



Engineering and
Physical Sciences
Research Council

EPSRC – Future Priorities

University of Kent, 28th June 2022

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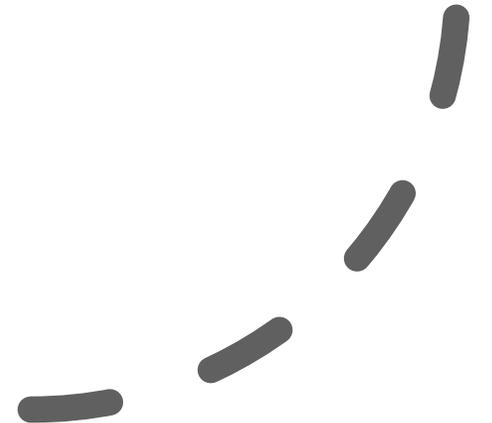


About me

- Background in environmental science
- Worked in Environmental NGO sector in UK and Australia
- Joined EPSRC in 2013
 - Portfolio Manager, Physical Sciences theme
 - Senior Portfolio Manger, ICT theme
 - Head of International
- Lead EPSRC's institutional engagement with University of Kent

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Outline

1 UKRI & EPSRC

Context on our organisation

2 EPSRC Priorities

Emerging thinking and priorities ahead of our new delivery plan

3 How to engage with EPSRC

Through peer review, engagement with strategic advisory structures, and engaging with funding opportunities

4 Q&A



UK Research and Innovation

We work with the government to invest over £7 billion a year in research and innovation by partnering with academia and industry to make the impossible, possible. Through the UK's nine leading academic and industrial funding councils, we create **knowledge with impact.**



**UK Research
and Innovation**



UK Research and Innovation



**Professor Dame
Lynn Gladden**
EPSRC
Executive Chair



HM Treasury



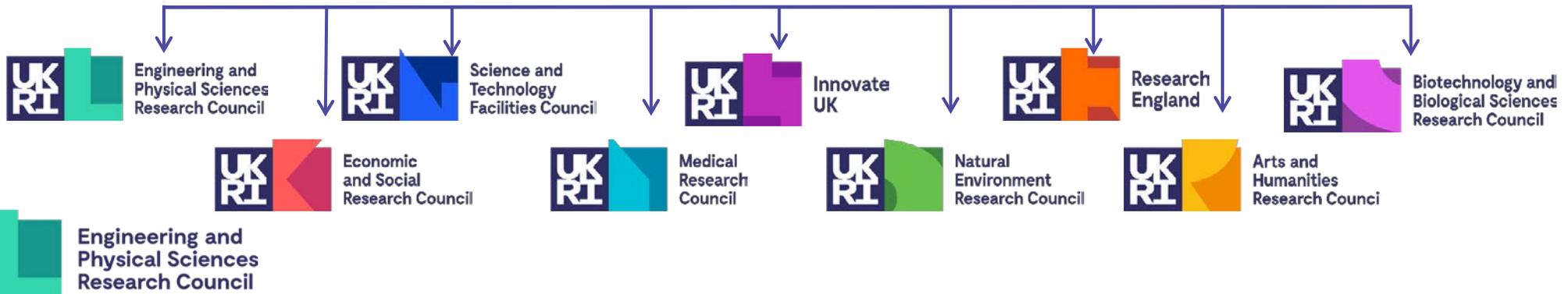
Department for
Business, Energy
& Industrial Strategy



**Professor Dame
Ottoline Leyser**
UKRI Chief
Executive



UK Research
and Innovation





**UK Research
and Innovation**



<https://www.ukri.org/wp-content/uploads/2022/03/UKRI-210422-Strategy2022To2027TransformingTomorrowTogether.pdf>



