

Transforming Food Production

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Transforming Food Production

Part of the Industrial Strategy Challenge Fund



Audience of the future
(up to £33m)



Data to early diagnosis and precision medicine
(up to £196m)



Prospering from the energy revolution
(up to £102.5m)



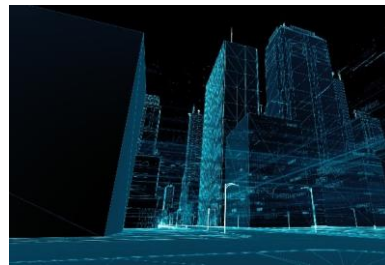
Healthy ageing
(up to £98m)



Next generation services
(up to £20m)



Quantum technology
(up to £20m)



Transforming construction
(up to £170m)

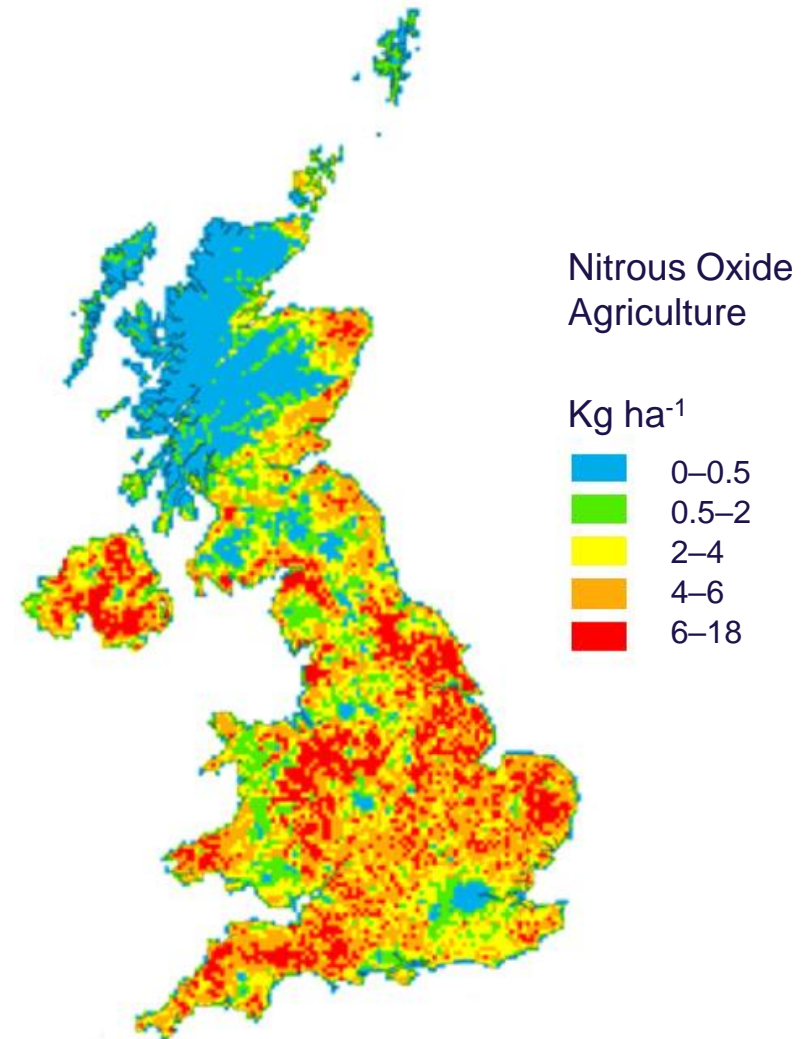


Transforming food production
(up to £90m)



