

Taking a lead in Agri-Food Policy post-Brexit

The future of
Agricultural Research
& Development
Post Brexit

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~£3 billion budget

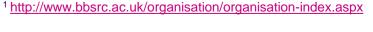


BBSRC

Vision: ensuring the power of biology delivers a Healthy, Prosperous and Sustainable future

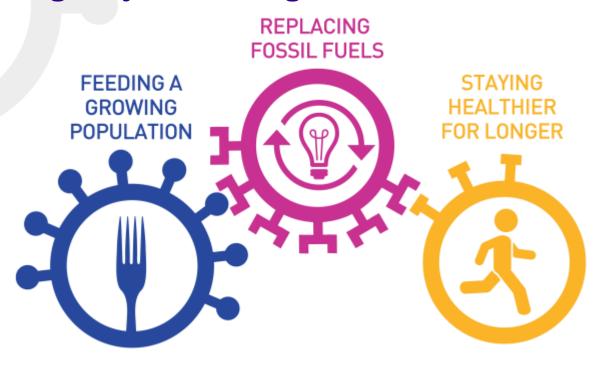
- Investing in world-class bioscience research in UK universities and institutes
- Supporting bioscience training and skills
- Driving the widest possible social and economic impact from our bioscience
- Promoting public engagement with bioscience

Budget £473M 2015/161





Addressing major challenges



- The world needs to produce 50% more food by 2050
- Food & agri sector in UK already worth £96Bn a year
- Need for low carbon alternatives to fossil fuels
- Demand for energy predicted to grow by 20%
- in 2030 (from 2010)

- 21% of UK population will be aged 60+ by 2050
- Tackling obesity would save wider UK economy £50bn per year by 2050



 Agri challenges still the same but brexit will drive rapid need for change



Investment in UK research delivers world-leading productivity, quality and efficiency

1% of global population

3% of global funding for research

3

8% of papers published (productivity)



16% of the world's most highly cited paper (quality)





Agriculture Funding Landscape [Simplified]

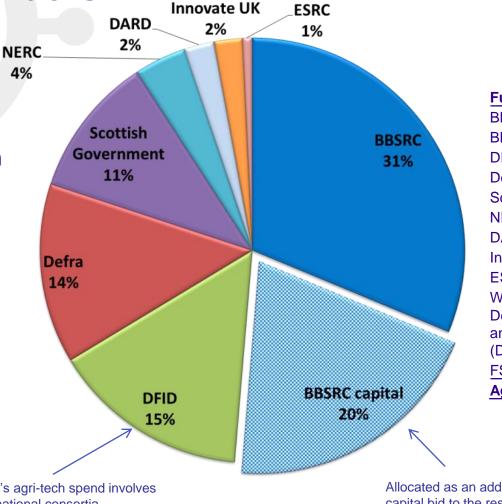
Research translation Competitive R&D Basic & strategic science Industry application **Research Councils** Innovate UK **Government Levy funding Levy funding European Union Foundations / Trusts Industry** VC



Agri-tech research analysis 2012/13:



Public funders spent £320M on agri-tech in 2012/13



Funder	Total Spend (£M)
BBSRC	99.4
BBSRC capital	63.7
DFID	47.8
Defra	43.5
Scottish Government	34.2
NERC	12.6
DARD	7.2
Innovate UK	6.9
ESRC	2.4
Welsh Government	1.3
Department of Energy	
and Climate Change	
(DECC)	0.6
FSA	0.1
Agri-tech Total	319.8

DFID's agri-tech spend involves international consortia.

Allocated as an additional capital bid to the research institutes



Data includes: studentship and capital spend.

^{*}FSA and a number of other funders do have spend in food and nutrition areas



€80 billion 2014-2020



Excellent Science

European Research Council (ERC)

Future and Emerging Technologies (FET)

Marie Skłodowska-Curie Actions (MSCA)

Research Infrastructures

Industrial Leadership

Leadership in Enabling and Industrial Technologies (LEIT) -ICT, KETs, Space

Access to Risk Finance

Innovation in SMEs

Societal Challenges

Health and Wellbeing

Food security

Transport

Energy

Climate action

Societies

Security

Widening Participation; Science with and for Society

European Institute of Innovation and Technology (EIT)

EURATOM

Joint Research Centre (JRC)





http://www.publicdomainpictures.net/



EU Research and Innovation Funding

technopolis

2007-2013

- Framework Programme £7Bn
- ERDF £1.9Bn
- EIB £5.9Bn

Currently equal to

- 10% UK Government R&D Spend
- 25% of value of universities grants from Government

10th May

The role of EU funding in UK research and innovation

www.technopolis-group.com



Brexit funding questions

UK Government Statement 13 August 2016

Guarantees EU Funding for UK researchers beyond the date the UK leaves the EU: "where UK organisations bid directly to the European Commission on a competitive basis for EU funding projects while we are still a member of the EU, for example universities participating in Horizon 2020, the Treasury will underwrite the payments of such awards, even when specific projects continue beyond the UK's departure from the EU"

Q&A released by UK Government in July 2017 gives further clarification.

