JOURNAL OF THE PARLIAMENTARY AND SCIENTIFIC COMMITTEE
ALL-PARTY PARLIAMENTARY GROUP

THIS JOURNAL IS PRODUCED WITH THE SUPPORT OF THE PARLIAMENTARY AND SCIENCE AND TECHNOLOGY INFORMATION FOUNDATION

SCIENCE IN PARLIAMENT
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SUMMER 2026



The unsung hero of AI

Why high-quality data is the next big challenge for science

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The Rosalind Franklin Institute

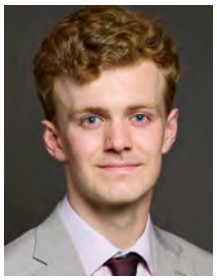
INNOVATION THEATRE

WILL NOT SAVE BRITAIN FROM AI



IKE® Institute of Innovation & Knowledge Exchange

THE UK PROFESSIONAL BODY FOR INNOVATORS.



Sam Carling MP
Chair, Parliamentary & Scientific Committee

A (very) warm welcome to our Summer Edition.

The hot weather looks as though it's here to stay, which I hope you are all enjoying as we move towards the recess. Appropriately, at the end of June we had a great event in collaboration with The Physiological Society about developing effective responses to extreme heat in the workplace. And of course we had our annual lunch, with brilliant guest speaker Professor Liz Bentley, Chief Executive of the Royal Meteorological Society in the UK and President of the European Meteorological Society. I also want to say a big thank you to Applied Microbiology International for sponsoring the lunch - it was a great event.

We have many excellent articles in this edition on a variety of different topics, including but not limited to the impact of culture wars on climate policy; AI data; wearable technology; advanced materials and sustainability; and Scottish innovation. There is much here to keep you busy!

As we move towards the Recess, I want to say a huge thanks to Leigh, Karen and Kinga for all their work for what has been a fantastic year for the APPG. I hope you all have a wonderful summer.

Sam

EDITOR'S NOTE

I should like to extend a warm welcome to the following new P&SC members:

Scientific and Technical Organisations

The Institute of Research in Schools (IRIS)

National Centre for Universities and Business (NCUB).

National Measurement Laboratory

Commercial Members

Heights

Individual Members

Dr Ubasinachi Otuonye

Dr Mandar Thakare

Life Members

Lord Hacking a valued supporter of P&SC over many years, and a Parliamentary Member, left the House of Lords as a Hereditary Peer at the end of April.

We are delighted that he has accepted an invitation to become a Life Member of the Committee.

Leigh

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Science in Parliament has two main objectives:

Inform the scientific and industrial communities of activities within Parliament of a scientific nature and of the progress of relevant legislation

Keep Members of Parliament abreast of scientific affairs

The unsung hero of AI is not the algorithm, it's the data



Mark Basham
Science Director and Challenge Lead, Rosalind Franklin Institute

Data is the most expensive part of AI and the hardest to get right. Until now, it's also the part that's had the least funding and attention. With the government's AI for Science strategy, that is set to change. The strategy rightly focuses on generating new data sets, created with AI in mind. While that might sound straightforward, in reality, it's challenging and resource intensive. Scientists, and the organisations that fund them, need to be prepared to meet that challenge.

The UK has a strong science research base – and the data to match. Scientists are adept at managing data for high quality research, prioritising what they need for scientific discovery. Unfortunately, that approach does not always produce datasets that can power AI.

There are some exceptions. The most well-known science AI is Google DeepMind's AlphaFold, which, since 2021, has accurately predicted the structure of millions of proteins. But this was only possible because it already had 50 years of data to work with: since 1971, scientists had been uploading their data in an agreed format to the Protein Data Bank (PDB). Although efforts have been made, we have nothing like the PDB in other fields of science.

The change required to create AI-ready scientific datasets is substantial. It's requires far more than just managing the data differently once it's been collected. You need to change the way the science itself is carried out, including how equipment is calibrated, how experiments are conducted and how data is recorded.

This is acknowledged by the AI for Science strategy, which states: "AI is not just driving new breakthroughs in science, it is fundamentally reshaping the way science is conducted, evaluated, and understood".

The way that science has traditionally been rewarded and funded disincentivises these changes. A new approach to data analysis and management is needed if science is to maximise the potential of AI. By placing a strong emphasis on data, the government's AI for Science strategy highlights what needs to change.

Building AI-ready scientific data

At the Rosalind Franklin Institute, since day one we've been actively working to try and ensure our data is AI-ready. We aim to make our data FAIR: findable, accessible, interoperable and reproducible. This means it meets most of the requirements for AI use. But despite our best efforts, even we can't claim complete success. Making data FAIR requires comprehensive metadata, proper documentation, and standardised structure formats that machines can interpret. It takes time, effort and expertise – and sometimes the funding and time constraints make it impossible.

The untapped potential of 'Dark Data'

Another issue is that large volumes of potentially useful data are currently being left 'in the dark' because of the way that scientists are forced to work.

Firstly, scientists are incentivised to only publish on success. The data on what doesn't work stays in the lab, if it's kept at all. But if we train science AI purely on published 'success' data, we're giving it less than half the picture – and that creates bias.

Scientists are also only able to study in depth part of the data they collect, so the rest, anything that isn't perfect for their needs, is discarded early in the discovery process. This 'dark data' lives on our hard drives, on a USB stick on our shelves, because we've never had the time to analyse it.

This is a huge loss to science, because this 'dark data' could be powering the AI of the future. It also means we waste resources by replicating the same experiments, because we're unaware that the data we need already exists somewhere else.

Take structural biology for example – one of the main disciplines within the Franklin's research.

Most structural biologists are funded on a project basis, to look at one issue, such as the structure of a specific protein. They collect intricately detailed, 3D images of cells and then label that protein so they can compare across the images. But everything else in the image – all the other cell components – they simply have to ignore. They cannot afford to label those as well, as their time and effort wouldn't be covered under their grant funding.

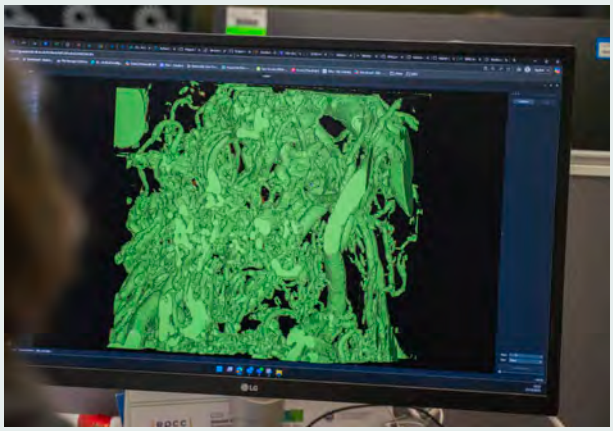
As an independently funded institute, we have more flexibilit , but not always enough to cover all the data we create.

Creating the Digital Cell

Our new Digital Cell project, however, is a different matter. For this research, we are intentionally creating AI-ready datasets that can underpin increasingly powerful models. Comparing our approach to that of other research teams around the world shows why the focus on data is so important.



A stylised visualisation of how imaging a cell allows us to capture complex biological information and integrate this into a digital representation of a biological cell.



A researcher examines a detailed 3D reconstruction revealing the intricate inner structure of a complex sample.

The project will see us building a digital representation of a stem cell as the first step towards creating a virtual cell. While science has taught us much about cells, we are still unable to predict their fate. A virtual cell would allow us to answer that question, opening up new opportunities in drug development – the first mission of the government's AI for Science strategy.

A virtual cell model powered by AI will help us to understand how drugs affect cell fate, how different chemical imbalances change a cell's future. Will the drug drive a cell towards death, change its differentiation, or make it divide faster? All of these questions are critical for our understanding of many different diseases.

The other teams working in this area have chosen to start by combining existing datasets. The attraction of this seems clear – with so much data needed, why not get a head start by making use of the science that already exists? Unfortunately, it's not that simple. The majority of these datasets are not easily interoperable for AI models, due to the heterogeneous nature of the cells studied and the way the data has been managed and curated by different research teams. So while you may be able to get a model working on initial datasets, as your data grows, the models will need to be completely reconfigu ed, progressively slowing you down.

Our approach is more in line with the AI for Science strategy's priority on new data sets. We are starting relatively small, by first gathering the structural data we need for an average stem cell: our digital cell. From this, we will gradually expand to other cells along the pathway. Each successive data set will only have subtle differences, allowing our models to work across all the data we create. Growing our data will not slow us down – quite the opposite.

Why the Franklin is uniquely positioned

The Franklin is uniquely positioned in the UK to lead on the virtual cell project. Our mission is to bring together experts from the fields of physics, chemistry, computer science and biology to create innovative new technologies that will transform life sciences and improve human health.

Our base at the research and innovation supercampus at Harwell hosts some of the most advanced cryogenic electron tomography (cryo-ET) microscopes in the world. Cryo-ET builds up a 3D image from multiple 2D images of samples which have been flash frozen at temperatures below -180oC.

Usually, cryo-ET can only handle small samples, such as parts of cells. We have developed new techniques to prepare and handle larger samples of human tissue – though these are still less than a hundredth of the thickness of human hair. Using this technique, we can create 3D images of cells at very high resolution. This allows us to identify sub-cellular components and proteins that play a role in diseases, not in isolation, as was previously the case, but as part of a whole cell or group of cells.

We can then build a high-resolution image not of individual components, but of the overall cell structure – a method that will be crucial for our digital cell. What determines cell fate is not only the proteins and other elements within the cell but also where each element is located and even the shape of the cell itself. The Franklin is currently the only place in the UK able to generate this level of imaging and curate and manage the data to analyse it at the whole-cell scale.

And while we might be starting (relatively) small, we don't intend to be slow! We're working towards generating the high-quality data assets needed within just six months to create our first digital cell. From there we will be able to expand at pace, with iterative advances between new models and new data.

Funding the data revolution

In the past, getting funding simply to build this kind of dataset was almost impossible. The AI for Science strategy will hopefully change that for all researchers. For the first time it puts a true value on data as the necessary first step to realise the promise of AI. This mandate now needs to be reflected in funding policy and decision-making. Here at the Franklin, that recognition feels well overdue – but no less welcome for that.

Transforming humanitarian assistance through geographic data science



Professor Francisco Rowe
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Dr Carmen Cabrera
Senior Lecturer in Geographic Data Science, University of Liverpool

As conflict disasters and climate change drive record levels of internal displacement worldwide, researchers at the University of Liverpool's Geographic Data Science Lab are working with the International Organization for Migration to harness digital data and real-time analytics to transform how humanitarian crises are monitored and responded to.

Internal displacement is one of the most pressing humanitarian challenges of our time. At the end of 2024, a record 83.4 million people were living in internal displacement worldwide, having been forced to flee their homes due to conflict, violence, persecution or disasters. The global number of internally displaced people is predicted to grow over the coming years as wars, climate change and pandemics uproot communities around the world with increasing frequency and speed.

Harnessing geographic data science

The scale of the crisis highlights the urgent need for innovative, data-driven solutions to track and understand displacement dynamics to help some of the most vulnerable people in the world. The Geographic Data Science Lab (GDSL) at the University of Liverpool and the International Organization for Migration (IOM) at the United Nations have been working in partnership to transform how displacement crisis is measured, understood and acted upon.

Traditional data collection methods, such as household surveys, administrative records and registration systems, remain essential pillars of crisis responses for humanitarian agencies and organisations. Yet when disasters strike and populations move, these data systems are frequently stretched, delayed or absent where and when they are needed most, creating a gap between the pace of displacement and the pace of knowledge about the crisis.

This gap leaves policymakers and humanitarian agencies working from incomplete pictures at precisely the moments when accurate, real-time, granular evidence is critical to effective policy decision making and humanitarian response coordination. The collaboration between GDSL and IOM was founded on a shared conviction that this gap could be narrowed to improve outcomes for the tens of millions of internally displaced people worldwide using geographic data science.

Geographic data science sits at the intersection of social science, computational science and spatial analysis. It bridges expertise from geography, statistics, computer science, economics and public health to transform large and complex datasets into meaningful evidence about people and places.

Humanitarian agencies often face difficult decisions about where to deploy resources, establish shelters, distribute aid or provide healthcare services. By providing more timely and geographically precise information, geographic data science offers new opportunities to understand crises as they unfold, rather than weeks or months afterwards, improving the capacity of humanitarian organisations to effectively identify emerging needs and allocate support.

Triangulating digital trace and traditional data for displacement monitoring

Together, the GDSL and IOM teams explored how digital trace data, including mobile phone GPS signals, social media activity, internet traffic and other passively generated data streams, can complement and strengthen traditional humanitarian data systems. To do this, GDSL connected its frontier methods in geographic data science to the IOM's operational realities of humanitarian response, where evidence must be timely, trusted and actionable.

Rather than treating these new data sources as replacements, the collaboration between GDSL and IOM has developed methods for triangulating diverse data streams, using each to validate and enrich the others. Crucially, the partnership has built a more responsible model for the use of digital trace data. The model recognises and addresses bias and uncertainty in this type of data, ensures privacy protection, provides accurate contextual interpretations and establishes clear governance frameworks.

Co-developing these transparent methodologies is essential to maintain public trust in digital trace data for humanitarian support.

The partnership's work is reshaping how displacement during disasters is estimated at a global scale. It has

informed the practices of international agencies and contributed to emerging standards for digital data use in humanitarian contexts. Drawing lessons from recent crises, such as the war in Ukraine and the 2022 floods in Pakistan, the team have created a scalable framework for integrating real-time, high-resolution data into humanitarian decision-making. It provides technical insights, open datasets and replicable methodologies to support global efforts in building resilient, rights-based solutions for displaced populations while maintaining the standards of validation, accountability and protection required in displacement contexts.

Experts from the GDSL team have also recently contributed to emerging international standards on the responsible use of mobile phone data for official statistics, including a new UN manual, Design and Implementation of Mobile Phone Data Initiatives. Developed by the Mobile Phone Data Task Team of the United Nations Committee of Experts on Big Data and Data Science for Official Statistics, the manual highlights how mobile phone data can generate valuable insights into population mobility, disaster response, migration, transport and digital society, while emphasising the importance of strong governance, privacy protection, quality assurance and trusted partnerships.