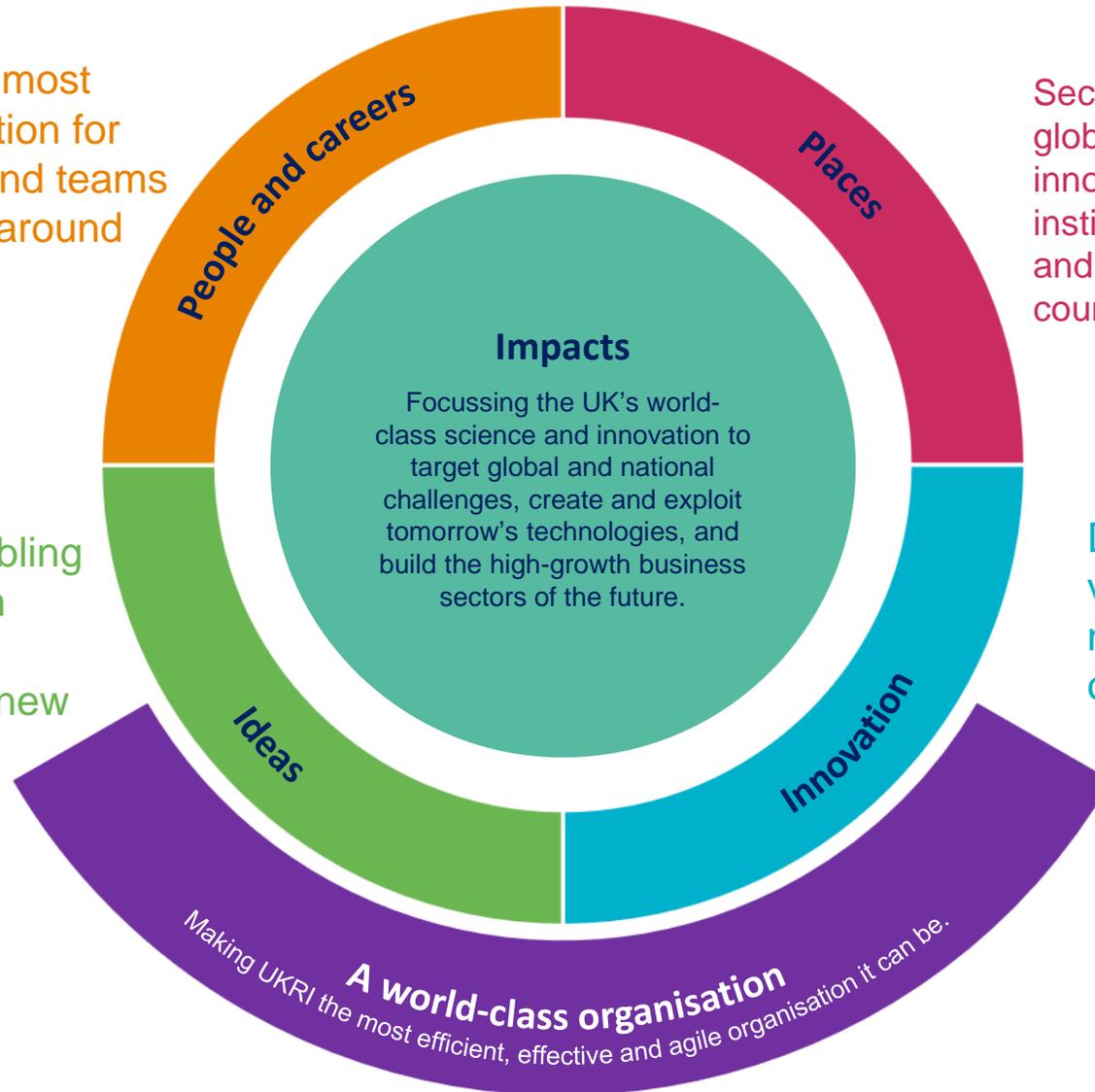
https://www.ukri.org/wp-content/uploads/2022/06/6618_UKRI-Budget-Allocations-2022-25_MH_v7.pdf

Our Strategic Objectives

Our **strategic objectives** provide the framework for how we will achieve our vision and realise our principles through world-class:

Make the UK the most attractive destination for talented people and teams from the UK and around the world.

Advancing the frontiers of human knowledge and innovation by enabling the UK to seize opportunities from emerging research trends, multidisciplinary approaches and new concepts and markets.



Securing the UK's position as a globally leading research and innovation nation with outstanding institutions, infrastructures, sectors and clusters across the breadth of the country.

Delivering the government's vision for the UK as an innovation nation, through concerted action of Innovate UK and wider UKRI.

Our Strategic Objectives and Priorities

Each strategic objective will be delivered through a set of priorities for UKRI over the next five years.

