

# Industrial Strategy Challenge Fund (2017-2025)

£2.6bn Government Investment 21 Challenges

Challenges in Health, Digital, Mobility & Clean Growth

This infographic reflects a *snapshot* in time based on findings from the Impact Evaluation Report – many impacts are still emerging and will continue to grow.

ISCF's tailored funding, challenge structure and capacity-building created conditions for accelerated technical progress across battery tech, robotics, AI, diagnostics, nuclear, and more. These gains strengthen the UK's long-term competitiveness and lay foundations for future growth, even if many commercial outcomes are still several years out.

The data snapshot covers activity up to July 2024.

## 1. Innovation & Technology development

ISCF accelerated UK innovation—moving ideas further, faster, and closer to market.



### +2.4 Technology Readiness Levels

average progression for funded projects.



Faster movement from concept towards commercialisation.

### 1 in 3 projects reached TRL 7-9

signalling commercial deployment readiness. Unsuccessful applicants progressed only +0.9 TRLs.



Shows added value of ISCF.



### 442 IP assets created

(patents, licences, trademarks, copyrights).



Stronger UK intellectual property base and higher potential future returns.



→ 57% on track to launch new products → 67% expect new services within 3 years

Commercialisation is coming.

Services have found new applications through translation across sectors, such as:



Robotics for production and harvesting in agriculture



AI for diagnostics and triaging tools



Integration of AI in data analytics platforms

## 2. Knowledge Creation and Policy Influence

ISCF generated new knowledge and created platforms for its exchange—shaping UK and global policy debates.



### Knowledge Outputs



#### 3,300+ publications

including journal articles, book chapters, policy papers and reports.



#### 182 new data platforms 51 new software tools



#### 1596 policy documents

citing ISCF publications by governmental, international and third sector bodies, within and beyond the UK.



**81%** of policy documents citing ISCF publications were authored by government/public bodies.



ISCF evidence directly reached and influenced decision-makers across countries.

### Domestic Policy Impact

ISCF evidence fed into major UK strategies:



Innovation Strategy



Quantum Strategy



Cyber Strategy



Semiconductor Strategy



Civil Nuclear Roadmap



Drone Legislation



Robotics Sector Deal



Energy Data Taskforce

ISCF enabled expert participation in committees shaping AI ethics, nuclear safety, health data governance, energy policy, and advanced therapies.



ISCF contributed towards standards setting and guidance for emerging industries.

### Lessons

- Structured policymaker engagement worked
- Regulator engagement lagged and needs strengthening
- Better outcome-tracking would help attribute policy impacts more clearly.

# 3. Investment, Capacity Building & Economic Impact



ISCF unlocked capital, built skills, and delivered measurable economic value—while early signals suggest more growth to come. Economic impacts will be further assessed as part of the upcoming economic evaluation, with the evidence below representing what we know so far.

## Co-Investment Leverage

£6.25bn

private investment leveraged.



2.5x

2.5x public-to-private multiplier.



Public money de-risked cutting-edge innovation and pulled in major private backers.

## Firm-Level Investment Impact



57%

increase in external investment three years post-project.



79%

increase for small firms.



SMEs, critical to UK innovation, became more investable and resilient.

## Jobs & Skills



3,563

new FTE jobs created.



7,499

FTE jobs retained.



14,266

FTE projected to be created within 5 years.



148

training programmes delivered by the fund.

12,500

people upskilled.

## Economic Outputs



ISCF's infrastructure investments have created new assets encouraging research, innovation and sector development e.g. through the UK Battery Industrialisation Centre, 22 new health data storage platforms, participant health data via the Our Future Health initiative, and other digital assets and research facilities.



**Sector Growth:** ISCF activities supported growth of a range of sectors from precision medicine, automotives and battery manufacture, to the power electronics, electronic machines and drives sector.



Early signs of sector specialisation, supply chain development, and spin-out activity.

# 4. Collaboration & Ecosystem Development

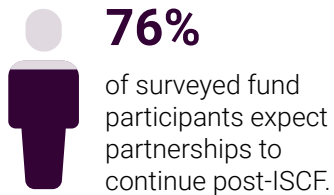


ISCF strengthened the UK's innovation ecosystem, creating partnerships, networks, and interdisciplinary bridges that outlast the programme.

## Partnerships

Challenges reported partnerships across sectors\*, including cross-sector collaborations between industries, academic institutions, government bodies and organisations of different sizes.

\*These are general collaborations between entities in different sectors (including SMEs and large firms in different business sectors, academic and public agencies.)