A real-time picture of displacement in Iran

Since strikes began in late February 2026, millions of Iranians have been living under conditions of active conflict and severely restricted communications, with limited access for journalists and humanitarian agencies. In situations like this, large-scale population movement is expected. Yet in Iran, the scale and shape of that movement has remained almost entirely hidden. In an information blackout, with internet access almost completely shut down across Iran, building a detailed picture of this population movement to swiftly act and support displaced people has been a major challenge for humanitarian agencies.

In the absence of conventional data on internal population displacement in Iran, the GDSL team have been piecing together where people are moving by looking at faint but persistent signals of internet activity. Weeks of active hostilities and Iran's tight information controls closed off most of the usual population statistics typically used to monitor population movements, so the team developed a model translating internet traffic requests to population numbers.

GPS-based mobile data and Meta's population maps have been useful in other crises, but for Iran, they are unavailable. Instead, the digital trace-data source was Cloudfla e Radar, a US-based content delivery network which publishes aggregated, anonymised counts of encrypted web requests passing through its network, broken down by province.

Despite the widespread internet shutdowns, some weak internet signal remained which enabled estimation of population numbers at the sub-national level in near real time. We compared these numbers with a baseline control set in December 2025 to assess increases and decreases in population during each day of the year, adjusting for network shocks and coverage, and cross-checked the patterns against Farsi Wikipedia pageviews for border regions and against recorded strike locations. More requests than usual is a tentative signal that more people are present and online. Fewer requests may suggest fewer people or less activity.

The GDSL team published an analysis and situation report in March 2026, covering the war since its outbreak which showed a clear geographic pattern and timeline of movement. The findings pointed humanitarian agencies to three pressure points in Iran: the northwestern border corridor, the provinces adjoining Afghanistan and Tehran's hinterland. This was one of the first near real-time pictures of displacement within Iran, complementing cross-border figu es from the UN IOM team.

The data offers a partial but very important view of movement inside the country, where conventional methods of counting displaced people have largely broken down, helping humanitarian agencies to respond faster and more effectively.

Transforming humanitarian assistance

As displacement continues to rise globally, policymakers require tools capable of operating at the speed and scale of modern crises. Geographic data science offers a solution by transforming vast quantities of information into operational intelligence that can inform humanitarian planning and response. But this is not simply about developing new analytical techniques. It is about creating better evidence for effective action. As crises become more dynamic and interconnected, governments and humanitarian organisations will require increasingly sophisticated capabilities to monitor displacement, anticipate needs and coordinate responses.

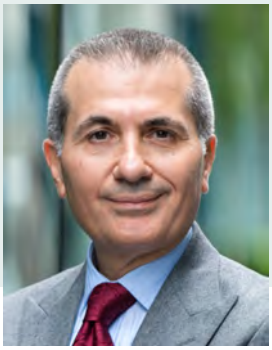
For the UK, this work demonstrates how investment in data science research can generate practical tools that support international humanitarian action, strengthen evidence-based decision-making and contribute to global stability.

Building the future of humanitarian assistance

The challenge now is to ensure that these innovations are translated into practice. This will require continued investment in research, stronger partnerships between academia and humanitarian organisations, and robust governance frameworks that ensure data are used responsibly and ethically. The GDSL team is engaging with relevant units within Foreign, Commonwealth & Development Office (FCDO) to support model initiatives, such as the ones deployed in Iran, to assist their own policy discussions.

The promise of geographic data science lies in its ability to transform new insights into positive impact. By combining traditional expertise with new forms of digital evidence, it offers a pathway towards more responsive, targeted and effective humanitarian assistance. At a time when displacement is affecting millions of people worldwide, that capability is no longer a technological luxury; it is becoming a humanitarian necessity.

Innovation 'theatre' will not save Britain from AI



Professor Sam Medhat PhD MPhil CEng FIET FRAeS FRSC FCIM FCMI FRSA FIKE FIoD FIRL
Chief Executive, Institute of Innovation & Knowledge Exchange
Visiting Professor, University of Westminster

AI has made innovation cheaper, faster and more deceptive. A minister can announce a pilot. A company can launch a chatbot. A university can build a prototype. None of this proves innovation. In the AI era, the easiest thing is to look modern; the hardest thing is to create measurable public, scientific or economic alue.

The real bottleneck is judgement

The old defence of systematic innovation was organisations needed help generating ideas. That argument is now obsolete. AI can generate endless concepts, business cases, code, images, policies and product variants. The bottleneck is no longer imagination; it is judgement. Which ideas are worth testing? Which are safe? Which can scale? Which should be stopped before they become expensive theatre?

Stanford's 2026 AI Index[1] reports that organisational AI adoption reached 88%, while responsible AI practice is not keeping pace: documented AI incidents rose from 233 in 2024 to 362 in 2025. The lesson is blunt: adoption without discipline is not leadership; it is exposure.

Pilots are becoming a political alibi

Britain does not suffer from a shortage of AI pilots. It suffers from a shortage of institutional learning. McKinsey's 2025 global survey[2] found that only one-third of respondents said their organisations were scaling AI across the enterprise, and only 39% attributed any enterprise-wide EBIT impact to AI. The high performers were not merely experimenting; they were redesigning workflows, scaling faster and pursuing transformative change.

That should worry Parliament. A pilot can be useful evidence. But a pilot can also be a holding pen for indecision. The phrase "scan, pilot, scale" must not become "scan, pilot, forget".

Bureaucracy is not the answer – but neither is chaos

The controversial conclusion is that systematic innovation is more necessary, not less. But it must be stripped of bureaucracy. A modern innovation system should be brutal about evidence: define the public problem, set ethical guardrails, test the smallest safe intervention, measure real-world outcomes, scale what works and terminate what doesn't.

This is not conventional stage-gate management. It is an operating system for national learning. ISO 56001:2024, from the ISO frames innovation management as a repeatable system for establishing, implementing, maintaining and improving innovation capability. That matters because AI does not remove uncertainty; it accelerates it.

Regulation must move upstream

The stale debate is whether Britain should accelerate AI or regulate it. That is the wrong binary. The UK should regulate by design, not by delay. Governance must be built into experimentation from the start: data rights, human oversight, cyber security, bias testing, procurement transparency and accountability for harms.

The NIST AI Risk Management Framework[3] was developed to help manage risks to individuals, organisations and society, and to incorporate trustworthiness into the design, development, use and evaluation of AI systems. The OECD AI Principles[4] similarly promote innovative and trustworthy AI that respects human rights and democratic values.

From AI announcements to national advantage

The UK Government's AI Opportunities Action Plan, published in January 2025[5] set out 50 recommendations to grow the UK's AI sector, drive adoption across the economy and improve products and services. Its 2026 progress report says Government has met commitments on 38 of those 50 actions and is moving from ambition to delivery.

That is welcome. But delivery must now be judged by outcomes, not activity. Britain should ask harder questions: Which AI deployments improved diagnosis, reduced backlogs, raised productivity, widened access, strengthened science or created defensible industries? Which merely consumed attention?

The uncomfortable prescription

The UK should stop celebrating innovation theatre and build real innovation infrastructure: shared evidence standards, faster procurement for proven tools, public registers for significant AI systems, multidisciplinary testbeds, reusable data foundations and stronger routes from prototype to deployment.

In the AI age, the winners will not be those with the most pilots. They will be those with the fastest responsible learning loops. Systematic innovation is not dead. Properly reinvented, it is the discipline that separates national renewal from technological noise.

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Access empowers growth:

How Scottish IKE is democratising, systemising and professionalising innovation



Stuart McDowall BA (Hons) DipM, FIKE
Head of Innovation & STEM, City of Glasgow College
Deputy Director Scottish IKE Institute

Innovation delivers the greatest impact when it is accessible to all. The Scottish Institute of Innovation & Knowledge Exchange (Scottish IKE) is increasing access to innovation support that accelerates regional growth, strengthens industry capability and widens participation in STEM-led transformation.

Democratising innovation

Scottish IKE is designed to ensure innovation is for everyone. Since launching in 2017, it has developed into Scotland's national innovation centre of excellence, focused on removing barriers and extending innovation capability across education, industry and public services.

Hosted within City of Glasgow College, a polytechnic of our time, Scottish IKE helps individuals and organisations, regardless of size, sector or starting point, build confidence in using the tools and structured methods to innovate effectively.

Programmes span start-ups, SMEs, large employers, public bodies, and social enterprises, giving every part of the economy access to accredited, expert innovation support and globally recognised frameworks such as Investor in Innovations®, aligned to the International Organization for Standardization (ISO) 56002 innovation management standard and Digital Maturity Assured (DMA).

Systemising innovation

Over the past eight years, the institute's focus has been to move partners beyond sporadic idea generation towards repeatable, evidence-based innovation processes. Through diagnostic tools, maturity assessments, certified professional programmes and applied research, organisations are supported to:

- Embed innovation within governance and culture
- Align activity with measurable outcomes
- Build long-term resilience through capability, not chance
- Connect innovation to productivity, sustainability and growth

This structured approach has underpinned nationally significant initiatives across construction, engineering, health and social care, creative media, maritime, digital transformation, space, net zero, and the development of industry-led innovation ecosystems.

Professionalising innovation

City of Glasgow College is the first organisation in the UK to hold both the DMA accreditation and the Investor in Innovations® standard, positioning Scottish IKE as a recognised exemplar for innovation excellence.

The institute's professionally certified training helps organisations, across Scotland's economy, build a measurable innovation capability. This professionalisation supports a quality assured approach to scale innovation locally, regionally, nationally and internationally.

Innovation in action

Impact is demonstrated not only through frameworks and accreditations, but through applied research and delivery. Through Innovation Vouchers, applied research and development (R&D), and collaborative projects, Scottish IKE has supported innovation across multiple industries.

From supporting photovoltaic (PV) and piezoelectric technology development and data-driven solutions in construction to Altitude Thinking's Aquabot 2.0 product development and the award-winning research on oxygen depletion risks, recognised by a Queen's Anniversary Prize in 2023, the institute shows how 'evidence and experimentation' can address safety, sustainability, digital transformation and productivity; and how accessible, systematic innovation capability delivers measurable improvements in both technology and public value.

Empowering Scotland's innovation ecosystem

Not only does Scottish IKE play a key role in the local and regional innovation ecosystems, but it is also connecting Scotland to global innovation assets.

Hosting the IPHatch® UK Open Innovation competition, start-ups can gain access to global patent portfolios from various multi-national corporations, accelerating the creation of scalable, technology led solutions in areas including Digital Health, FinTech, Sustainable Energy and AI/VR. Initiatives like IPHatch® support Scotland's ambitions to build a world class entrepreneurial nation.

Access empowers growth

Equitable access to evidence, expertise and structured support enables national progress. Scottish IKE embodies this by democratising who can innovate, systemising how innovation is done, and professionalising the standards by which innovation is recognised and measured.

By turning innovation from an abstract aspiration into an accessible, measurable and supported capability, Scottish IKE contributes to Scotland's economic transformation, whilst offering a model that aligns with the UK's science–policy community.

Hidden micronutrient deficiencies across the UK:

A call for government action



Dr Harry Jarrett
PhD MRSB
Director of Science and Research, Heights

The UK is one of the wealthiest nations, yet a large proportion of our population is deficient in vitamins and minerals essential for healthy brain function immunity, cardiovascular health and successful pregnancy. There is a crisis of hidden micronutrient deficiencie , largely unaddressed by public health policy.

The problem – hidden micronutrient deficiencies

Micronutrients such as vitamins and minerals play fundamental roles in the human body; without them the body simply could not function. Yet, when policymakers discuss diet and health, the conversation centres on calories and obesity rates. However, a parallel crisis exists: the widespread depletion of the vitamins and minerals across UK diets- "Hidden Micronutrient Deficiencies".

The scale of the problem

The UK's National Diet and Nutrition Survey (NDNS) is the government-run, national surveillance programme, reporting nutritional levels across the UK. Its findings reveal a consistent and alarming picture of widespread hidden micronutrient deficiencies. The examples below are among the most striking, but the problem extends well beyond these nutrients alone:

Folate (Vitamin B9)

Folate is essential for DNA synthesis, forming healthy blood cells, and supporting fetal development. Inadequate folate status is the single most important preventable risk factor for neural tube defects (NTDs) such as anencephaly and spina bifida. Anencephaly is usually fatal shortly after birth; spina bifida carries significant mortality and lifelong care.

Beyond the profound toll on families, NTDs carry a substantial economic cost. The UK Government's analysis puts the lifetime societal cost of a single severe NTD case at up to £3 million.

Alarmingly, the most recent NDNS reports 83% of UK women of childbearing age had blood folate levels too low to minimise the risk of a neural tube defect-affected pregnancy. This is not an isolated finding: longitudinal analysis of NDNS data documented a significant decline of 3% per year in blood folate concentrations across the UK. The evidence is clear, there is urgent need to improve folate levels across our population, and above all among women of childbearing age.

The UK Government's new mandatory folic acid fortification policy, due December 2026, is anticipated to prevent approximately 200 NTD cases each year. A welcome step, but one that comes decades after the United States and over 70 other countries acted. Modelling indicates that US-level fortification from 1998 would have prevented an estimated 2,014 NTDs by 2012. That such clear evidence went unactioned for more than two decades represents a failure of public health policy that should not pass without scrutiny and one we cannot afford to repeat for other deficiencies. This new policy will prevent roughly one in five NTDs; the evidence shows there is considerably more government could, and should, do.

Riboflavin (Vitamin B2)

Riboflavin is a widely overlooked but essential nutrient crucial for energy metabolism, healthy blood cells and required to convert folate into its active form. While the UK is one of the few countries to measure riboflavin levels, it has failed to act on the evidence of widespread deficienc , and riboflavin remains almost entirely absent from UK food policy.

I recently co-authored a study in *The Journal of Nutrition*, the first to quantify riboflavin biomarker status worldwide, recognised with two awards at STEM for Britain in Parliament. We report that among healthy adults, half of women and 45% of men were riboflavin deficient. Worryingly, over half of children aged 11–17 years were also deficient. These findings are mirrored in a clinical trial we recently completed at Heights, in which 83% of healthy UK adults had suboptimal or deficient riboflavin status.