People and careers	Places	Ideas	Innovation	Impacts
<p>1.1 Make the UK the most attractive destination for talented people and teams from the UK and around the world</p> <p>1.2 Develop the breadth of skilled people and teams essential for the future R&D workforce</p> <p>1.3 Shift research culture to support, rather than hinder, talented people and teams to pursue their ideas</p>	<p>2.1 Strengthen clusters and partnerships – locally, nationally and globally</p> <p>2.2 Improve the financial sustainability of research and innovation in organisations across the UK</p> <p>2.3 Secure cutting-edge infrastructures for world-class research and innovation</p>	<p>3.1 Invest in a diverse and dynamic portfolio of high-quality, creative research and innovation</p> <p>3.2 Incentivise and remove barriers to multi- and inter-disciplinary working</p>	<p>4.1 Deliver the skills, finance and collaboration opportunities needed to boost private sector investment</p> <p>4.2 Accelerate translation, commercialisation and knowledge exchange</p>	<p>5.1 Address major national and global challenges</p> <ul style="list-style-type: none"> • Building a green future • Securing better health, ageing and wellbeing • Tackling infections • Building a secure and resilient world • Creating opportunities, improving outcomes <p>5.2 Harness the opportunities from tomorrow's technologies</p> <p>5.3 Transform sectors that are key to the future economy</p>
<p>Supported by a world-class organisation – making UKRI the most efficient, effective and agile organisation it can be.</p>				
<p>6.1 Empower talented people to collaborate and thrive</p> <p>6.2 Make UKRI an efficient, effective and agile organisation</p> <p>6.3 Catalyse change and impact through partnership and leadership</p>				

The UKRI Strategy in context

The UKRI Strategy:

- Is a huge opportunity to shape how the research and innovation system works at a critical time for the UK and the world, and will be instrumental in shaping the role of research and innovation in responding to many of the greatest challenges we face
- Covers the period 2022-27, corresponding to the period for reaching the government's R&D public spending target of £22 billion per annum
- Crosses two UK spending review cycles, including UKRI's first 3-year settlement from 2022-25; the combination of Strategy and multi-year spending settlement will enable us to deliver in more systematic ways over longer timescales
- Reflects UKRI's role as an essential connecting institution between researchers and innovators, governments, investors, and communities
- Involves working in more collaborative, effective and efficient ways, with improved connections across UKRI, and a new operating model
- Will be supported by Strategic Delivery Plans developed by each of our nine Councils, and the shared Corporate Plan for UKRI – all to be published later in 2022



UKRI Allocations: Summary

- In March 2022, the Department for Business, Energy and Industrial Strategy (BEIS) confirmed a total budget of **£25.1 billion** for the three financial years 2022-23 to 2024-25. This is a 14% increase in our budget between 2021-22 and 2024-15, rising from £7,785m to £8,874m (see table below).
- A multi-year budget for all parts of UKRI for the first time gives us the security to plan strategically as we deliver our five-year UKRI Strategy: transforming tomorrow together.
- We will leverage the strength and breadth of investments in R&I across our Councils with new cross-UKRI strategic programme, learning from our existing programmes.
- We will transition into working in a collective manner across £2bn of talent initiatives, covering studentships and fellowships. We will build on our strong track record in working across Research Council remits to harmonise further our talent investments, to reduce bureaucracy and make it more efficient and easier to work across disciplines and across the R&I system, including the private, public and third sectors.
- This allocation will maintain the balance to dual support, providing stability of funding for higher education institutions, we will maintain the balance of dual support.

	Total £m							
UKRI budgets	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Total	6,768	6,842	6,957	8,188	7,785	7,904	8,373	8,874



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EPSRC vision and priorities

EPSRC: Overview

vaccines/therapeutics
manufacturing



transport



clean energy



skilled people



energy networks



- Our remit covers engineering and physical sciences: we fund research into chemistry, engineering, information and communications technologies, materials, mathematical sciences and physics.

finance



- Broad portfolio, in terms of the research and training we fund, and the impacts these achieve.

cities and infrastructure



- Skills training: 11,000 students, ~50% with business partners
- Trusted partnerships across academia, business and government
- existing successful models for working across UKRI and with external partners, at national and international scales

driverless cars/6G



- maintaining internationally-leading research in core disciplines offers agility to move into new areas of strategic importance

wellbeing and social care



defence and security



music and art



healthcare



EPSRC Grants: 2020/21 Facts and Figures

- **More than 5000 proposals** processed by EPSRC in 2020/21
- This is an increase of over 2000 proposals from 2019/20 **driven by high demand and popularity** of the EPSRC New Horizons pilot and the UKRI Agile Research and Innovation Ideas to Address COVID-19 call.
- This has been supported by a **significant peer review effort from reviewers and panelists** and we are extremely thankful to the community for their time and effort