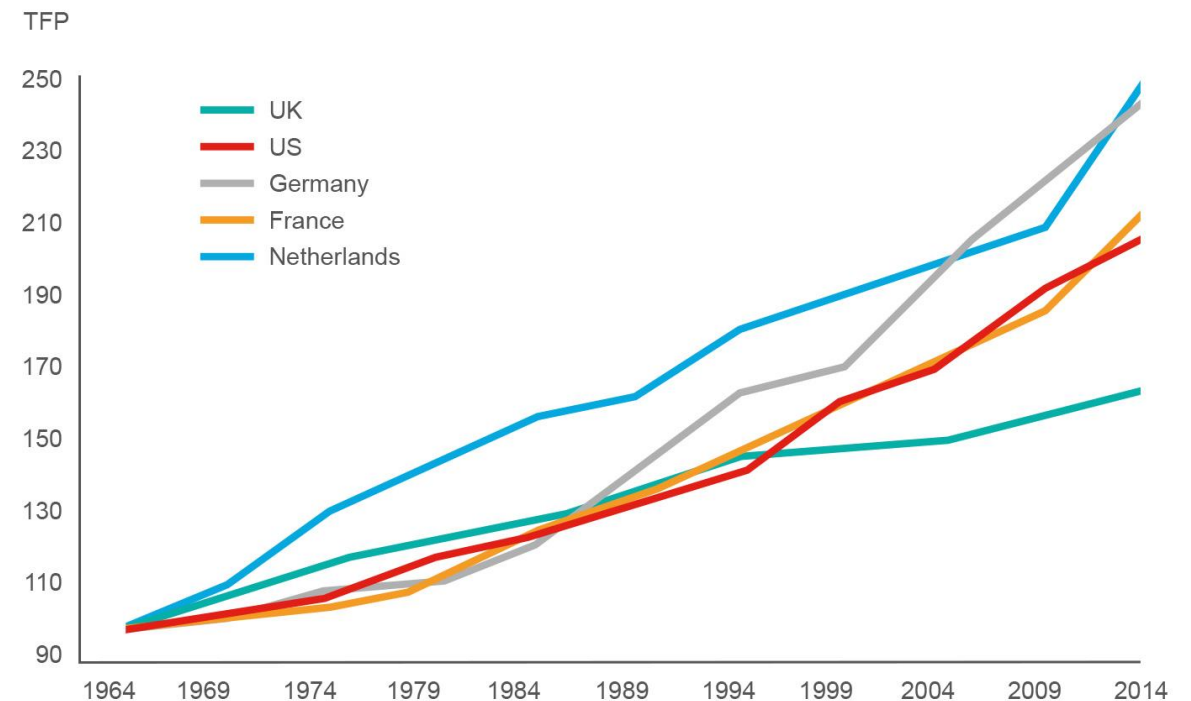
Transforming food production

- Global need to produce food in ways that are significantly more efficient, resilient and sustainable
- Transforming Food Production is recognised as a key driver of Clean Growth under the Industrial Strategy
- Integrates current world-class UK capabilities (digital tech, AI, engineering, biological, environmental and social sciences) to realise the biological potential while minimising our environmental footprint



UK Agriculture Sector

- Productivity of the UK Agricultural sector lags behind that of competitors
- UK agri-food sector supports 3.9m jobs, utilises 71% of land and has a GVA of £112bn
- Need for a competitive and prosperous UK agricultural sector, as we prepare to leave EU
- Key links to Defra (as policy leads)



Total factor productivity (TFP) annual growth 1964-2014

Our challenge

Towards net zero emissions productive food systems by 2040:

- Accelerating the development and adoption of integrated precision approaches to improve productivity in agricultural systems
- Enable food to be produced in ways that more efficient, resilient and sustainable
- Driving economic growth across the country



Transforming food production:

Objectives

1. Create integrated data-driven solutions to drive primary agricultural productivity whilst driving towards net zero emissions
2. Embed adoption of precision approaches to bridge the productivity gap, strengthening connections between researchers, businesses and practitioners
3. Stimulate the establishment of novel high value production systems to position UK technologies at the forefront of new industries.
4. Drive growth in UK precision technology companies, creating high value jobs and adding value in the UK agricultural value chain.
5. Develop export opportunities and increase investment into UK research and innovation.

UK Research
and Innovation



Future Food Production Systems:

£50 million

- Focused on projects that disrupt the traditional land-based models of production.
- Projects funded under this competition will **develop new** resource efficient, low emission food production systems and/or address the **technological bottlenecks** that prevent the current state-of-the-art supplying **mainstream** consumer markets.
- **Funding: Up to £20m (Open 16 September)** support a small number of large-scale projects
- Previous funding £25m committed from July 2018



- UK Research and Innovation

Science and Technology into Practice:

£30 million

- Increase engagement and collaboration between R&D, end-users and all stakeholders
- Demonstrate near market solutions at commercial scale and across different production environments.
- Provide end users with evidence of technical feasibility and economic viability of combinations of precision solutions across one or more demonstration platforms.
- Embed co-innovation approach to accelerate the development of new solutions



Investment Accelerator:

- The Investment Accelerator deploys grant funding alongside equity funding from private investors.
- To increase investment into early stage precision focused companies.
- To help early stage companies get direct access to commercial acumen and market opportunities through their relationship with an investor.
- To encourage new (platform, social impact, overseas) and existing investors to invest earlier and wider.



International Bilateral Agreements:

£10 million

- International activities focused on established strong strategic relationships and where there are advanced discussions around agri-tech.
- International bilateral agreements to ensure new technologies take advantage of overseas markets.
- UK funding (£10m from *International partners* £10m to match ISCF investment of £10m) for competitions with Canada and China to support development of advanced precision technologies in shared areas of ambition.



Transforming Food Production:



Insider Tips:

1. The key is in the title
2. Productivity, sustainable and net zero emissions
3. Think big - this is not BAU / JAAC
4. Systems focus - multiple technologies and diverse collaborations
5. Winning the funding will be the easy part – delivery will be critical
6. Live fast, die young
7. Watch this space

Key challenges

Towards net zero emissions productive food systems by 2040:

- Accelerating the development and adoption of integrated precision approaches to improve productivity in agricultural systems
- Enable food to be produced in ways that more efficient, resilient and sustainable
- Driving economic growth across the country



Thank you