Vitamin D

Vitamin D is essential for bone and muscle health and supports normal immune function. The UK's northern latitude creates a structural deficit: between October and March, leaving the population reliant on diet and supplements – sources that fall short for most people. The most recent NDNS data show that 18% of UK adults are vitamin D deficient year-round, rising to 31% over winter. Among 11–18-year-olds, the rate climbs from 23% to 36%, more than one in three adolescents deficient during a critical period for building bone strength. The NHS already advises daily supplementation through autumn and winter, but these figu es show advice aimed at individuals has not closed the gap; government action is needed.

Iodine

Iodine is essential for the synthesis of thyroid hormones, which regulate metabolism, growth and neurological development throughout life. Similar to folate, adequate iodine levels during pregnancy are critical for fetal brain formation.

The cost of UK inaction on folic acid fortificatio

Neural tube defects are serious malformations of the brain and spine, mainly spina bifida and anencephaly. Anencephaly is usually a fatal shortly after birth: spina bifida, causes, serious, lifelong disability.

2,014 **Estimated NTD-affected pregnancies prevented, 1998–2012**

1,1799 England & Wales

152 Scotland

64 Northern Ireland

Estimated neural tube defect-affected pregnancies that could have been prevented each year – had the UK fortified from 1998, like the US



Morris JK et al. (2016) Prevention of neural tube defects in the UK: a missed opportunity. Arch Dis Child, doi: 10.1136/archchild-2015-309266.

The most recent NDNS data show iodine status is now inadequate across much of the UK population, including adolescent girls and, increasingly, adults more widely. Women of childbearing age are among the lowest status of all, falling below the level needed to support a healthy pregnancy- the group for whom, the consequences of deficiency are most serious.

At present the UK has no strategy to address decreasing iodine levels across the population.

Built into the food system

Hidden micronutrient deficiencies are not, at root, a matter of personal choice; they are a product of the food system that shapes what the population eats and what that food contains. The contributing factors are many, but two significant elements are set out below.

Dietary patterns

First, dietary patterns have shifted in ways that lower micronutrient intake. The move towards plant-based diets, including switching from cow's milk to plant-based alternatives reduces dairy intake and, with it, both riboflavin and iodine. Persistently low intakes of vegetables further limit folate, while ultra-processed foods- now over 50% of adult's energy intake are energy-dense but typically low in micronutrients.

Declining nutrient density

Food supply has become less nutrient-dense. Analysis of the UK Government's Composition of Foods tables- found that the nutrient content of British fruit and vegetables has fallen markedly over eight decades, for example iron dropped by ~50%, copper by 49% and magnesium by 10%.

Modern crops are bred for high yield and energy rather than nutrient quality and rising atmospheric CO_2 further dilutes the nutrient content of staple crops. Across the modern food supply, our food may now deliver less than it did for earlier generations.

The result is a food system that is making adequate micronutrient intake from diet alone harder to achieve. Urging individuals to simply eat better is not a solution. The truth is that structural problems have structural solutions and delivering them lies within Parliament's power.

What Parliament can do

Food policy has not kept pace with our evolving food system. The UK has never systematically addressed riboflavin, vitamin D or iodine, and was among the last high-income nations to act on folate. These gaps cannot be closed by individual effort; they require policy action, for both the health of our population and the wider economy. We urge Parliament to consider the following steps.

1. Extend mandatory flour fortification to riboflavin and vitamin D. UK flour is fortified with several nutrients, but not riboflavin, despite deficiency affecting around half of UK adults. Further fortifying flour with vitamin D is modelled to prevent around a quarter of all new cases of deficiency saving the NHS and public services an estimated £65 million.
2. Introduce mandatory salt iodisation. The UK is one of few European countries with no iodine fortification policy. UK modelling found that addressing iodine deficiency in pregnancy could save society approximately £4,500 per pregnancy.
3. Monitor and strengthen the 2026 folic acid fortification policy. The Government estimates it will prevent 200 NTDs a year, a 20% reduction, translating to NHS savings of £20 million and wider economic benefit of >£90 million across a decade. However, it could go further: a higher level, applied to all flour and rice, could prevent around 80% of cases. With each severe case carrying a lifetime cost of up to £3 million, the case for stronger fortification is compelling. The NDNS should track folate and related B-vitamin levels, and we urge the Government to act on what that monitoring reports.
4. Commission an independent review of UK fortification policy. The nutrients above are illustrative; the literature documents widespread deficiency across a broader set of micronutrients. A systematic review should identify those of greatest concern, put in place the public health measures needed to address them, and monitor the results.

Hidden micronutrient deficiencies are preventable. The data exist, the policy tools are proven, and the economic case is robust. What has been missing is not evidence, but the political will to act on it. We urge Parliament to act.

Saving our soils:

Grand challenges for microbial soil recovery







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A new mission-led framework, drafted at The Lost Gardens of Heligan in Cornwall, aims to turn microbial science into interventions and metrics to support measurable improvements in soil health, on which food, water and climate all depend.

Soil is the thin biological skin between rock and atmosphere, and it is being worn away. Globally, soils are eroding at roughly one hundred times the rate at which they form. In Iowa alone, average losses now exceed five tonnes per acre per year, and around a quarter of cropland is reported to have no topsoil left at all. The same loss of structure that releases carbon, contaminates groundwater and undermines food security also cripples the soil's microbial communities, the bacteria, fungi, archaea and viruses that drive nearly every ecosystem service soils provide.

If we are serious about food security, climate resilience and biodiversity recovery, we cannot continue to treat the microbiology of soil as a footnote.

Microbiology also now offers a credible route back. Microbial inoculants can reduce reliance on synthetic fertilisers; biological consortia produce extracellular polymers that bind soil particles and hold water in desiccated soils; and microbial metabolism can be steered toward longer-lived carbon pools. Recent multi-site smallholder trials in Rwanda have shown measurable maize yield and root-biomass gains following microbial inoculation (Bukombe et al. 2026), evidence that the science can perform outside the greenhouse.

Yet field success is inconsistent, validation methods differ between laboratories, and farmers, regulators and investors lack a shared language for describing what 'good' looks like. The result is a paradox: scientific possibility is expanding rapidly while real-world deployment remains fragmented and slow.

> **Policy opportunity**: Establish a UK-anchored, internationally governed Heligan Grand Challenges platform, so that microbial soil-recovery technologies can be validated, regulated and deployed against shared global thresholds.

The Heligan Grand Challenges

In March 2026, an international group of soil scientists, microbiologists, farmers, communicators, investors and policymakers met at Heligan Gardens in Cornwall and the nearby Eden Project to confront this paradox. The result was the first draft of the Heligan Grand Challenges: a portfolio of ambitious, time-bound mission goals for biology-enabled soil recovery.

Inspired by the XPRIZE model, the Challenges are not another funding call. They sit one level higher, defining the outcomes that matter for global soil recovery and providing an organising framework through which scientific, technical, financial and social effort can be aligned. Implementation can take many forms, including challenges, living labs, policy pilots, public–private platforms, but each Protocol describes a clear destination and threshold for success.

Two complementary categories

Intervention challenges target the biology itself. The Carbon Lock Prize calls for biological pathways that drive soil carbon into durable, slow-turnover pools, with credible evidence of stability over 36 months. The Water Sponge Prize seeks treatments that increase soil water-holding capacity by 30%, or enable a 20% reduction in irrigation demand without yield or environmental penalty, across at least three soil types and climate regions. A complementary Save Our Soils (S.O.S.) Prize challenges teams to demonstrate a 20% reduction in erosion through practices adopted by at least 40 growers across three managed land systems. The Water Filtration Prize aims for a 50% reduction in nitrate, phosphate or pesticide leaching from contaminated lands, while the Biological Fertilisers Prize calls for a 25% reduction in synthetic fertiliser use, including the import-exposed phosphate on which UK agriculture relies, with no yield penalty across three crop systems and two seasons.

Validation challenges do something equally important. They ask how we will know an intervention has worked. The Soil Health Diagnostic Test, effectively a 'soil blood test', challenges innovators to deliver a rapid, affordable assay that tells a farmer within a week whether their soil is healthy, degrading or recovering, validated across at least thirty farms, three regions and three soil types, and predicting at least four key indicators with greater than 70% accuracy. The BIOME Prize tackles biological complexity directly, requiring measurable progress toward a high-biocomplexity reference state using existing metrics.

This combination matters. Without diagnostics that everyone trusts, the most elegant intervention will struggle to attract investment, regulatory approval or farmer uptake. Without interventions

that genuinely shift the dial, even the best monitoring system merely documents decline.

From challenge to deployment

The harder work begins after the prize is won. The Heligan participants identified fiv cross-cutting enablers that any successful Protocol must address.

1. Shared validation infrastructure. Without harmonised monitoring, common benchmark sites and independent auditing, claims made in one geography cannot be evaluated credibly in another. The European Union has begun to lead here: the EU Mission 'A Soil Deal for Europe' is building 100 living labs and lighthouses by 2027, and the EU Soil Observatory Dashboard now tracks 19 indicators of soil degradation. The UK should align with these emerging standards rather than duplicate them.

2. Scalability. Microbial inoculants must not only work in glasshouses; they must also be manufacturable, storable, distributable and robust to local conditions and resident microbiota. Heligan participants argued that formulation, delivery, farmer co-design and regional adaptation are part of the innovation challenge, not afterthoughts.

3. Regulation. Microbial products do not fit neatly into policy systems designed for chemicals. OECD guidance has long recognised that environmental uses of microorganisms need their own evaluation frameworks (OECD 2014), and recent analyses argue that microbes may even require a distinct environmental risk-assessment approach from genetically modified plants because their persistence, dispersal and ecological interactions after release can be difficult to predict (Eckerstorfer et al. 2025). Risk-governed stewardship (Beattie et al. 2026) must be built into Protocol design from the outset.

4. Economics policy alignment and public legitimacy. Farmers face strong "wait-and-see" incentives because the costs of transition are immediate while the benefits of soil restoration accrue slowly and often outside the farm gate (Kroh et al. 2026). Without crop-insurance reform, soil-health-linked payments and clear public communication, even excellent technology will sit on the shelf.

5. Engaging public narrative. The scientific case for microbial soil recovery is now largely settled and the dominant rate-limiter for global action is narrative, attention, and trust. The Heligan Challenges were therefore designed not only as research targets but as communicable stories with measurable thresholds. The grand challenge names and the deliberate XPRIZE framing are part of that design.

Why the UK is well placed to lead

Britain has a credible claim to host this work. The Heligan Protocols were drafted on Cornish soil, and the UK already supports world-class microbial science at Rothamsted Research, the Quadram Institute, the John Innes Centre and an expanding network of farmer-led research groups. DEFRA's Soil Health work and the Sustainable Farming Incentive provide a policy scaffold; UKRI and Innovate UK can resource the translational science; and Applied Microbiology International and the new IUCN Microbial Conservation Specialist Group offer global convening power (Gilbert et al. 2025). Britain's combination of dense agricultural innovation, mature research councils and a world-class AI ecosystem (the Alan Turing Institute, DeepMind, UKRI) is well suited to anchoring an internationally trusted Protocols platform.

Policy actions

To turn the Heligan Challenges from a workshop output into a durable global instrument, four UK policy actions would help.

Anchor the platform. Back a peer-reviewed framework paper and a public platform presenting each Protocol as a mission with measurable thresholds, judging criteria and partner opportunities.

Fund living labs that benchmark, not duplicate. Resource UK living labs that align with the EU Soil Mission and serve as international benchmark sites for Protocol validation, ensuring British farmers and land managers are co-designers, not late adopters.

Modernise microbial regulation. Reform the regulatory pathway for microbial inoculants and biological soil amendments so products meeting Protocol thresholds can move from trial to deployment without losing rigour, with risk assessment built around microbial behaviour rather than chemical regulation.

Reward measurable soil recovery. Integrate Protocol-aligned soil-health metrics into the Sustainable Farming Incentive, Nature Recovery Network and Environmental Land Management schemes, so public money rewards measurable soil recovery rather than activity alone.

Conclusion

Soil degradation is one of the most consequential and least visible crises of our time. Microbes are central to the solution, but only if success is described in ways scientists, farmers, regulators and investors all recognise. The Heligan Protocols are an attempt to build that shared language: a portfolio of clear, measurable, time-bound goals for microbial soil recovery, deployable through prizes, living labs and policy pilots alike. With early UK leadership, they can become an operating system for the soils on which our food, water and climate all depend.

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To secure the UK's innovation future, ethics cannot be optional



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We are living through one of the most fast-paced and disruptive technological periods in history. This is creating huge opportunities, but as scientific progress accelerate , the challenge for policymakers, regulators and innovators cannot simply be how quickly new technologies can be brought into use; it must also be about ensuring they are responsible and deliver for society.

At a recent meeting with the Science and Parliamentary Committee, the Nuffield Council on Bioethics (NCOB) examined three ways ethics can help strike this balance: supporting trustworthy and equitable science, aligning innovation with societal needs and expectations, and helping build consensus on complex and contested issues.

Ethics helps build consensus on complex and contested issues

We live in an increasingly polarised world, where navigating difficult questions about contested innovation means confronting competing values, interests and perspectives. Where this happens without a clear process for working through disagreement, decisions risk lacking the legitimacy they need to stick – either stalling entirely, or proceeding without public backing and trust.

Ethics offers a way to bridge those differences and find a path through issues that can otherwise seem intractable. One way the NCOB does this is by bringing together multidisciplinary working groups, deliberately convening experts with diverse perspectives to work through difficult ethical questions collectively.

Our current project on Solar Radiation Modification (SRM), a form of geoengineering, is an example of this approach (see figu e). The Government has committed over £67 million to SRM research. Yet the field remains highly contested, with deep divisions within the scientific community and beyond over whether and how it should proceed. Our working group brings together experts from across that divide, including critics of SRM and researchers directly involved in the science. The aim isn't agreement on the technology itself, but consensus on the principles and governance that should guide future decisions and earn public confidence in them, with recommendations due early next year.

