make payments in the same way they do now. Immediately thereafter, Bulb UK Operations Limited will transfer into Octopus Energy Retail 2022 Limited, a wholly owned subsidiary of Octopus Energy Group Limited.

Ofgem has reviewed this transaction under their trade sale framework as part of our enhanced requirements to protect the interests of existing and future energy consumers: see the Ofgem guidance on [Significant commercial developments and senior personnel changes](#)

There are 3 principal elements to the structure of the transaction:

- the sale will now be implemented using the [Energy Transfer Scheme](#), which will transfer the relevant assets of Bulb into a new entity. This entity will subsequently be sold to Octopus and will remain ringfenced from its core business for a defined period. The transfer is conditional upon approval of the BEIS Secretary of State and will take effect at a time ordered by the courts, likely 11 November, for the transfer to become effective likely on 17 November
- the government will provide financial support to the new entity for the procurement of energy for Bulb customers over the course of Winter 2022. This financial support will be repaid by the new entity in accordance with an agreed repayment schedule
- a profit-share agreement will be put in place for the ringfenced business until agreed funding is repaid by Octopus. Under this structure payments to shareholders or the wider Octopus group from the ringfenced entity would be restricted until the repayable funding to government is repaid

## Further background

Bulb was [placed into special administration](#) in November 2021. Special administration is designed to protect customers if a large energy supplier becomes insolvent. It enables a business to continue to trade as usual, and if circumstances permit, to be sold at the appropriate time, in full or in part.

A Special Administration Regime (SAR) is a long standing, well-established process available to protect consumers and ensure continued energy supply when a large provider fails.

Due to high market volatility, it is impossible to fully forecast the true cost of Bulb SAR.

The special administrator of Bulb is obligated to keep costs of the administration process as low as possible. Government has the option to recoup costs through the established shortfall recovery mechanism which would

see a levy charged on industry, maximising value for money for taxpayers.

The government cannot guarantee no energy supplier failures in the future. In a competitive market some businesses will fail, and the energy supply market is no exception, seeing regular entry and exit in the last 10 years.

However, if suppliers do fail, government and Ofgem have robust tools in place in the form of the competitive Supplier of Last Resort (SoLR) process, and, when SoLR is not practicable, the Special Administration Regime (SAR), to ensure continuity of supply and minimise disruption for consumers.

To promote financial resilience of suppliers, Ofgem have introduced new requirements for suppliers entering the market, and changes for existing suppliers. This includes the Financial Responsibility Principle, a principles-based requirement for suppliers to make sure that they are managing their finances effectively and actively managing the risk of leaving costs to be mutualised in the event of their failure.

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## [Foreign Secretary calls on global community to fight terrorism](#)

- Foreign Secretary James Cleverly will address the UN Security Council Counter Terrorism Committee during a visit to India this week
- He will use his speech in New Delhi today (Saturday) to call for like-minded partners to come together behind a mission to cut terrorist resources and prevent future attacks like that seen in Mumbai in 2008
- The Foreign Secretary started his first visit to India in his role in Mumbai yesterday (Friday) before travelling on to New Delhi today

The international community must work together to “starve terrorists of the finance and emerging technologies” that will cause destruction around the world, UK Foreign Secretary James Cleverly will set out today (Saturday 29 October).

Speaking at the United Nations Security Council Counter-Terrorism Committee in New Delhi, he will call on countries to work together to fight online terrorism – including global terror recruitment campaigns and live streaming of attacks.

It comes after he paid his respects yesterday at the Taj Palace Hotel in Mumbai, to those who lost their lives in the city’s 2008 terror attack, including three British nationals.

The Foreign Secretary is due to say:

Within the space of two decades, terrorists have gone from

circulating crackly voice recordings from the depths of Tora Bora, to global online recruitment and incitement campaigns, to live-streaming attacks.

Online incitement has radicalised vulnerable people in far off countries, who have gone on to use rental vans as weapons of terror.

So we must continue to work together to fight terrorist ideologies online.

He will conclude we must “starve terrorists of the finance and emerging technologies that will cause death and destruction around the world”.

The UK’s Counter Daesh Communication Cell, in partnership with the US and UAE Governments, works to challenge Daesh propaganda. The UK is also working to stop terrorists exploiting online platforms and to push tech companies to crack down harder on extremist online content through the G7 and the Global Internet Forum to Counter Terrorism.

Around the world unmanned aerial systems are being used to inflict terror. The UK is funding new technology to tackle these drones and stop terrorists from misusing them.

During the visit, the Foreign Secretary announced further collaboration between the UK and India through British International Investment. This included £11 million of UK funding invested in Kinara Capital, a woman-led fintech company. British International Investment is designed to strengthen trade ties with our partners and generate economic growth, benefitting the UK and creating jobs at home.

He also announced a £22 million investment by the UK-backed Neev II Fund into Hygenco which will help India’s green energy transition by pioneering green hydrogen.

The Foreign Secretary is due to meet India’s Minister of External Affairs Jaishankar today to discuss the latest on the 2030 Roadmap, the landmark commitment to boost cooperation between the UK and India over the next decade.

Notes to editors:

- More information about the UNSC event can be found [here](#)
- Kinara Capital is a digital lender that helps small entrepreneurs access finance to drive India’s economic development and creation of jobs. The investment is \$12.5m by British International Investment (BII).
- Hygenco is pioneering green hydrogen technology. This investment of £22 million comes from FCDO backed Neev II Fund in partnership with the State Bank of India.