

# Engineering an economy that works for all

## Five priorities for the next government from the engineering community\*

Engineering underpins every aspect of society - the homes we live in, our work and leisure, the energy and transport we use, and the health and care we all need. Engineering makes a major contribution to the UK's economy - some £280 billion (20% of GVA) and half our exports. Engineering holds the solutions to the pressing global challenges of clean energy, food and clean water for all.

Ahead of the 8 June general election, the engineering community is calling on the next government, whatever its political persuasion, to harness the full capacity, capability and potential of the UK's engineering talent. We have identified five key priorities that will enable the UK and its citizens to meet the challenges that our society will face in the future.

These goals cannot be achieved in a single parliamentary term: a consistent, long-term, whole-systems approach is needed to maximise the UK's potential.

### 1. Define and clearly articulate a bold, global and ambitious vision for the UK

The next government must ensure that the UK is strongly positioned as an outward-looking trading nation and a top destination for inward investment and international talent via a modern industrial strategy. This will be critical if the UK is to exploit the opportunities and mitigate the risks associated with exiting the EU.

### 2. Focus the education and skills system on fully unlocking UK talent and potential

Talent and skills - increasingly, digital skills - are fundamental to the UK's position as a world-leading economy but this is threatened by a severe engineering skills shortage. As well as continuing to attract the best and brightest from around the world, it is vital that we maximise our home-grown talent by ensuring more diversity and inclusion, and addressing the emergency in specialist teacher supply. We need to ensure that vocational education and training is fully funded and as much a priority as higher education. It is also essential to upskill and fully equip people for rewarding careers in the industries of the future. For more detail, see E4E's manifesto on [educationforengineering.org.uk](https://www.educationforengineering.org.uk).

### 3. Support innovation

Government should set a target of 3% of GDP combined public and private R&D investment, and work with the private sector to formulate a roadmap to achieve this goal. Government also needs to demonstrate willingness to accept the risk of failure, or perceptions of it, in its support for innovation. Better collaboration between business and universities should be supported to reap benefits for the economy.

### 4. The benefits of engineering, in terms of economic growth and social advancement, must be spread across the UK

Opportunities to improve living standards and increase productivity must be available across the whole of the UK. Local institutions - such as Local Enterprise Partnerships, Catapults and universities - need to attain consistent, national levels of excellence and their services must be promoted more widely to those who will benefit. We should build on existing successful initiatives and institutions and spread best practice and learning derived from them. Metrics must be developed that are sufficiently sensitive to local industries and demographics to monitor progress, identify areas that are not progressing as they should and target support accordingly.

### 5. Prioritise world-class supporting infrastructure

Infrastructure, including energy and digital, is critical to the wellbeing of society and the performance of the economy. A clear, long-term strategy is needed for all infrastructure to provide industry with the confidence to invest for the future. Regional plans that understand local needs will need to be integrated with national strategies. All new infrastructure will need to support economic growth alongside resilience and environmental sustainability. Energy efficiency must be a key driver.

**We look forward to working with the next government to realise our vision of a successful, inclusive, sustainable society and economy.**

**\*This message comes from an alliance of the 38 professional organisations in engineering that represent some 450,000 engineers. A recent project, led by the Royal Academy of Engineering, ran a survey and 10 workshops across the UK to gather views on industrial strategy. For further information, please contact [juniour.blake@raeng.org.uk](mailto:juniour.blake@raeng.org.uk)**