Ethics can also create space for informed public deliberation on difficult questions. The NCOB's work on assisted dying illustrates this. Amid growing public and political debate on questions of autonomy, dignity and the role of the state, the NCOB commissioned England's first Citizens' Jury on assisted dying in 2024. Over eight weeks, the jury heard a wide range of evidence and deliberated carefully together.

One of the most striking reflections from jurors was that this process enabled them to move beyond their initial reactions and engage with the issue through a broader societal lens – a powerful illustration of how ethics can create the conditions for more informed, legitimate and trusted decision-making.

Ethics supports equitable and trustworthy science

Ethics plays a central role in supporting equitable and trustworthy science, in two distinct ways.

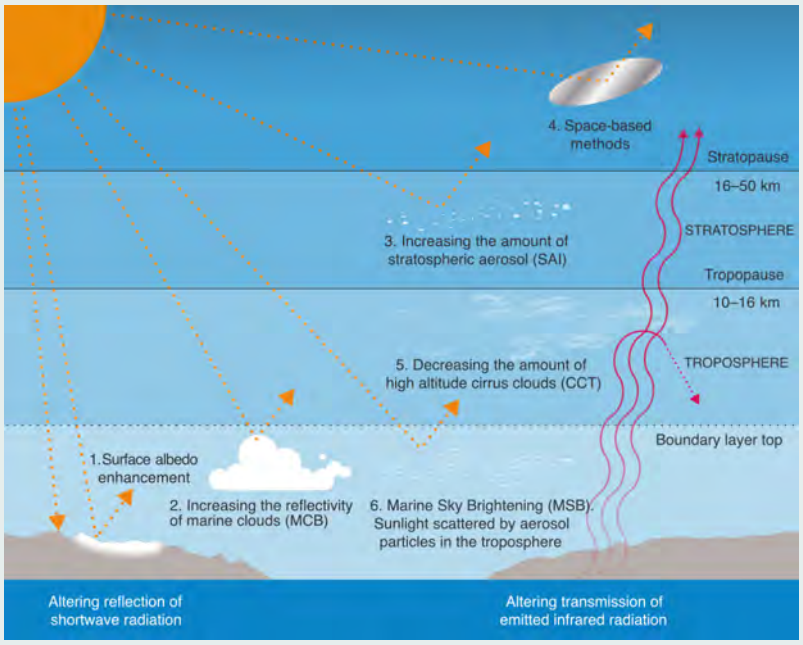
First, by seeking to ensure the benefits of research are fairly distributed. If we take genomics as an example, the NHS 10-Year Plan places genomic medicine at the centre of its ambition for personalised, predictive and preventative care, promising earlier diagnosis, more precise treatment and better disease prevention. However, potential is not performance, and performance depends on the quality and diversity of the data behind these tools.

Around 85% of genome-wide association study participants are of European ancestry, while African populations – the most genetically diverse globally – remain significantly underrepresented. As a result, tools such as polygenic risk scores are markedly less accurate in non-European populations.

The consequences are already visible in clinical practice: warfarin dosing, built largely on European data, has not always accounted for genetic variants more common in people of Asian ancestry, contributing to historic over-dosing in these groups. This pattern repeats across pharmacogenomics – unrepresentative data produces outcomes that are less accurate, and sometimes harmful.

Ethics has a key role to play in addressing these limitations and ensuring any potential benefits are equally distributed. Before any genomic tools are implemented at population scale within the NHS, we need robust ethical assessment and minimum reliability standards to ensure they do not reinforce existing health inequalities. Ethics guidance also plays a key role in responsible research and improving the diversity of datasets, through more inclusive study design, meaningful engagement with communities, and stronger data governance.

Getting this right matters. If we don't, instead of improving health outcomes, we risk the opposite: new harms, deeper inequalities and a loss of public trust.



Schematic diagram showing the interaction of solar radiation (orange arrows) and emitted infrared radiation (wavy red arrows) with the various proposed SRM techniques.

Source: The Royal Society. Solar Radiation Modification Policy Briefing October 2025.

Second, ethics can provide researchers with clear and accepted boundaries to work within. The NCOB's work has identified areas of emerging science where researchers are operating in regulatory and ethical grey areas, including human stem-cell-based embryo models and neural organoids, which raise complex ethical questions.

Without a clear framework, researchers are left to navigate these questions case by case – creating uncertainty, inconsistent decision-making across the field, and a chilling effect where individual scientists, unsure of where the ethical lines lie, may hesitate to pursue legitimate research. Clear ethical guidance avoids this by giving researchers the confidence and protection to get on with their work, knowing they are operating within understood and accepted parameters.

These benefits of clarity also extend beyond the lab. The public's trust in science depends on it too: the recent Public Attitudes to Science report found that ethical behaviour is one of the public's most important expectations of scientists, and trust, once lost, is incredibly difficult to regain.

Ethics helps align innovation with societal needs and expectations

The trajectory of a technology is not fixed from the outset. Decisions about what it is used for, who benefits, and what values shape its development are choices, often made implicitly. Ethics makes them explicit – by surfacing the values at stake early enough for them to be debated, rather than locked in by default.

Regulation is a critical juncture in this process, where those values are translated into guardrails. Here ethics helps strike a proportionate balance: enabling scientific progress while ensuring it aligns with public interests, so that regulation neither closes off worthwhile innovation nor allows it to proceed unchecked.

Mitochondrial transfer is a clear demonstration of what that process can look like in practice. The technique, developed by UK scientists to prevent serious mitochondrial disorders from passing from mother to baby, generated controversial headlines about "three-parent babies" when it was the subject of a major ethical review by the NCOB in 2012.

The review weighed the benefit of preventing serious, often fatal disease against concerns about altering genetic material and the welfare of any resulting child. It concluded that, under certain conditions, the technique would be ethical.

That review, alongside the Human Fertilisation and Embryology Authority (HFEA) public dialogue, gave parliamentarians a clear sense of public expectations and the confidence to legislate. In 2015, the UK became the first country in the world to legalise the technique in the clinic, and remains one of only two where it is legally available to patients today.

Despite the success of this approach in supporting responsible innovation, there is still a tendency to treat ethics as separate from innovation and regulation, rather than core to how emerging technologies are assessed, governed and implemented. This is a missed opportunity that will cost us greatly.

Across the UK's innovation ecosystem, we know the pace of scientific change is outpacing the regulatory frameworks built to govern it. We are at a key moment as government and regulators respond to this challenge: the Government has invested in new experimental governance approaches, including regulatory sandboxes – testbeds for designing the regulation of emerging technologies.

As these frameworks are redesigned, there is a real opportunity to embed ethical reflection into the process from the start, ensuring the choices being made about new technologies truly align with society's values, needs and priorities.

Advances coming through the UK's research pipeline hold enormous potential. But if that science is going to convert into technologies and products that deliver on their promise and share their benefits equitably across society, ethics needs to be treated as part of the core infrastructure for navigating these challenges – not a tick-box or an afterthought.

Clean Growth Fund:

Powering the UK's transition to a low-carbon economy through homegrown clean tech





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The UK is Europe's largest venture capital market, yet UK asset owners and pension funds remain largely absent from Seed and Series A investment. This matters because economy-wide decarbonisation will not be achieved by adjusting listed portfolios alone. It requires productive capital flowing into new companies, new industries, and high-quality UK jobs. CGF bridges that gap.

What is the Clean Growth Fund?

The Clean Growth Fund (CGF) is a specialist UK climate tech venture capital fund. Launched in 2020, it invests in British start-ups that significantly reduce greenhouse gas emissions or improve resource efficienc . With initial investments typically between £500k and £5m at Seed or Series A stage, CGF provides the expertise and capital that UK clean tech entrepreneurs need to tackle the climate crisis and build successful businesses.

CGF focuses on six sectors critical to delivering low-carbon economic growth and climate resilience in the UK.: power and energy, transport and mobility, industrial decarbonisation, buildings and the built environment, agrifood and land use, and the circular economy (including waste and water).

Clean Growth Fund I raised £101m of capital – from institutional investors including Queens College Cambridge, Aviva, DESNZ, CCLA and multiple Funds in the Local Government Pension Scheme (LGPS) – and has invested in 19 innovative companies across the UK, from London to Glasgow and Belfast, creating over 600 high quality jobs in the clean economy. Fund I has recently announced its first exit (Rendesco) and distribution of capital back to its LPs.

The team is now raising its second fund, with £59m already committed and a final target of £150m in early 2027.

What CGF does differently

Clean tech is not solely software, we need hardware and engineering solutions. Successful investment requires hands-on support: helping start-ups move from prototype to production, open facilities, and reach cost parity with incumbent technologies. CGF takes board seats at every portfolio company and provides specialist guidance on commercialising decarbonisation hardware.The following case studies illustrate the process:

Case study 1: Sunswap: solving a critical decarbonisation challenge for Tesco

Tesco, a major UK employer and core holding in many institutional portfolios, has a Science Based Target-initiative (SBTi) commitment to Net Zero by 2050. One obstacle was transport refrigeration – historically diesel-dependent, with no commercially proven zero-emission alternative.

Sunswap, founded in 2020, developed a zero-emission, triple-temperature refrigeration unit (e.g; chilled, frozen, and ambient all in one unit). CGF's Series A investment (March 2022) enabled customer trials. A follow-on Series B (August 2024) scaled production. In 2025, Tesco rolled Sunswap units into its fleet. Manufactured in Leatherhead, Surrey, they now export as far as Australia and Chile.

CGF's venture capital backing proved critical in enabling this component of Tesco's decarbonisation programme.

Case study 2: Clean Food Group: creating jobs and decarbonising food supply chains

Palm oil is a leading driver of deforestation, yet large food companies struggle to find cost-effective, functional alternatives. Clean Food Group, originating at the University of Bath, produces microbial oils that mimic palm oil's fatty acid profile without the environmental damage.

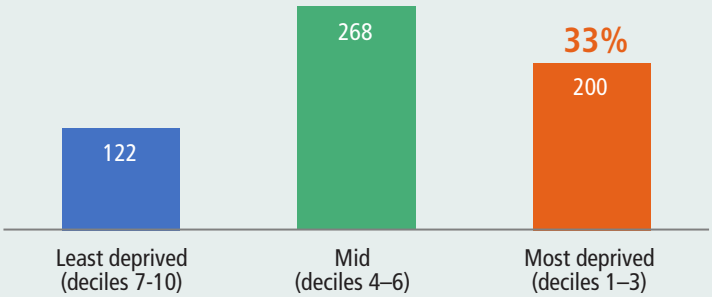
CGF invested in March 2024. Since then, Clean Food Group has secured regulatory approval, built partnerships with major food manufacturers, and acquired a one-million-litre fermentation facility in Knowsley (Northwest England). That facility will bring up to 150 new jobs to the region.

Again, this outcome relied on early-stage VC capital from CGF. Many UK climate technology companies originate from publicly-funded research conducted in universities and research institutes. Ensuring that these innovations can access commercialisation capital is therefore an important component of maximising the economic and societal return on public investment in R&D. CGF also supports companies to access grant funding from schemes such as Innovate UK and develop further funding rounds to promote the success of public-private funding initiatives.

Creating high quality jobs to stimulate the UK economy and bring industry to regions outside the 'golden triangle'

The latest CBI report[1] shows that the clean economy is bringing growth and higher productivity to all regions across the UK, generating £1.85 in economic value for every £1 invested and creating jobs with 11% higher wages than the UK average.

CGF invests in a diversified portfolio of start-up businesses, growing the clean economy and bringing job creation and industry to regions all around the UK. They can demonstrate tangible place-based impact as their companies have created over 600 jobs, 200 of which are located in the UK's most deprived regions.



CGF portfolio employees by deprivation band adjusted for location

Notes: Northern Ireland is, on average, more deprived than England, requiring some rescaling on a composite basis for overall comparison. Even NI's least-deprived SOAs (NIMDM decile 10) re-decile to roughly UK-wide decile 5–6 on an English-methodology basis. Our Belfast portfolio company location is in NIMDM decile 9, which maps approximately to the UK composite as decile 4–5.

Source: Portfolio location data by postcode has been mapped to the online government published local deprivation indices for England, Northern Ireland and Scotland.

Matching capital to opportunity

The recently published findings of the Transition Finance Pilot by the FCA[2] found that there is no shortage of innovation or investment appetite in the UK, but material mismatches exist between available institutional private capital and climate solutions opportunities. Companies developing climate innovations are often very small, early-stage, pre-revenue opportunities. They can struggle to demonstrate their ability to meet institutional asset owners' expectations of risk and return, which have traditionally been based on commercial maturity and repeatable pipelines.

Clean Growth Fund exists to match this investment appetite to the best quality, early-stage climate solutions innovations in the UK. Its diversified portfolio and experienced team of investors, with long careers in scaling and commercialising climate technology businesses, aims to address market concerns about risk and reward. CGF's success thus far in attracting and deploying institutional private capital demonstrates these risk reward perceptions can be overcome – and it has shown first hand that early-stage companies can successfully scale and commercialise.

Case study 3: Rendesco – heating up the clean economy

In May 2026, CGF exited the UK's leading independent clean heat network operator in a £100m deal whereby Pioneer Point Partners took a majority position, enabling the company to directly finance and own the networks it builds.

Heating accounts for roughly one-third of UK emissions, making clean heat one of the highest-impact decarbonisation categories, and Rendesco's ground-source heat pump networks operate at 3–4 times the efficiency of traditional gas systems.

CGF, alongside Aviva Ventures and Eurazeo, supported Rendesco as it became the UK's leading independent clean heat network operator. Over the holding period, Rendesco scaled to supply more than 10,000 homes and generate 28GWh of clean energy annually. It brought geothermal drilling in-house, becoming the UK's only fully integrated clean heat operator and secured anchor relationships with major housebuilders, developing a vertically integrated Heat-as-a-Service model that removes the upfront cost barrier historically blocking clean heat adoption.

The Rendesco exit demonstrates CGF's ability to: (i) identify early-stage UK climate-tech with credible paths to infrastructure-scale capital; (ii) help portfolio companies build defensible, vertically integrated business models; and (iii) hand off to specialist sustainable infrastructure capital at the inflection point – in this case, regulatory tailwinds from the Future Homes Standard and Warm Homes Plan. It also illustrates the venture-to-infrastructure capital handoff that is increasingly characteristic of successful climate-tech exits in the UK.