Continue to apply for EU funding through mechanisms such as Horizon 2020 while the UK remains a member of the EU.

UK Government has a dedicated inbox for specific concerns Research@beis.gsi.gov.uk



UK Government Future Partnership Paper

- Outlines how continued collaboration in science and innovation is an important part of the UK's future partnership with the EU.
- "the UK will seek to agree a far-reaching science and innovation agreement with the EU that establishes a framework for future collaboration."
- Programmes the UK would welcome discussion with the EU on are in particular:
 - The Research and Innovation (R&I)
 Framework Programmes;
 - The Space programmes;
 - Nuclear R&D and
 - Defence R&D.





Researcher Mobility

- 29% UK academic workforce and 50% of UK PhD Students are from overseas
- Mobility and collaboration seen as important professionally
- 'Government want the UK to remain a hub for international talent'
- £100m for Rutherford Fund



Research Regulation

- Continuity provided though EU Withdrawal Bill
- Intent that current EU laws and Directives will be subsumed into UK law



Legislating for the United Kingdom's withdrawal from the European Union

Cm 9446



Preparing for change

- UK Research and Innovation
- Industrial strategy



UK Research and Innovation

Vision













"To be an outstanding organisation that ensures the UK maintains its world leading position in research and innovation"

This is about potential

Bringing Research Councils and Innovate UK into a single organisation

9 councils, one organisation

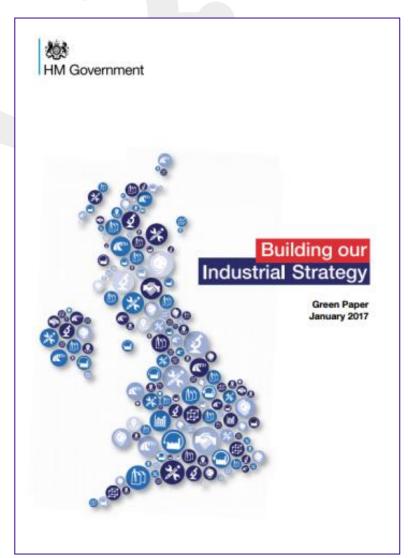
Strong, unified voice for research and innovation

>£6bn budget

Great potential

Expanding the frontiers of knowledge, stronger economies, better jobs, stronger, healthier and more resilient societies

The government's industrial strategy



Our 10 pillars



science, research & innovation

We will become a more innovative economy and do more to commercialise our world leading science base, developing new technologies and driving growth throughout the UK.



We will upgrade our digital, energy, transport, water and flood defence infrastructure, and join up central government investment and local growth priorities more effectively.

We will ensure public procurement

drives innovative new products and





services, strengthens skills, develops UK supply chains and increases competition by creating more opportunities for SMEs. procurement



affordable energy

We will keep energy costs down for businesses, build the energy intrastructure we need for new technologies, and secure the economic benefits of our move towards a low-carbon economy



Driving growth whole country

We will build on local strengths and address factors that prevent areas from reaching their full potential, by investing in key intrastructure projects, increasing skill levels and backing local expertise.



We will build a proper system of technical education, and boost key skills in science, technology, engineering, maths and digital proficiency, to ensure people have the skills employers need now and in



Supporting businesses to start & grow

We will support businesses and entrepreneurs across the UK to ensure they can access finance and wider support to grow, and have the right conditions for companies to invest long-term.



trade & inward investment

We will make Britain a global leader in free trade, including promoting and supporting UK exports, building future trading relations and creating a more active approach to winning major overseas contracts.



We will build on our greas of global excellence and help new sectors to flourish, supporting businesses to take the lead in transforming and upgrading their industries through sector deals.



We will create strong structures and institutions to support people, industries and places to maximise local strengths, including reviewing the location of government bodies and cultural institutions.







Autumn Statement 2016

National Productivity Investment Fund (NPIF)

Investment of £23 billion - R&D element additional £4.7 billion by 2020-21



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Innovation Applied
Science and
Research

Industrial Strategy
Challenge Fund
(ISCF)

Research and Innovation Talent Fund



Wave 1: Agriculture funding



- Agri-Tech catalyst funding £6.5m
- Smart Crop Protection: Increasing Supply Chain Resilience - £6m



Summary

- World leading research base in the UK
- Varied funding landscape and EU is a significant funder
- Ambitious negotiating position for future collaboration with the EU
- Opportunities from the Industrial Strategy









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