New Horizons Pilot

- **Over 1200 first stage applications from 82 Research Organisations**
- 1073 applications sent out to reviewers after passing initial checks
- **More than 400 reviewers participated in the batch reviewing process, submitting over 3000 reviews**
- Decisions communicated to applicants within 16 weeks of submission
- **126 successful proposals totalling £25.5m supported**



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EPSRC Delivery Plan 2022-2025



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EPSRC – Our Vision



- For the UK to be recognised as **the place where the most creative researchers can deliver world-leading engineering and physical sciences research**



- We **support new ideas and transformative technologies** which are the foundations of innovations that improve our economy, environment and society



- **In partnership and co-investing with industry**, we work to deliver both national and global priorities, making a more sustainable, resilient and prosperous UK



EPSRC – Our ambitions

In partnership across UKRI, government departments and the wider research and innovation landscape, we will:

- support the UK's ambition to be a science superpower by **investing in a pipeline of discovery-led research**, delivering the research tools, technologies and outcomes that will provide a bedrock for the UK's future
- **deliver mission-inspired research**, enabling economic and societal impacts by underpinning UKRI strategic themes, targeting national priorities and enabling transformative technologies
- enhance UK prosperity by **developing world-class people, places and innovation**, supporting impactful partnerships and catalysing industry investment for a more inclusive, connected and sustainable ecosystem

EPSRC's Strategic Priorities

Core Disciplines

The Physical and Mathematical Sciences Powerhouse: curiosity driven discovery, with boundless potential

Frontiers in Engineering and Technology: unleashing our productivity potential

Digital Futures: the future of communications, computing and the internet

Mission-Inspired and Translational Research

Engineering Net Zero: decarbonising our economy and society, creating an alternative energy future and developing truly circular economies

AI, Digitalisation and Data – Driving Value and Security: powering transformative change and the next industrial revolution

Transforming Health and Healthcare: improving quality of life through innovative technological solutions

Quantum Technologies: realising the transformative impact of this technology across business, government and society

International

Talent and Skills

Place

World Class Infrastructure

Impact

Business Engagement



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How to Engage with EPSRC



Engaging with EPSRC

- Through EPSRC themes
- Getting involved with Peer Review
- Engaging with strategic advisory groups
- Getting involved with workshops, activities, calls in your area.

Via engagement with EPSRC Themes

Home > Engineering and Physical Sciences Research Council (EPSRC) > Remit, programmes and priorities > Our research portfolio and priorities

Remit, programmes and priorities



Engineering and Physical Sciences Research Council

Contents

- Areas we fund
- **Our research portfolio and priorities**

Our research portfolio and priorities

EPSRC has [more than 100 research areas](#) in its portfolio. Within those areas, we fund research that contributes to the following themes:

- [digital economy](#)
- [energy](#) and decarbonisation
- [engineering](#)
- [healthcare technologies](#)
- [information and communication technologies](#) (ICT)
- [manufacturing the future](#)
- [mathematical sciences](#)
- [physical sciences](#)
- [quantum technologies](#)
- [research infrastructure](#).

<https://www.ukri.org/councils/epsrc/remit-programmes-and-priorities/our-research-portfolio-and-priorities/>

	Open all
The scope and what we're doing	+
Why we're doing it	+
Opportunities, support and resources available	+
Past projects, outcomes and impact	+
Who to contact	+
Governance, management and panels	+

Talk to us!

Portfolio manager contact details can be found on each of our theme web pages

Via Engagement with Peer Review: EPSRC Peer Review College

- Our peer review college consists of more than 6,000 members whose expertise helps to ensure that the Engineering and Physical Sciences Research Council (EPSRC) supports the highest quality research across the remit of our portfolio.
- Our peer review college members are our preferred source of peer reviewers, as they have undertaken training on joining the college and will be committed to undertake a number of reviews per year, as well as attend prioritisation panels, where possible.



https://www.smartsurvey.co.uk/s/EPSRC_CollegeMemberApplication22/

EPSRC Peer Review College

As a college member we ask you to:

- provide informed, objective and timely reviews of proposals submitted to EPSRC (or notify EPSRC within five working days of a request for review if you are unable to meet the request)
- serve on prioritisation panels where invited but recognise that such opportunities are limited
- keep your Je-S details up to date, particularly those elements relating to your availability and areas of expertise
- undertake training provided by EPSRC for college members and refresh this when the reviewing process changes, or you are undertaking a new role (for example, panel member)
- keep up to date with developments that may affect your role as a member of the college, for example through attendance at EPSRC organised events, its website, and its newsletters.