A policy ask for Parliament

CGF's experience points to a clear gap. LGPS pools and other institutional asset owners typically write cheques above £50m, while a best-in-class early-stage clean tech fund raises £100–150m in total. Without a fund-of-funds approach and lower minimum cheques, UK pension capital will only enter at Series C or later – by which time promising UK start-ups have already been acquired by US or European funds, or failed to meet their potential.

Three practical actions for Parliament:

1. **Clarify LGPS guidance** – define "local productive asset" for Seed/Series A clean tech as UK-wide investment, provided the fund manager reports regional job creation.
2. **Support first-of-a-kind commercial deployment.** Expand mechanisms that help climate technologies move from pilot-scale demonstration to commercial production, where financing gaps are often most acute.
3. **Recognise future climate impact.** Assessment frameworks should account for the potential emissions reductions delivered by climate solutions, alongside the current emissions profile of the companies developing them.

Conclusion

The UK's climate ambitions depend not only on setting targets but on scaling the technologies capable of delivering them. Early-stage climate venture capital plays a critical role in translating British scientific innovation into commercial deployment, regional economic growth and emissions reductions. The Clean Growth Fund is already demonstrating how targeted, early-stage climate tech venture capital can grow the UK economy, create regional jobs, and solve real-world decarbonisation challenges that large companies cannot fix alone. With the right policy support from Parliament – unlocking UK pension capital at the right scale – CGF and funds like it can do much more.

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MEETINGS

18 MAY 2026 IN PARTNERSHIP WITH THE NUFFIELD COUNCIL ON BIOETHICS

How embedding ethics across the innovation lifecycle – from discovery to regulation and implementation – can strengthen the UK's science ecosystem



L-R: **Jay Stone**, Associate Director, External Relations and Foresight, Nuffield Council on Bioethics; **Professor Sarah Devaney**, Professor of Healthcare Law and Regulation, University of Manchester; **Professor Segun Fatumo**, Professor and Chair of Genomic Diversity, Queen Mary University of London; **Sam Carling MP**, Chair, Parliamentary & Scientific Committee **Megan Edwards**, Public Affairs Manager, Nuffield Council on Bioethics **Viscount Stansgate**, President, Parliamentary & Scientific Committee **Danielle Hamm**, Director, Nuffield Council on Bioethics **Professor Emily Jackson**, Council Member, Nuffield Council on Bioethics



L-R: **Danielle Hamm**, Director, Nuffield Council on Bioethics, **Professor Segun Fatumo**, Professor and Chair of Genomic Diversity, Queen Mary University of London; and **Professor Sarah Devaney**, Professor of Healthcare Law and Regulation, University of Manchester.

WESTMINSTER MEDAL PRESENTATION

The Medal is awarded for excellence in science communication to one of the five Gold Medal inners at STEM for BRITAIN, the Parliamentary & Scientific Committee's annual poster competition for Early-Ca eer Researchers, which took place on the 17 March 2026.

Congratulations to **Ane Kritzinger** who won Physics Gold at STEM for BRITAIN 2026 and was subsequently adjudged the winner of the Westminster Medal!

Ane, who is a PhD candidate at the University of St Andrews, received her award at a P&SC Discussion Meeting in the Houses of Parliament on the 18 May. The Medal, established in honour of the late Dr Eric Wharton, is sponsored by the Society of Chemical Industry



L-R: **Viscount Stansgate**, President, Parliamentary & Scientific Committee, **Steve Smith**, representing the Society of Chemical Industry, **Mrs Sue Wharton**, Parliamentary & Scientific Committee; **Ane Kritzinger**; **Sam Carling MP**, Chair, Parliamentary & Scientific Committee; and **George Freeman FRSA MP**, Co-Chair, Parliamentary & Scientific Committee.

SELECT COMMITTEES

HOUSE OF COMMONS EDUCATION COMMITTEE

CURRENT INQUIRIES	Opened	Report	Gov't response
The use of Artificial Intelligence and EdTech in Education	26 Feb 2026		
Children and Young People's Mental Health	13 Feb 2026		
Realising potential: Delivering the Child Poverty Strategy	29 Jan 2026		
Reading for pleasure	23 Nov 2025		
Early years: improving support for children and families	4 Sep 2025		
Higher education and funding: threat of insolvency and international students	12 Jun 2025		
Solving the SEND crisis	20 Dec 2024	18 Sep 2025	

Chair: Helen Hayes MP

Clerks: Laura Daniels and Sian Woodward

Email: educom@parliament.uk

General enquiries: 020 7219 2370

Media enquiries: 020 7219 8895

X @CommonsSITC

Address: Education Committee, House of Commons, London SW1A OAA

Further information at: https://committees.parliament.uk/committee/203/education-committee

HOUSE OF COMMONS ENVIRONMENT, FOOD AND RURAL AFFAIRS COMMITTEE

CURRENT INQUIRIES	Opened	Report	Gov't response
Land use and nature	18 Mar 2026		
Climate and weather resilience	9 Sep 2025	20 Mar 2026	
Preventing waste and enabling a circular economy	20 May 2025		
Fisheries and the marine environment	23 Jan 2025		
Fairness in the food supply chain	20 Dec 2024		
Reforming the water sector	19 Dec 2024	16 Jun 2025	
Work of the Department and its arm's-length bodies	6 Nov 2024		

Chair: Rt Hon Mr Alistair Carmichael MP

Clerk: Sean Kinsey

Email: efracom@parliament.uk

Media enquiries: 020 7219 3138

X @CommonsEFRA

Address: Environment, Food and Rural Affairs Committee, House of Commons, London SW1A OAA

Further information at: https://committees.parliament.uk/committee/52/environment-food-and-rural-affairs-committee

HOUSE OF COMMONS ENERGY SECURITY AND NET ZERO COMMITTEE

CURRENT INQUIRIES	Opened	Report	Gov't response
Reviewing the electricity market	6 Feb 2026		
International climate change policy	5 Nov 2025		
Managing the future of UK oil and gas	30 Oct 2025		
Revisiting the nuclear roadmap	20 Feb 2025		
Building support for the energy transition	19 Feb 2025		
The cost of energy	18 Feb 2025	29 Oct 2025	19 Mar 2026
Unlocking community energy at scale	11 Nov 2024		
Work of the Department of Energy and Net Zero	11 Nov 2024		

Chair: Bill Esterson MP

Clerk: Stephen McGinness

Email: commonsesnz@parliament.uk

Media enquiries: 020 7219 4984 bridgespalmerj@parliament.uk

X: @CommonsESNZ

Address: Energy Security and Net Zero Committee, House of Commons, London SW1A OAA

Further information at: https://committees.parliament.uk/committee/664/energy-security-and-net-zero-committee

SELECT COMMITTEES

HOUSE OF COMMONS SCIENCE, INNOVATION AND TECHNOLOGY COMMITTEE

CURRENT INQUIRIES	Opened	Report	Gov't response
Low-energy computing	16 Apr 2026		
Neuroscience and digital childhoods	24 Mar 2026		
The science and regulation of hair and beauty products and treatments	2 Dec 2025		
Data security across government	24 Nov 2025		
Life sciences investment	2 Oct 2025		
Innovation and global food security	21 Jul 2025		
Science diplomacy	3 Apr 2025		
Digital centre of government	3 Feb 2025	3 Jun 2026	due 3 Aug 2026
Under the microscope	13 Jan 2025		
Innovation, growth and the regions	6 Dec 2024	13 Mar 2026	16 Jun 2026
Innovation showcase	4 Dec 2024		

Chair: Dame Chi Onwurah MP

Clerk: Hannah Stone

Email: commonssitc@parliament.uk

General enquiries: 020 7219 5023

Media enquiries: 020 7219 0731

X: @CommonsSITC

Address: Science, Innovation and Technology Committee, House of Commons, London SW1A OAA

Further information at: https://committees.parliament.uk/committee/135/science-innovation-and-technology-committee

HOUSE OF COMMONS BUSINESS AND TRADE COMMITTEE

CURRENT INQUIRIES	Opened	Report	Gov't response
UK trade with the EU	8 Apr 2026	22 June 2026	due Aug 2026
UK trade with the US	8 Apr 2026		
AI, business and the future of the workforce	10 Mar 2026		
China and the UK economy	5 Mar 2026		
Competition and market functioning in the UK live music industry	4 Dec 2025	24 May 2026	due 24 Jul 2026
Financing the real economy	4 Aug 2025		
Small business strategy	16 Jun 2025	11 Feb 2026	overdue

Chair: Rt Hon Liam Bryne MP

Second Clerk: Jonathan Finlay

Email: commonsbtc@parliament.uk

General enquiries: 020 7219 8586

Media enquiries: 020 7219 4984

X: @CommonsBTC

Address: Business and Trade Committee, House of Commons, London, SW1A 0AA

Further information at: https://committees.parliament.uk/committee/365/business-and-trade-committee

HOUSE OF COMMONS ENVIRONMENTAL AUDIT COMMITTEE

CURRENT INQUIRIES	Opened	Report	Gov't response
HM Treasury and the economics of climate and nature	17 Apr 2026		
Risks and opportunities to the sustainability of data centres in the UK	27 Feb 2026		
Air pollution in England	20 Jan 2026		
The seventh carbon budget	23 Sep 2025	4 Mar 2026	11 Jun 2026
The environment in focus	5 Sep 2025	19 Dec 2025	
Addressing the risks from Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS)	10 Apr 2025	23 Apr 2026	overdue

Chair: Mr Toby Perkins MP

Clerk: Ian Cruse

Email: eacom@parliament.uk

General enquiries: 020 7219 8890

Media enquiries: 020 7219 1034

X: @CommonsEAC

Address: Environmental Audit Committee, House of Commons, London SW1A OAA

Further information at: https://committees.parliament.uk/committee/62/environmental-audit-committee

SELECT COMMITTEES

HOUSE OF COMMONS HEALTH AND SOCIAL CARE COMMITTEE

CURRENT INQUIRIES	Opened	Report	Gov't response
Health Bill	19 May 2026	12 Jun 2026	due 12 Aug 2026
Children and young people's mental health	13 Feb 2026		
Delivering the neighbourhood health service: estates	12 Dec 2025		
Food and weight management	17 Jul 2025		
Healthy ageing: physical activity in an ageing society	26 Jun 2025	22 May 2026	due 22 Jul 2026
The first 1000 days: a renewed focus	21 Mar 2025	22 Jan 2026	22 Apr 2026
Community mental health services	17 Dec 2024	19 Mar 2026	

Chair: Layla Moran MP

Clerk: Ben Williams

Email: hsccom@parliament.uk

General enquiries: 020 7219 6182

Media enquiries: 020 7219 3138

X: @CommonsHealth

Address: Health and Social Care Committee, House of Commons, London SW1A OAA

Further information at: https://committees.parliament.uk/committee/81/health-and-social-care-committee

THE HOUSE OF LORDS SCIENCE AND TECHNOLOGY COMMITTEE

CURRENT INQUIRIES	Opened	Report	Gov't response
Innovation in the NHS: personalised medicine and AI	3 Mar 2026		
Forensic science: follow-up	3 Nov 2025	17 Feb 2026	21 Apr 2026

Chair: Professor The Lord Mair CBE

Clerk: John Turner

Email: hlscience@parliament.uk

Committee Staff: 020 7219 5750

Press Officer 020 7219 1692

X: @LordsSTCom

Address: Science and Technology Committee, House of Lords, London SW1A 0PW

Further information at: https://committees.parliament.uk/committee/193/science-and-technology-committee

THE HOUSE OF LORDS ENVIRONMENT AND CLIMATE CHANGE COMMITTEE

CURRENT INQUIRIES	Opened	Report	Gov't response
Pet Parasite Medication	24 Apr 2026		
Drought preparedness	24 Oct 2025	21 May 2026	due 21 Jul 2026
Waste crime	29 Jul 2025		

Chair: The Baroness Sheehan

Clerk: Andrea Ninomiya

Email: ninomiyaa@parliament.uk

Committee Staff: 020 7219 6076

Press Officer 0207 219 8550

X: @HLEnviroClimate

Address: Environment and Climate Change Committee, House of Lords, London SW1A 0PW

Further information at: https://committees.parliament.uk/committee/515/environment-and-climate-change-committee

House of Commons Library



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You can receive the latest research updates from the Commons Library, on the topics you care about, with alerts sent straight to your email inbox. Sign up at **commonslibrary.parliament.uk/subscribe**.

NEW COMMONS LIBRARY RESEARCH

We publish a range of topical and business-related research online each month. Read about our latest research on science, health, the environment and technology below – you can find more recent research, as well as the full briefings for everything in this article, on our website at **commonslibrary.parliament.uk/scienceinparliament**.

Proposals to ban social media for children

Research Briefin
last updated 23 June 2026

This briefing introduces key AI concepts and sets out the current regulatory approach in the UK, which relies largely on existing sector-specific frameworks rather than a single overarching law. It also outlines the roles of regulators and examines policy developments and debates around oversight, offering a concise guide to a fast-moving and complex policy area.

What might a 'Godzilla' El Niño mean for the UK?

Research Briefin
published 15 June 2026

A potentially record-strength El Niño could reshape global weather patterns – but what does that mean closer to home? This briefing explains how El Niño forms, how it influences the atmosphere, and why forecasts suggest an unusually strong event. It also considers the possible implications for UK weather, alongside wider global impacts on sectors such as agriculture, energy and supply chains.

AI regulation in the UK

Research Briefin
published 10 June 2026

This briefing introduces key AI concepts and sets out the current regulatory approach in the UK, which relies largely on existing sector-specific frameworks rather than a single overarching law. It also outlines the roles of regulators and examines policy developments and debates around oversight, offering a concise guide to a fast-moving and complex policy area.

Flood risk management and funding

Research Briefin
last updated 8 June 2026

Flooding remains a significant and growing risk across the UK. This briefing explains how flood and coastal erosion risk is managed, from the roles of Defra and the Environment Agency to the responsibilities of local bodies and property owners. It also outlines the policy framework and funding mechanisms that support risk reduction, alongside the range of measures used to protect communities, to provide a picture of how flood resilience is organised and delivered.

