Navigating the Industrial Strategy
Opportunities for academic and business engagement
In November 2017, the Government released its Industrial Strategy white paper - aimed at ensuring that the UK continues to thrive in the global economy. With the strategy promising £4.7 billion in R&D funding over four years, as well as an ambition to uplift R&D to 2.4% of UK GDP by 2027, the Industrial Strategy presents an exciting opportunity for academics, business and the Sheffield city region.

To help navigate the 250-page white paper this summary outlines the key components of the Industrial Strategy and opportunities for engagement.

**INDUSTRIAL STRATEGY: WHAT IS IT?**

The Industrial Strategy is structured on five Foundations of Productivity. These are described as the essential attributes of every successful economy and will boost productivity and earning power throughout the UK.

- **IDEAS**
  - the world’s most innovative economy

- **PEOPLE**
  - good jobs and greater earning power for all

- **INFRASTRUCTURE**
  - a major upgrade to the UK’s infrastructure

- **BUSINESS ENVIRONMENT**
  - the best place to start and grow a business

- **PLACES**
  - prosperous communities across the UK

**5 foundations of productivity**
One of the clearest ways to engage with the wealth of opportunity presented by the Industrial Strategy is through the Government’s ambitious new Industrial Strategy Challenge Fund (ISCF). The ISCF builds on the UK’s world-class research base and delivers the innovation that business needs to transform existing industries and create new ones. It also aims to accelerate commercial exploitation of the most exciting technologies the UK has to offer the world to ensure that scientific and academic investment truly delivers economic impact, jobs and growth right across the country.

CURRENT ISCF INVESTMENT AREAS

ISCF programmes are released in waves. There have been two waves to date.

Wave one included:

- £181m to develop first-of-a-kind technologies for the manufacture of medicines to accelerate patient access to new drugs and treatments
- £93m to develop AI and Robotic systems that can be deployed in extreme environments such as occur in offshore energy, nuclear energy, space and deep mining
- £246m to develop world leading batteries, designed and manufactured in the UK, to fully exploit the industrial opportunity of vehicle electrification
- £38m to develop the AI and control systems needed to drive vehicles autonomously through complex environments
- £26m to develop the next generation of affordable light-weight composite materials for use in aerospace applications
- £99m to develop next generation launch technologies and manufacturing and testing capabilities that will allow the UK to construct satellites and deliver payloads into orbit

Wave two was announced earlier this year, and includes:

- £210m will be made available to combine the UK’s research data with real-world evidence from our health service to create new products and services for improved treatment
- £98m will help people to live independently in their homes, tackle loneliness, increase independence and wellbeing
- Prospering from the energy revolution
- Transforming construction
- £90m investment to build new developments in precision agriculture and support high-value jobs, growth and export opportunities
- £20m to help the service industry take advantage of new technologies
- £33m to develop, demonstrate and support the adoption of new products and services that will capture the public’s imagination and strengthen the UK’s position as a world-leader in creative content
- Quantum technologies

ISCF funding is ongoing and we expect to see further competitions for wave two to be announced imminently. Programmes invested in by the ISCF must be industry-led but powered by multi-disciplinary research and business-academic collaboration. The fund is part of the Government’s £4.7 billion increase in R&D over four years and will be delivered by UK Research and Innovation (UKRI).
INDUSTRIAL STRATEGY: WHY ENGAGE?

With dizzying headline numbers, and the ambition to tackle some of society’s grand challenges, the Industrial Strategy presents a huge opportunity for academics and business alike.

We have been sent a clear message that collaborative challenge-based innovation is key to ensuring the UK continues to thrive in the global economy.

The Grand Challenges and ISCF programmes are all areas where we are well placed to offer insights and ideas. Indeed, social science has much to contribute to the challenges and priorities identified in the paper - advances in artificial intelligence, machine learning and robots, for example, raise pressing economic, policy and governance questions.

Using the Grand Challenges and ISCF as a framework we can highlight practical opportunities to access funding and create long-term external partnerships (whether public/private or profit/not profit). Taking a challenge based collaborative approach will allow us to address the challenges of our time, as well as open up new pathways to impact.

WHAT NEXT?

We want to see Sheffield fulfil its potential and play a leading role in support of the Industrial Strategy. We are therefore committed to supporting staff, students and external partners in engaging with the opportunities presented by the Industrial Strategy.

The University has a range of internal resources to support those interested in engaging with the Industrial Strategy.

These include, but are not restricted to:
- Investment available to build Industrial Strategy/ISCF collaborative cohorts
- Support finding, engaging and working with external partners
- Business Engagement skills and training workshops
- Knowledge exchange workshops
- Networking events
- Commercialisation support
- Internships and placements

Interested in learning more?

For the latest information on Industrial Strategy news, events and opportunities please contact the SSPIKE team via

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For further reading on the Industrial Strategy please visit:
www.gov.uk/government/topical-events/the-uk-s-industrial-strategy

Sheffield Solutions is an initiative of the Faculty of Social Sciences, at the University of Sheffield, which supports events, activities and outputs aimed at connecting social science perspectives to policy makers, practitioners and other external audiences in order to tackle pressing global issues.

www.sheffield.ac.uk/faculty/social-sciences/making-a-difference/sheffield-solutions