EPSRC Peer Review College – further details

- We provide college members with an online tutorial which has been developed to enable you to understand details of the EPSRC peer review process, the roles you may be asked to fulfil, how you fit into that process, and how to ensure that your contributions are as helpful as possible in reaching sound decisions.
- The training consists of four modules which take around 45 minutes in total to complete. College members are provided with a username and password to access the training. New applicants will need to complete the training within two months of receiving the college training login details so that you can become a college member.
- The training is updated to remain in line with current EPSRC policy and processes, and we may ask you to revisit training modules to ensure your knowledge is up to date.
- EPSRC publishes a college newsletter to keep members up to date with the running of the college, changes to EPSRC policy and procedure, and anything else relevant to their roles in the peer review process

Engaging via EPSRC Strategic Advisory Groups

- EPSRC have a number of different decision making and advisory groups with membership drawn from across the Engineering and Physical Sciences research community
- Recruitment for the Engineering and Physical Sciences Research Council's (EPSRC) strategic advisory teams (SAT) is currently closed and is due to open in Autumn 2022.
- List of current membership of our advisory bodies along with terms of reference can be found available online

Roles of Decision Making and Advisory Groups

Council

Provides strategic direction and decisions across the **whole EPSRC portfolio**

Strategic Advisory Network (SAN)

Provides strategic policy advice and recommendations by considering **cross-cutting themes**

Science, Engineering and Technology Board (SETB)

Provides scientific guidance across the **whole remit of EPSRC**

Strategic Advisory Teams (SATs)

Provide strategic policy and scientific advice and recommendations at a **theme and research level**

We also seek advice from our established relationships with universities and business

Strategic Advisory Teams (SATs)

Provide strategic policy and scientific advice and recommendations at a **theme and research level**

Relevant expertise

Relevant expertise could be in advancing knowledge, delivering impact, stakeholder engagement, community leadership or meeting the needs of business and/or society. A maximum of two applications is allowed per candidate.

Strategic thinking

Candidates must be able to take a strategic overview of issues relevant to the theme applied for. Issues encountered may relate to research, skills and training, international context, impact, innovation, research infrastructure and interdisciplinary work.

Flexible approach

This means being prepared to develop, test and constructively challenge EPSRC UKRI policies in a flexible, adaptable, multi-stakeholder environment.

Representation

Candidates must be willing to represent the views of the research, innovation and business community, and facilitate two-way communication between the community and EPSRC and UKRI.

Availability

It is important that candidates have the capacity to devote sufficient time to the role, and have the backing of their organisation. The [SAT terms of reference](#) sets out the expectations of team members.

Via calls, workshops and funding activities

The screenshot shows the UK Research and Innovation website's 'Funding finder' section. The header includes the UKRI logo, navigation links like 'Apply for funding', and a search bar. A secondary navigation bar contains links for 'Funding finder', 'Before you apply', and 'Funding for COVID-19 research'. The main content area features a 'Funding council' filter sidebar on the left with checkboxes for various councils, including EPSRC which is selected. The central heading is 'Funding finder', followed by sorting options: 'Sorted by publication date (newest first)', 'Sort by opening date (oldest to newest)', and 'Sort by closing date (oldest to newest)'. A dark blue bar indicates '23 opportunities found using the current filters'. The featured opportunity is 'Future Leaders Fellowships: round 7', with a description and bullet points: 'looking to establish or transition to independence' and 'developing their own original and ambitious plans within a commercial setting.' A concluding sentence states: 'We are offering funding to support ambitious research or innovation programmes across UKRI's remit.'

The screenshot shows the UK Research and Innovation website's 'Events' section. The header is similar to the funding finder page. The secondary navigation bar includes 'Events', 'COVID-19', 'Climate change', and '101 Jobs that change the world'. The main heading is 'Browse our events'. A dark blue bar shows '5 results found using the current filters'. The featured event is 'Integrating finance and biodiversity for a nature positive future'. The event details are as follows:

Date:	29 June 2022
Time:	13:30 to 15:00 UK time
Registration deadline:	28 June 2022 23:59 UK time
Location:	Online
Event type:	Webinar
Audience:	Those applying for funding

Below the details, a text block reads: 'Join us for a briefing webinar to learn more about this opportunity and ask questions you may have. A recording will be made available after the event.'



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Questions?



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Thank you



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EPSRCvideo