Building broadband and mobile infrastructure

Research Briefin
last updated 5 June 2026

Delivering nationwide connectivity depends on more than technology – it hinges on planning, regulation and access to land. This briefing explains how broadband and mobile networks are rolled out in the UK, including the permissions operators need and the rules governing infrastructure such as masts and cables. It also explores recent reforms designed to speed up deployment and improve coverage, setting out how policy aims to enable faster and more cost-effective roll-out.

What are carbon budgets?

Insight
last updated 3 June 2026

Carbon budgets sit at the heart of the UK's legally binding climate targets – but what do they actually involve? This explainer outlines how five-year limits on greenhouse gas emissions are set, monitored and enforced. It also places carbon budgets within the wider framework of the UK's net zero target.

Ketamine

Research Briefin
published 3 June 2026

Ketamine is used both as a medicine and as an illegal drug, complicating its regulation. This briefing explains ketamine's clinical uses, classification under drug law, and patterns of use. It also considers concerns around misuse and harm, alongside the policy and public health responses aimed at addressing them.

Heatwaves in the UK

Insight
published 27 May 2026

This quick-read insight explains how heatwaves are defined in the UK and examines their impacts on health, infrastructure and the environment. It also looks at how rising temperatures are expected to shape future risks, helping to put recent extreme weather into a longer-term climate context.

Data centres: planning policy, sustainability, and resilience

Research Briefin
last updated 27 May 2026

As demand for data grows, so does the need for the infrastructure behind it. This briefing explores how data centres are planned and regulated in the UK, including the policy landscape governing their development. It also considers key challenges such as energy use, environmental impact and resilience.

Cryptoassets

Research Briefin
published 15 May 2026

Cryptoassets are a rapidly evolving part of the financial landscape. This briefing explains what cryptoassets are, how they are used, and the risks and opportunities they present. It also outlines the UK's regulatory approach and considers wider policy debates, offering a clear overview of a complex and fast-changing sector.

The green economy

Research Briefin
published 21 April 2026

What does the 'green economy' mean in practice? This briefing explains how green economic activity is defined and measured and how it fits into the UK's wider policy agenda. It looks at official data on low-carbon and renewable energy industries, green jobs and businesses, and considers how clean energy industries feature in the government's plans for economic growth and the transition to net zero.

Gigabit broadband in the UK: Government targets, policy, and funding

Research Briefin
last updated 16 April 2026

The UK has set ambitious targets for gigabit-capable broadband, but how are these being delivered? This briefing looks at government policy and funding programmes aimed at expanding high-speed connectivity. It also explores progress to date and the challenges of reaching harder-to-serve areas, including the role of public investment alongside private sector deployment.

Energy efficiency of UK homes

Research Briefin
last updated 15 April 2026

Improving the energy efficiency of homes is central to both climate policy and reducing energy bills. This briefing examines how energy performance is measured, the current state of the UK housing stock, and the policies designed to drive improvements. It also explores key challenges, including costs, delivery and the pace of change required to meet targets.

Nature based solutions for climate change

Research Briefin
published 7 April 2026

Can working with nature help tackle climate change? This briefing explores approaches such as restoring wetlands, planting forests and enhancing ecosystems to reduce emissions and build resilience. It also considers how these solutions fit into policy frameworks, alongside the opportunities and limitations associated with scaling them up.

The switch to digital landlines

Research Briefin

last updated 1 April 2026

The UK's traditional analogue phone network is being phased out, but what does that mean in practice? This briefing explains the shift to digital landlines, including how services are being delivered over broadband. It also highlights key issues such as reliability, support for vulnerable users, and the responsibilities of providers during the transition.

Rights of Rivers

Research Briefin

last updated 31 March 2026

Should rivers have legal rights? This briefing examines the emerging concept of granting rights to rivers and other natural features. It explores how this approach has been applied in other countries, growing campaigns in the UK, and the debates around its potential role in domestic environmental law and governance.

DATA DASHBOARDS

The Library also produces a range of interactive data dashboards, helping you find data at constituency, regional and national levels. Our most recently-updated dashboards include:

Constituency data: Green belt land in England

data last updated 13 June 2026

Constituency data: Sewage discharges in England

data last updated 10 June 2026)

Constituency data: Road traffic collisions and casualties

data last updated 5 June 2026

Constituency data: Health conditions

data last updated 4 June 2026

GOOD INFORMATION TOOLKIT

The good information toolkit is the Library and POST's essential collection of resources to help you avoid disinformation and find reliable sources – now including new good information guides on:

- Working with AI and spotting AI-generated text
- What is misinformation?
- How to evaluate sources
- How to check facts
- How to verify images and videos:
- How to spot spin and inappropriate use of statistics

Search 'good information toolkit' online to explore.

GET REAL-TIME RESEARCH UPDATES FOR PARLIAMENTARY DEBATES

Get impartial, curated research for the day's debates an hour before the Commons Chamber sits from the Commons Library and POST's WhatsApp channel, **Research in Parliament.**

Scan the QR code or go to **ukparlresearch.info/whatsapp** on a browser or your mobile device to follow the channel, and make sure to click the bell icon to be notified when we share helpful research.

UK Parliament POST

The Parliamentary Office of Science and Technology (POST) is an impartial research and knowledge exchange service based in the UK Parliament. POST connects members of parliament with cutting-edge research and evidence. We publish evidence-based, peer-reviewed briefings on a wide range of subjects and have a UK-wide network of researchers and academics ready to share their expertise with parliamentarians. We also help researchers understand parliament and contribute to its work.

Bookmark the POST website **post.parliament.uk** to keep up to date with our latest research.

NEW POSTNOTES

THE NATIONAL HYDROGEN NETWORK

published 28 May 2026

Hydrogen could play a small but important role in decarbonising parts of the UK economy. This POSTnote looks at how it might be transported, focusing on proposals for regional and national pipeline networks. It sets out plans for linking production, storage and industrial demand, alongside challenges around cost, infrastructure and future demand. For a concise view of how a hydrogen network could develop in practice, this briefing brings together the key evidence.

LIFELONG LEARNING AND SKILLS

published 20 May 2026

This briefing explores the role of lifelong learning in supporting the UK workforce, examining declining participation alongside growing demand for new skills. It outlines recent policy initiatives, as well as barriers such as cost and time pressures. With technological change and an ageing population reshaping careers, POST provides a clear picture of how approaches to learning are changing, and where gaps remain.

NATURE-BASED FLOOD AND DROUGHT RESILIENCE

published 1 May 2026

Floods and droughts are often treated separately, but could the same solutions address both? This briefing examines nature-based approaches such as peatland restoration and floodplain reconnection, setting out how they may help manage water across entire catchments. It reviews the available evidence, highlights practical challenges and considers how these interventions fit within wider policy approaches.

EVIDENCE FOR NATURE RECOVERY

published 23 April 2026

This POSTnote explores how scientific data, expert knowledge and local insight are brought together to inform nature recovery actions in England. It highlights gaps in the evidence base, alongside challenges in data access, coordination and long-term monitoring. As progress towards biodiversity targets remains slow, find out what stronger evidence could mean for decision-making.

RESEARCH AND DEVELOPMENT (R&D) FOR UK DEFENCE

published 20 April 2026

Defence capability increasingly depends on the effective use of emerging technologies. This briefing examines how research and development for UK defence is funded and delivered across government, industry and academia. It outlines current policy priorities and considers structural challenges – including skills shortages and difficulties in scaling innovation – giving you a concise overview of how defence R&D operates and the factors shaping its future direction.

MENTAL HEALTH DURING AND AFTER PREGNANCY

published 17 April 2026

One in four women in England experience mental health problems during pregnancy or the year after birth. This POSTnote outlines the scale of the issue, alongside the impacts on parents and children. It explores inequalities in risk and access to care, as well as the evidence behind different forms of support.

PUBLIC ENGAGEMENT WITH THE ENERGY TRANSITION published 7 April 2026	Public behaviour and participation are key factors in the UK's transition to net zero. This POSTnote explores how people engage with energy policies and technologies, from household choices to involvement in decision-making. It outlines different forms of engagement, levels of support and the barriers that can limit participation. With a significant share of emissions reductions linked to consumer action, the briefing highlights the role of engagement in meeting climate goals.
DIAGNOSIS AND TREATMENT OF RARE GENETIC DISEASES published 25 March 2026	Millions of people in the UK are affected by rare genetic conditions, many of which remain difficult to diagnose and treat. This POSTnote brings together evidence on advances in genetic testing and therapies, alongside the policy frameworks shaping care. It also examines challenges including delayed diagnosis, limited treatment options and the costs associated with emerging therapies.

NEW RAPID RESPONSES

Alongside our flagship POSTnotes, POST publishes quick-read rapid response articles to get you up to date on fast-moving areas of research and policy, including some from guest authors. Recent articles include:

Artificial intelligence for cyber resilience published 8 June 2026	Cyber resilience underpins critical services. What is it, how can it be achieved with AI, and what are the challenges from evolving cyber threats?
Impacts of taxation on small businesses: Business rates in the UK published 22 May 2026	Business rates are a fix cost for firms. Research shows they influence occupancy, employment and rents, with lower rates linked to higher occupancy of premises.
Digital targeting web: enhancing armed forces' precision and lethality published 20 May 2026	The digital targeting web is a new initiative intended to enhance the precision and lethality of the UK Armed Forces in targeting adversary forces.
What are climate tipping points and how might they affect the UK? published 19 May	As global warming approaches 1.5°C, parts of the climate system are at increasing risk of undergoing potentially abrupt, long-lived and irreversible shifts.
Technology transfer and productivity growth in the UK published 11 May 2026	Technology is key to the economy and productivity. Policies on investment and skills shape how technology transfers across the economy.
The health impacts of airports on local residents published 7 May 2026	Residents near airports can experience elevated air pollution and aircraft noise. How do these affect health, and what are the opportunities to mitigate the effects?
Conspiracy theories: What they are and how to spot them published 6 May 2026	Conspiracy theories can have social and political consequences, but why do people believe them and what conversational techniques work to address them?
Leasehold retirement living: How it works, challenges and reforms published 22 April 2026	How does leasehold work in retirement developments, and what are the potential areas for reform?
Contracts for Difference and the economics of renewable energy deployment published 13 April 2026	Contracts for Difference auctions are used to build new renewable power, but how do they work and what is their impact on energy prices?
Facial recognition technology in policing published 8 April 2026	UK police forces have used facial recognition technology for around a decade. How does it work, how is it used, and what are the opportunities and concerns?
Astronaut health: is going into space bad for your health? published 31 March 2026	Space missions, such as the Artemis II journey around the moon, expose astronauts to physical and psychological effects. What are those effects, and how is the UK involved in space health research?
UK investment screening: Balancing national security and economic growth published 17 March 2026	Investment screening lets the government review deals that may pose security risks. But evidence indicates it also captures low-risk activity and adds costs.

UPCOMING RESEARCH

More exciting new POST research will be published over the next few months, on topics including:

The POST Board meets quarterly to agree to new research projects. Additional briefings will be announced in mid-July – keep an eye on the POST website to find out what's coming soon and how to contribute.

If you'd like to be notified when new POST research is published on topics you care about, sign up for POST email updates at **post.parliament.uk/subscribe**.

- Environmental compensation for net zero infrastructure
- Governance of solar geoengineering research
- Impacts of screen and phone use on children and young people's development
- Accessing large-scale health data for research – opportunities, barriers and risks
- Technology to reduce livestreamed child sexual abuse
- Digital sovereignty
- Impacts of social media on children and young people
- FemTech: technology to support women's health
- Batteries
- Supply chains in the energy industry

POST IS APPOINTING SEVEN NEW THEMATIC RESEARCH LEADS

Since 2023, POST has embedded external researchers part-time in Parliament to enhance parliamentary use of research evidence and expertise. Thematic Research Leads (TRLs) focus on specific policy areas and work closely with teams across Parliament to facilitate effective knowledge exchange.

We are currently looking to appoint seven new TRLs, covering the following areas:

- AI, Digital and Technology
- National Security and Resilience
- Infrastructure, Planning and Land Use, including Clean Energy Industries
- Health and Life Sciences
- Education, Children and Young People
- Criminal Justice
- Place-Based Economic Growth

Applications are open until 9 August 2026. If you are interested – or know someone who might be – go to parliament.uk/trls to find out more.

Parliamentary Links Day 2026

Parliamentary Links Day, an annual event organised by the Royal Society of Biology on behalf of the science and technology community, took place on 16 June 2026 at the House of Commons. Links Day is the largest science event in the annual Parliamentary events calendar, which brings together scientists, learned societies, and Members of Parliament.



This year there were 90 attendees present with the theme focusing on the current challenges and opportunities in higher education and research funding in the UK. **Dame Chi Onwurah MP** gave the welcoming speech, followed by a keynote address on public attitudes to science by **Hannah Russell FRSB**, Chief Executive of the British Science Association.



Image credit: Mike Rumsey/RSB

SCIENCE DIRECTORY

UK Research and Innovation

Christopher Brown
UKRI, 7th floo , Caxton House
Tothill Street, London SW1H 9NA
Email: externalaffairs@ukri.org

UK Research and Innovation (UKRI) is the largest public funder of research and innovation in the UK, investing £8 billion annually spanning all disciplines and all sectors.

We are nine councils, drawing on our unique breadth and depth of expertise to work with government and other stakeholders to enrich lives, by increasing our understanding of ourselves and the world around us, supporting innovative businesses and public services, and creating high-quality jobs throughout the UK.

- Arts and Humanities Research Council
- Biotechnology and Biological Sciences Research Council
- Economic and Social Research Council
- Engineering and Physical Sciences Research Council
- Innovate UK
- Medical Research Council
- Natural Environment Research Council
- Research England
- Science and Technology Facilities Council

www.ukri.org

airto

Contact: Dr Jane Gate MBE, Executive Director
AIRTO Ltd, c/o Net Zero Tech Centre,
20 Queens Road, Aberdeen AB15 4ZT
E: enquiries@airto.co.uk
W: www.airto.co.uk
X: @airtoinnovation

AIRTO, the Association of Innovation, Research and Technology Organisations, comprises approximately sixty principal organisations operating in the UK's Innovation, Research and Technology (IRT) sector. The IRT sector has a combined turnover of £6.9bn, employs over 57,000 people and contributes £34bn to UK GVA. AIRTO's members work at the interface between academia and industry, for both private and public sector clients. Members include independent Research and Technology Organisations, Catapult Centres, Public Sector Research Establishments, National Laboratories, some university Technology Transfer Offices and some privately held innovation companies.