Lasting networks mean continued innovation spillovers and investment opportunities. Partnerships brought together industry, academia and public bodies, often linking SMEs with large firms across value chains.

For example, Data to Early Diagnosis Challenge has helped establish new partnerships between leading pharmaceutical companies, including those unlikely to collaborate otherwise, and increased networks between organisations of diverse sizes.

ISCF's investments in the precision medicine sector and leadership support from other UK funding agencies helped facilitate a successful model of collaboration.

## Ecosystem Effects

➔ **11,865** collaborative connections facilitated between organisations on the same ISCF funded projects.

➔ Organisations collaborated with an average of **7** partners.

➔ Large firms and RTOs acted as connective tissue: RTOs were **~3x** more central than businesses in the collaboration network.

➔ Collaboration extended beyond projects:

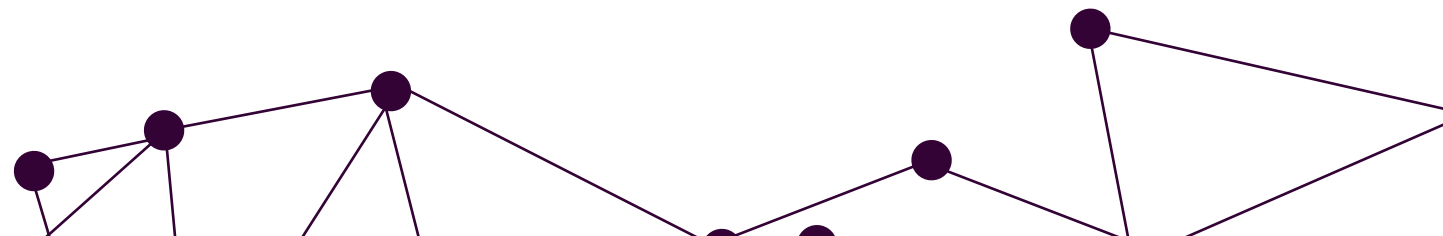
**359 ISCF events** (2017-2023) brought together



**14 Challenges** generated interdisciplinary tools with value beyond their immediate beneficiaries.

• Future Flight built a dedicated social science workstream producing reusable evidence on public attitudes, ecosystem dynamics and community impacts, used to inform wider sector decision-making.

• Prospering from the Energy Revolution developed open energy data outputs via the Energy Data Taskforce, supporting wider uptake of smart local energy systems.



# 5. Societal & Environmental Outcomes



ISCF has begun shaping healthier societies and greener systems—early signs now, major impacts expected in the longer term.

## Health

The Healthy Society Cluster showed early signals of future health benefits.



Foundations laid for

- Better diagnostics
- New data infrastructures
- More equitable healthcare
- Reduced long-term NHS cost pressures

(But direct impacts not yet measurable due to a long time horizon, the horizon being 10 years.)



The Healthy Ageing Challenge had **10% of innovations** designed for lower-income groups (and ~80% targeted multiple socioeconomic groups including lower-income households). Accelerating Detection of Disease / Our Future Health: secured **£160m** from industry and **£20m** from medical charities to build a large-scale prevention/early-detection data resource (long-term health impacts expected). Data to Early Diagnosis built major enabling assets for future health innovation, including **22** health data storage platforms.

### Equity



Where EDI monitoring was embedded in programme design, there were notable gains in gender-balance and inclusion of BAME and LGBTQ+ groups.

## Environment

Funded projects are already showing early positive environmental outcomes.



Contributions include:



### Progress towards Net Zero

Industrial Decarbonisation delivered a nationally recognised industrial-cluster blueprint to accelerate decarbonisation investment pipelines. Early emissions reduction signals reported across four clusters (Humber, South Wales, North West, North East).



### Energy efficiency gains

Prospering from the Energy Revolution demonstrator projects advanced business models to Commercial Readiness Level (CRL) 4–8, with Energy Superhub Oxford reaching CRL 8.



### Promotion of clean energy sources

Low Cost Nuclear advanced UK capability for small modular reactor development towards lower-carbon power options (deployment impacts expected longer-term).



### Lower energy costs

Prospering from the Energy Revolution's energy demonstrator projects linked digital energy data + flexibility tools to reduce system costs, with benefits expected to scale as smart local energy systems adoption grows.



### Support for critical green infrastructure

Faraday Battery: created the UK Battery Industrialisation Centre (UKBIC) as a long-term national asset for battery scale-up and industrial capability.

