A VISION FOR UK SCIENCE & ENGINEERING

WHAT WOULD A THRIVING UK ENVIRONMENT FOR RESEARCH & INNOVATION LOOK LIKE?

CULTURE

Challenge and independent thought are encouraged and supported in our schools as in the public square. There is a culture of integrity, transparency, and openness in research. Appropriate oversight and intervention sit alongside independence and autonomy.

PEOPLE

The science base is as strong as the people in it, not just the institutions and equipment they use.

The UK develops its home-grown pipeline of people with science & engineering skills to fill workforce needs. Science & engineering attract a wide range of UK citizens into study and work to meet skills needs, to provide fulfilling careers for individuals, and well-paid jobs for the economy.

The UK is open and welcoming to researchers, innovators and specialist technicians amid fierce global competition for talent and skills. Migration policy facilitates global recruitment into UK industry and academia, and international mobility.

INVESTMENT

The UK is a highly efficient research nation. Constrained funding levels inevitably tend toward risk averse funding decisions.
So research & innovation investment is at a level that can support quality ideas, not just safe ideas, and provides enough flexibility to commit to longer term projects and emerging priorities.

Long-standing principles are upheld, including allocating funding for research by peer-reviewed judgement of excellence wherever it exists; the dual support system; and the Government guiding priority-setting with the research community determining which projects receive state support.

DIVERSITY

Diversity brings resilience and spurs innovation. The UK fosters a breadth and diversity of funders, investment instruments, settings for research & innovation, disciplinary strengths and people. There is the potential to lead the world in new research areas and create new markets.

CONNECTIVITY

The UK is a global research & innovation hub. The science base is an integrated ecosystem of universities, research institutes, charities, colleges, funders, and companies of all sizes. These organisations do not exist in isolation from each other, from their locality or from the rest of the world but are connected.

Borders aren't boundaries to collaboration and trade. Collaboration nationally and internationally is facilitated through the funding, tax, regulatory and migration environment.

INFRASTRUCTURE

From facilities and equipment to transport and digital infrastructure, appropriate structures and systems work together to support science & engineering.

Research & innovation infrastructure requirements will never be static and so robust processes are in place at a regional and national level to assess, coordinate and act on such needs to create, upgrade, maintain and replace infrastructure.

THE BENEFITS OF SCIENCE & ENGINEERING

HOW DOES UK RESEARCH & INNOVATION BENEFIT INDIVIDUALS AND SOCIETY?

142,000 new STEM jobs by 2023

Engineering supports 14.5m jobs – 55% of UK employment

STEM graduates earn on average 20% more

62% of new digital jobs are outside London

Sectors across the economy depend on research & innovation

Technology that drives 95% of smart phones, 80% of digital cameras & 35% of all electronic devices was developed in the UK

Aircraft are 75% quieter than 50 years ago and are predicted to be 65% quieter again by 2050

Cancer survival rates in the UK have doubled in the last 40 years

Firms that persistently invest in R&D have 13% higher productivity

Public R&D investment boosts industry-level productivity and crowds in investment

CREATE HIGH-VALUE JOBS

BOOST PRODUCTIVITY

STRENGTHEN THE ECONOMY

BENEFIT US ALL

UK SCIENCE & ENGINEERING

STRENGTHEN SCIENCE & ENGINEERING TO SUPPORT THE UK'S FUTURE

www.sciencecampaign.org.uk

CaSE Campaign for Science and Engineering

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