Applied Microbiology International

Contact: Lucky Cullen, Policy, Public Affairs and Diversity Manager
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W: www.appliedmicrobiology.org

Applied Microbiology International believes that global challenges need to be solved by global, interdisciplinary experts who apply their diverse experience and unique voices to achieve a common goal. Because of this, we're a truly inclusive, international organisation.

With a strong focus on influencing inte national policy, we are organised around seven goals which align with core UN Sustainable Development Goals and encourage partnership between industry and academia to increase our impact. We publish the leading industry magazine, *The Microbiologist*, and in partnership with Wiley and Oxford University Press, publish six internationally acclaimed journals.

AWE NUCLEAR SECURITY TECHNOLOGIES

Contact: Colin Danson, Distinguished Scientist & Head of Profession for Physics and Mathematics
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W: www.awe.co.uk

For over 70 years, AWE has supported the UK Government's nuclear defence strategy and Continuous At Sea Deterrence.

On behalf of the Ministry of Defence, AWE manufactures, maintains and develops the UK's nuclear warheads, and applies its unique expertise to support nuclear threat reduction and to protect national security.

The company provides guidance to UK military and police counter-terrorism teams, as well as emergency response in the event of nuclear or radiological incidents.

SCIENCE DIRECTORY

British In Vitro Diagnostics Association

Contact: Ben Kemp, Policy and Public Affairs Executive
British In Vitro Diagnostics Association
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W: www.bivda.org.uk

BIVDA is the UK industry association representing companies who manufacture and/or distribute the diagnostics tests and equipment to diagnose, monitor and manage disease largely through the NHS pathology services.

Increasingly diagnostics are used outside the laboratory in community settings and also to identify those patients who would benefit f om specific drug t eatment particularly for cancer.

Contact: Policy Office
British Pharmacological Society
The Schild Plot, 16 Angel Gate, City Road, London EC1V 2PT
T: +44 (0)20 7239 0171
E: policy@bps.ac.uk
W: www.bps.ac.uk

The British Pharmacological Society is a charity with a mission to promote and advance the whole spectrum of pharmacology. It is the primary UK learned society concerned with drugs and the way they work, and leads the way in the research and application of pharmacology around the world. Founded in 1931, the Society champions pharmacology in all its forms, across academia, industry, regulatory agencies and the health service. With over 3,500 members from over 60 countries worldwide, the Society is a friendly and collaborative community. Enquiries about the discovery, development and application of drugs are welcome.

Contact: Tracey Guise, Chief Executive Office
British Society for Antimicrobial Chemotherapy
53 Regent Place, Birmingham B1 3NJ
T: +44 (0)121 236 1988
E: tguise@bsac.org.uk
W: www.bsac.org.uk

BSAC is a learned society whose members are among the world's leading infectious disease physicians, pharmacists, microbiologists, and nurses. With more than 45 years of leadership in antibiotic research and education, BSAC is dedicated to saving lives by fighting infection. It does this by supporting a global network of experts via workshops, conferences, evidence-based guidelines, e-learning courses, and its own high-impact international journal. BSAC also provides national surveillance and susceptibility testing programmes, an outpatient parenteral antimicrobial therapy (OPAT) initiative, research and development grants, and the secretariat for the All-Party Parliamentary Group on Antibiotics. BSAC has members in 40 nations and active learners in more than 135 countries.

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W: www.immunology.org

The British Society for Immunology is the leading UK charity representing scientists and clinicians who study the immune system in humans and animals.

As a membership organisation, we act as a focal hub for the immunology community, supporting and empowering immunologists working in academic, industry and clinical settings to drive forward scientific discovery and application. e aim to harness the knowledge generated by our membership to ensure society is aware of and can gain from the health benefits that immunology research can deliver.

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The British Society of Animal Science (BSAS), the principal body for animal science in the UK, was established in 1944.

We work globally with members and partners to shape the future of animal science, supporting the advancement of responsible, environmentally and economically sustainable animal production, addressing issues such as the role of animal science in resolving the world's food crisis.

BSAS disseminates research findings to ensu e practical and beneficial application of positive outcomes to include livestock, animal health and welfare, the care of equine, companion, and zoo animals.

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The British Society of Soil Science (BSSS) was founded in 1947 and is an established international membership organisation and charity committed to the study of soil in its widest aspects.

The society brings together those working within academia, practitioners implementing soil science in industry and all those working with, or with an interest in soils. We promote research and education, both academically and in practice, and build collaborative partnerships to help safeguard our soil for the future. This includes hosting the World Congress of Soil Science 2022 in Glasgow, where those with an interest in soil science met to discuss the critical global issues relating to soil.

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Brunel University London is an international research active university with 3 leading research institutes: Institute of Energy Futures: Led by Professor Savvas Tassou, the main themes of the Institute are Advanced Engines and Biofuels, Energy Efficient and Sustainable Technologies, Smart Power Networks, and Resource Efficient Futu e Cities. Institute of Materials and Manufacturing: The main themes of research are Design for Sustainable Manufacturing, Liquid Metal Engineering, Materials Characterisation and Processing, Micro-Nano Manufacturing, and Structural Integrity. The Institute is led by Professor Luiz Wrobel. Institute of Environment, Health and Societies: Professor Susan Jobling leads this pioneering research institute whose themes are Health and Environment, Healthy Ageing, Health Economics Synthetic Biology, Biomedical Engineering and Healthcare Technologies, and Social Sciences and Health. Brunel University London offers a wide range of expertise and knowledge, and prides itself on having academic excellence at the core of its offer, and was ranked in the recent REF as 33rd in the UK for Research Power (average quality rating by number of submissions) and described by The Times Higher Education as one of the real winners of the REF 2014.

Cavendish Laboratory

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The Cavendish Laboratory houses the Department of Physics of the University of Cambridge. The research programme covers the breadth of contemporary physics.

Extreme Universe: astrophysics, cosmology and high energy physics

Quantum Universe: cold atoms, condensed matter theory, scientific computing, quantum matter and semiconductor physics

Materials Universe: optoelectronics, nanophotonics, detector physics, thin film magnetism, surface physics and the Winton programme for the physics of sustainability

Biological Universe: physics of medicine, biological systems and soft matter. The Laboratory has world-wide collaborations with other universities and industry

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CIPA represents virtually all of the UK's 2,600 registered patent attorneys in industry and private practice. We are the UK's largest intellectual property organisation with over 4,700 members, including 1,100 trainee patent attorneys.

It is our members that support British SMEs, universities and large companies in protecting their innovative technology worldwide. The reputation of the UK for IP advice draws work from around the world; only 11% of European patent applications by British representatives are for UK applicants. Consequently, the profession generates around £1 billion for the economy in gross value added and approaching £750 million in exports.

SCIENCE DIRECTORY

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W: www.ctpa.org.uk
W: www.thefactsabout.co.uk

CTPA is the UK trade association representing manufacturers of cosmetic products and suppliers to the cosmetic products industry. 'Cosmetic products' are legally defined and subject to stringent EU safety laws.

CTPA is the authoritative public voice of a vibrant and responsible UK industry trusted to act for the consumer; ensuring the science behind cosmetics is fully understood.

Contact: Dr Eric Albone MBE, Director
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We bring school students and their teachers to:
• work closely with scientists and engineers
• experience science as a creative, questioning, team exploration
• add real-life meaning and motivation, from primary to post-16
• internationally build global awareness and experience science as a cultural bridge
• build transferable skills for employability and citizenship

Two powerful exemplars:
• Post-16; our unique UK-Japan Young Scientist Workshop Programme hosted in universities in England and Japan since 2001
• Primary; our local Meet-a-Medic Programme since 2005

Clifton Scientific rust Ltd is registered charity in England and Wales 1086933

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The Council for the Mathematical Sciences is an authoritative and objective body that works to develop, influence and espond to UK policy issues affecting mathematical sciences in higher education and research, and therefore the UK economy and society by:

• providing expert advice;

• engaging with government, funding agencies and other decision makers;

• raising public awareness; and

• facilitating communication between the mathematical sciences community and other stakeholders

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The Francis Crick Institute is an independent charity, established to be a UK flagship for discovery research in biomedicine. The Crick's mission is discovery without boundaries. We don't limit the direction our research takes. We want to understand more about how living things work to help improve treatment, diagnosis and prevention of human disease, and generate economic opportunities for the UK. In our institute more than 2,000 staff and students use their wide-ranging knowledge and expertise to work across disciplines and explore biology at all levels, from molecules through cells to entire organisms.

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Founded in 1992 in memory of the UK's first female Professor of Physics, the Trust is the UK's leading charity dedicated to realising the potential of scientists and engineers returning to research after career breaks for family, caring and health reasons. Recently, we have expanded our remit to incorporate the social sciences and arts & humanities. Our Fellowship programme, working in partnership with universities, UKRI, charities, learned societies and industry, enables individuals to undertake part- time research in universities and research institutes. Fellowships comprise a research project alongside an individually tailored retraining programme, with additional mentoring and support, enabling recipients to re-establish their research credentials, update skills and redevelop confidence, in a suitably supportive environment.

Suzanne King, Policy and Voice Manager
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EngineeringUK is an independent organisation that promotes the vital role of engineers, engineering and technology in our society.

EngineeringUK partners business and industry, Government and the wider science and technology community: producing evidence on the state of engineering; sharing knowledge within engineering, and inspiring young people to choose a career in engineering, matching employers' demand for skills.

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The Geological Society of London is the UK's national society for geoscience, providing support to 12,000 Fellows (members) worldwide.

The Fellowship encompasses those working in industry, academia and government, with a wide range of expertise on policy-relevant science, and the Society is a leading communicator of this science to government bodies and other non-technical audiences.

The Society aims to be an inclusive and thriving Earth science community advancing knowledge, addressing global challenges, and inspiring future generations.

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Heights is a UK-based, science-led supplement company committed to raising the standard of evidence in the nutrition industry. We design and manufacture premium supplements grounded in peer-reviewed research, aimed at improving the health of our population. Our award-winning clinical research programme includes randomised controlled trials, alongside in vitro studies, literature reviews and health economic modelling. We work in active collaboration with leading UK Universities and Nutrition Institutes and publish findings in pee -reviewed journals. Heights engages with parliamentary and policy stakeholders to translate nutritional science into real-world public health impact.

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Advancing knowledge and setting standards in biomedical science
With over 20,000 members in 61 countries, IBMS is the leading professional body for scientists, support staff and students in the field of biomedical science. Since 1912 we have been dedicated to the promotion, development and delivery of excellence in biomedical science within all aspects of healthcare, and to providing the highest standards of service to patients and the public. By supporting our members in their practice, we set quality standards for the profession through training, education, assessments, examinations and continuous professional development.

SCIENCE DIRECTORY

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IKE is the UK's professional body for innovators. It accredits and certificates innovation practices. We influence the inte -relationship between education, business, and government through research and collaborative networks.

Our Innovation Manifesto highlights our commitment to support the development of innovative people and organisations. IKE runs think-tanks, conducts research, develops new business models and tools and supports organisations to benchmark their innovation capabilities.

Institute of Measurement and Control

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The InstMC is a professional engineering institution and learned society dedicated to the science and application of measurement and control technology for the public benefit. The Institute has a comprehensive range of membership grades for individuals engaged in both technical and non-technical occupations. Also, it is licensed by the Engineering Council to assess and register individuals as Chartered Engineers (CEng), Incorporated Engineers (IEng) and Engineering Technicians (EngTech). The InstMC works to develop the knowledge and skills of individual engineers, fostering communication and advancing the science and practices within the industry.

IOP Institute of Physics

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The Institute of Physics (IOP) is the professional body and learned society for physics in the UK and Ireland.

The IOP's mission is to raise public awareness and understanding of physics, inspire people to develop their knowledge, understanding and enjoyment of physics and support the development of a diverse and inclusive physics community.

As a charity, the IOP seeks to ensure that physics delivers on its exceptional potential to benefit society.

IPEM Institute of Physics and Engineering in Medicine

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The Institute of Physics and Engineering in Medicine (IPEM) is the professional body for Medical Physicists, Clinical Engineers and Clinical Technologists working across healthcare, academia and industry.

We are a charity with a mission of Improving Health through Physics and Engineering in Medicine. Our vision is one in which professionalism drives improvements in diagnosis, treatment and care, transforming the lives of patients.

IPEM is licensed by the Science Council to award CSci, RSci and RSciTech, and by the Engineering Council to award CEng, IEng and EngTech.

IChemE

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The Institution of Chemical Engineers (IChemE) is the UK based and internationally recognised qualifying body and learned society for chemical, biochemical, and process engineers.

We provide a voice to the discipline of chemical engineering, facilitate the development of chemical engineering professionals across a wide range of sectors, and provide connections to a powerful network of around 30,000 members in more than 100 countries.

IET The Institution of Engineering and Technology

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The IET is a world leading professional organisation, sharing and advancing knowledge to promote science, engineering and technology across the world.

Dating back to 1871, the IET has over 163,000 members in 127 countries with offices in Eu ope, North America, and Asia-Pacific.

LGC

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LGC is a leading global life science tools company, providing genomics and quality assurance solutions into high growth application areas within human healthcare and applied market segments. Our core purpose is Science for a Safer World.

Our 180 years of scientific heritage, combined with a focus on innovation and value-enhancing acquisitions, has enabled us to build a highly valued product portfolio, and to closely collaborate with our customers, partners and the global scientific communit .

As the UK Government Chemist www.gov.uk/government/ organisations/government-chemist, LGC acts as the referee analyst and advises Government and the wider analytical community on analytical measurement matters for policy, standards and regulation.

LGC is also the UK's National Measurement Laboratory for chemical and bio-measurement, finding solutions to fundamental and emerging measurement challenges, driving innovation, productivity and economic growth.

The Linnean Society of London

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As the world's oldest active biological society, the Linnean Society is an essential forum and meeting point for those interested in the natural world. The Society holds regular public lectures and events, publishes three peer-reviewed journals, and promotes the study of the natural world with several educational initiatives. The Society is home to a world famous library and collection of natural history specimens. The Society's Fellows have a considerable range of biological expertise that can be harnessed to inform and advise on scientific and public policy issues.

A Forum for Natural History

Institution of Mechanical Engineers

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The Institution provides politicians and civil servants with information, expertise and advice on a diverse range of subjects, focusing on manufacturing, energy, environment, transport and education policy.

We regularly publish policy statements and host political briefings and policy events to establish a working relationship between the engineering profession and parliament.

SCIENCE DIRECTORY

Met Office

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The Met Office doesn t just forecast the weather on television.

Our forecasts and warnings protect UK communities and infrastructure from severe weather and environmental hazards every day – they save lives and money.

Our Climate Programme delivers evidence to underpin Government policy through the Met Office Hadley Cent e.

Our Mobile Meteorological Unit supports the Armed Forces around the world.

We build capacity overseas in support of international development. All of this built on world-class environmental science.

MICROBIOLOGY SOCIETY

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The Microbiology Society is a membership charity for scientists interested in microbes, their effects and their practical uses. It has a worldwide membership based in universities, industry, hospitals, research institutes, schools, and other organisations. Our members have a unique depth and breadth of knowledge about the discipline.

The Society's role is to help unlock and harness the potential of that knowledge. Our principal goal is to strengthen our culture of being a community-driven Society by amplifying our members' voices, wherever they are in the world, and empowering them to embed the benefits of microbiology within wider society.

NPL National Physical Laboratory

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The National Physical Laboratory (NPL) is the United Kingdom's national measurement institute, an internationally respected and independent centre of excellence in research, development and knowledge transfer in measurement and materials science.

For more than a century, NPL has developed and maintained the nation's primary measurement standards - the heart of an infrastructure designed to ensure accuracy, consistency and innovation in physical measurement.

NATURAL HISTORY MUSEUM

Advancing the science of nature

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We challenge the way people think about the natural world – its past, present and future We use our unique collection and unrivalled expertise to tackle the biggest challenges facing the world today. We are leaders in the scientific understanding of the origin of our planet, life on it and can predict the impact of future change. We study the diversity of life and the delicate balance of ecosystems to ensure the survival of our planet. We help enable food security, eradicate disease and manage resource scarcity. We inspire people to engage with science to solve major societal challenges.

University of Northampton

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The University of Northampton is an institution committed to science education through initial teacher training, a STEM Ambassador network which works within the community and teaching and research to doctoral level.

We are an Ashoka U 'Changemaker Campus' status university recognising our commitment to social innovation and entrepreneurship.

The University of Nottingham
UNITED KINGDOM · CHINA · MALAYSIA

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With 43,000 students and campuses in Nottingham, China and Malaysia, The University of Nottingham is 'the nearest Britain has to a truly global university'.

With more than 97 per cent of research at the University recognised internationally according to the Research Excellence Framework 2014, the University is ranked in the top 1% of the world's universities by the QS World University Rankings.

The Nutrition Society

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The Nutrition Society, formed in 1941, is a diverse community with the independence and courage to challenge, question and progress the field of nutrition.

Through a progressive approach that champions collaboration and breaking down research silos, we welcome members from around the world, regardless of their level of expertise. They must however have a genuine interest in pushing forward the field of nutrition for the benefit o people, animals while balancing the health of our planet too.

The Physiological Society

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As the largest network of physiologists in Europe, with academic journals of global reach, we continue our 140-year tradition of being at the forefront of the life sciences.

We bring together scientists from over 60 countries, and our Members have included numerous Nobel Prize winners from Ivan Pavlov to John O'Keefe.

Quadram Institute

Quadram Institute
Science • Health • Food • Innovation

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The £75m Quadram Institute opened in 2019 and is focused on fundamental and translational research into the interfaces between the gut microbiome, food, and human health.

The Quadram Institute combines leading-edge bioscience capabilities with NHS endoscopy, clinical trials and biobank facilities.

The Quadram Institute is a partnership between the Norfolk and Norwich University Hospital, University of East Anglia, Quadram Institute Bioscience and BBSRC.

SCIENCE DIRECTORY

Royal Academy of Engineering

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As the UK's national academy for engineering, we bring together the most successful and talented engineers for a shared purpose: to advance and promote excellence in engineering.

We have four strategic challenges:

- Drive faster and more balanced economic growth
- Foster better education and skills
- Lead the profession
- Promote engineering at the heart of society.

Kew

ROYAL BOTANIC GARDENS

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RBG Kew is a centre of global scientific expertise in plant and fungal diversity, conservation, and sustainable use, housed in two world-class gardens. Our scientific vision is to document and understand global plant and fungal diversity and its uses, bringing authoritative expertise to bear on the critical challenges facing humanity today. Kew's strategic priorities for science are: (1) To document and conduct research into global plant and fungal diversity and its uses for humanity. (2) To curate and provide data-rich evidence from Kew's unrivalled collections as a global asset for scientific esearch. (3) To disseminate our scientific knowledge of plants and fungi, maximising its impact in science, education, conservation policy and management. These priorities enable us to curate, use, enhance, explore and share Kew's global resource, providing robust data and a strong evidence base for our UK and global stakeholders. Kew is a non-departmental government body with exempt charitable status, partially funded by Defra.

THE ROYAL SOCIETY

Contact: Daniel Callaghan, Head of Public Affairs
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The Royal Society is the academy of science in the UK and the Commonwealth comprising 1400 outstanding individuals representing the sciences, engineering and medicine. The Society has played a part in some of the most fundamental, significant and life-changing discoveries in scientific history and Royal Society scientists continue to make outstanding contributions to science across the wide breadth of research areas. Through its Fellowship and permanent staff, it seeks to ensure that its contribution to shaping the future of science in the UK and beyond has a deep and enduring impact, supporting excellence in science and encouraging the development and use of science for the benefit of humanit .

Royal Society of Biology

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The Royal Society of Biology is a single unified voice, representing a diverse membership of individuals, learned societies and other organisations.

The RSB has a central role in facilitating scientific knowledge exchange and in harnessing the expertise of our community to advise policy-makers on key bioscience issues of national and global significance.

Our vision is a world that values biology's contribution to understanding and improving life for all.

ROYAL SOCIETY OF CHEMISTRY

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The Royal Society of Chemistry is the world's leading chemistry community, advancing excellence in the chemical sciences.

With over 50,000 members and a knowledge business that spans the globe, we are the UK's professional body for chemical scientists; a not-for-profit organisation with 170 years of history and an international vision of the future.

We promote, support and celebrate chemistry. We work to shape the future of the chemical sciences – for the benefit of science and humanity.

Science for Animal Welfare

The new name for UFAW

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E: info@scienceforanimalwelfare.org
W: www.scienceforanimalwelfare.org
Registered in England Charity No: 207996

The Society for Animal Welfare is an international independent scientific and educational animal welfare charity and membership society. The Society's vision is a world where the welfare of all animals affected by humans is maximised through a scientific understanding of their needs and how to meet them. We promote an evidence-based approach to animal welfare by funding scientific research, helping develop the next generation of animal welfare scientists and sharing animal welfare science knowledge with both experts and the wider public.

Society for Endocrinology

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The Society for Endocrinology has been the UK home of endocrinology for 80 years. Since 1946 we have been bringing together the global endocrine community to share ideas and advance discipline.

As a membership organisation, we support scientists, clinicians, and nurses who work with hormones throughout their careers. We also engage policymakers, journalists, patient, and the public with hormone science to encourage informed health decisions and demonstrate the value of endocrinology to the wider world.

Society for Underwater Technology

SUT Society for Underwater Technology

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The SUT is a multidisciplinary learned society that brings together individuals and organisations with a common interest in underwater technology, ocean science, and offshore/subsea engineering.

The society was founded in 1966 and has members from over 40 countries, including engineers, scientists, other professionals and students working in these areas.

Society of Chemical Industry

SCI where science meets business

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Established by Royal Charter in 1881, SCI is a unique multi-disciplinary community. Set up by a prominent group of forward thinking scientists, inventors and entrepreneurs, SCI continues to be a multi-science and industry network based around chemistry and related sciences. Our charitable objective is to promote links between science and industry for the benefit of societ . Our passion is invention and creation. We deliver our charitable objective by:

- Supporting the commercial application of science into industry
- Tackling global challenges across Agrifood, Energy, Environment, Health and Materials.

SCIENCE DIRECTORY

Society of Cosmetic Scientists

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Advancing the science of cosmetics is the primary objective of the SCS. Cosmetic science covers a wide range of disciplines from organic and physical chemistry to biology and photo-biology, dermatology, microbiology, physical sciences and psychology.

Members are scientists and the SCS helps them progress their careers and the science of cosmetics ethically and responsibly. Services include publications, educational courses and scientific meetings

The Society for Radiological Protection

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The Society for Radiological Protection is the principal independent professional body for radiation protection in the UK.

Its members operate in the fields of medicine, the nuclear power cycle and other industries, research, and teaching.

We offer a profession-wide view to regulators and are involved in training and educational outreach. We ensure that professional standards are maintained at the highest levels.

UK INNOVATION & SCIENCE SEED FUND

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The UK Innovation & Science Seed Fund is a leading patient capital investor with more than £330 million private investment leveraged to date.

The Fund works to build technology companies from the earliest stage by working closely with its partners led by STFC, BBSRC, NERC and Dstl, with the National Research and Innovation Campuses they support, and with entrepreneurial science-led teams.

The Fund is also closely aligned with the Catapults and InnovateUK, helping to commercialise key technological advances in industrial biotech, agricultural technology, healthcare, medicine, clean energy, materials, artificial intelligence, software and space.

University of Essex

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Established in 1964, the University of Essex is ranked highly in the Research Excellence Framework, with 100% of its research impact deemed internationally excellent or world-leading for 10 subjects, and is awarded Silver in the Teaching Excellence Framework.

It is home to world-leading expertise in analytics and data science, with research peaks spanning the social sciences, sciences, and humanities. Pioneers of quantitative methods and AI techniques, Essex is also in the UK top 10 for Knowledge Transfer Partnerships – working with businesses to embed innovation into operations, knowledge exchange and contract research.

INTERESTED IN TAKING A DIRECTORY ENTRY IN SCIENCE IN PARLIAMENT`?

These are available to P&SC member and non-member STEM organisations.

For further details please contact Karen Smith: office@scienceinparliament.org.u

Science in Parliament journal is circulated quarterly to P&SC subscribing members and all MPs and Peers.

STEM for BRITAIN

CALL FOR POSTERS

THE PARLIAMENTARY & SCIENTIFIC COMMITTEE'S STEM FOR BRITAIN 2027

Applications are invited from early-career research scientists, engineers, technologists and mathematicians who wish to exhibit posters in one of the following areas:

- Biological and Biomedical Sciences
- Chemistry
- Engineering
- Mathematics
- Physics

Prizes will be awarded for the posters presented in each discipline which best communicates high level science, engineering or mathematics to a lay audience.

The Westminster Medal will be awarded to the overall winner at a P&SC event in Parliament in April 2027, following online judging.

Tuesday 8 September 2026
Applications open.

Full details of the competition and exhibition including the application form will be on the STEM for Britain website: www.stemforbritain.org.uk

Friday 27 November 2026
Closing date for applications.

Tuesday 16 March 2027
Exhibition event in the House of Commons.

The Parliamentary and Scientific Committee is an All-Party Parliamentary Group funded by Membership.

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Published by Parliamentary and Scientific Committee.
Correspondence to: karen@scienceinparliament.org.uk.
Published four times a year.
Editor: Leigh Jeffes, leigh.jeffes@scienceinparliament.org.uk
Design: Moncrieff & Co
Printed by Premier Print Group Ltd

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The 2026 subscription rate is £80. Single numbers £20.

ADVERTISING

Space for cover advertising in the Autumn 2026 (copy deadline 21st September) and Winter 2026 (20th November) journals are currently available. To take an advertisement, please contact the Editor.

Current advertising rates	P&SC members	Non-members
Front Cover	£948	(members only)
Back Cover	£779	(members only)
Inside Front or Back Cover	£667	(members only)
Other Full Page	£450	£900
Half Page	£300	£500

VAT will be added (except for registered charities).

SCIENCE DIARY

Forthcoming discussion and other meetings

■ Tuesday 8th September 2026

DISCUSSION MEETING
In partnership with the UK Photonics Leadership Group
5.15pm to 6.30pm, Palace of Westminster
Chairman's Reception 6.45pm to 7.30pm, One Parliament Street

■ Tuesday 13th October 2026

DISCUSSION MEETING
In partnership with the Chartered Institute of Patent Attorneys
5.15pm to 6.30pm, Palace of Westminster
Chairman's Reception 6.45pm to 7.30pm, One Parliament Street

■ Wednesday 14th October 2026

BIOLOGY WEEK NETWORKING AND AWARDS CEREMONY
In partnership with the Royal Society of Biology
5.30pm to 9.30pm, Churchill Room

■ Monday 2nd November 2026

DISCUSSION MEETING
In partnership with the British Pharmacological Society
5.15pm to 6.30pm, Palace of Westminster
Chairman's Reception 6.45pm to 7.30pm, One Parliament Street

■ Monday 9th November 2026

DISCUSSION MEETING
In partnership with the Institution of Mechanical Engineers
Unlocking the potential of metamaterials
2.00pm to 3.00pm, Palace of Westminster
This will be a trial format for P&SC meetings and if successful will provide an opportunity to hold additional meetings/briefings for topical issues that arise.

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ISSN 0263-6271

Every supplement brand says it works.
Every label says clinically proven.
You've heard it before, and you've stopped believing.

So we did the work.

- → The UK's first gold-standard multivitamin trial.
- → Real ingredients at real doses.
- → Biomarkers that move.

But here's the thing about proof. It only counts when you feel it.

When the afternoon crash stops

When the fog lifts

When sleep gets deeper

When you feel like yourself again

That's the proof that matters.

Proven.
Not promised.



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