

# Introduction

The UK needs more young people from more diverse backgrounds to choose a career in engineering and technology to help improve sustainability and achieve net zero and to drive economic prosperity. And if UK engineering and technology are to continue to thrive, inspiring a more diverse future workforce that boosts creativity, innovation and market insight is essential.

It's EngineeringUK's ambition to inform and inspire young people and to grow the number and diversity of tomorrow's engineers. In 2022/23, the final year of a 5-year strategy period, we once again focussed our attention on 3 key pillars of activity to help us achieve this:

- Increasing reach and inspiration
- Developing and sharing insight
- Growing collective impact

**EngineeringUK** is a registered charity, and our main source of income is from the registration fees of professionally registered engineers and technicians, which also fund the Engineering Council in its role as the profession's regulatory body.

Thank you to the Professional Engineering Institutions, not only for this valuable financial contribution but also for the time their staff give to supporting our work. Thanks too to our Corporate Members and supporters of individual programmes, including The Big Bang and Energy Quest. This additional funding enables us to expand our activities even further.

# Thank you for your support

\*Note: Other programme support comprises Robotics Challenge, Energy Quest, EDI bursaries and support for The Tomorrow's Engineers Code, Tomorrow's Engineers Live and Science Education Tracker.





£2.8m Engineering Council Grant
£2.5m Inspiration - Big Bang
£2.5m Inspiration - Other Programmes
£1.0m Developing & Sharing Insight
£1.0m Growing Collective Impact



### Worked with:



### 37

Corporate Members

And many more organisations contributing to our resources or policy work or supporting our activities for schools

253

Tomorrow's **Engineers** Code Signatories

### 39

Tomorrow's **Engineers** Code Supporters

05

# Some outcomes

The evaluations of our work with young people are tailored according to each activity, but some questions are asked across them as shown below. It's important to take into account the intensity of each activity (for example, Robotics and The Competition are very intensive, Energy Quest is lighter touch), and also the different groups of students we are working with when looking at these findings.

Young people	The Big Bang Fair	Big Bang at School	The Big Bang Competition	Energy Quest	Robotics Challenge	
Enjoyed programme	88%	79%	92%	71%	97%	
Programme made them want to find out more about engineering/STEM	73%	45%	76%	46%	81%	
Programme made them want to do more STEM activities	71%	47%	80%	48%	89%	

## 90%

of stakeholders agree that and trusted voice on approaches to engage young

# 82%

agree that EngineeringUK is a recognised and trusted voice on equity, diversity and inclusion in the engineering sector

## 68%

agree that EngineeringUK is a recognised and trusted voice on the engineering talent pool coming from education

# 68%

agree that EngineeringUK is effective in providing them with insight and guidance on evaluating STEM engagement

# 68%

agree that they are provided with up-to-date evidence on engineering skills need and

# 74%

agree that EngineeringUK provides insights into what needs to change to address skills shortages in the engineering sector

### 77%

agree that EngineeringUK is a recognised and trusted voice on what enables, deters or inspires young people to pursue a career in engineering

## 69%

agree that they are provided with opportunities for partnership and collaboration with other organisations in the wider STEM community

Tomorrow's Engineers Code Signatories say that it has helped them improve across



different aspects of engineering engagement **In 2022/23** we thoroughly reviewed, consulted on, and widely tested a strategy designed to take EngineeringUK to 2028. September 2023 marked the start of this new 5-year strategy, one that is based on our mission to enable more young people from all backgrounds to be informed, inspired and progress into engineering and technology.

EngineeringUK's vision is for the UK to have the diverse workforce needed for engineering and technology to thrive and to drive economic prosperity, improve sustainability and achieve net zero.

Looking ahead

# We will play our role in achieving this in 4 ways:

**Research and evidence** - establishing the composition of the current engineering, technology and technician workforce, future workforce needs and how to address them.

**Leadership** - leading efforts to grow the collective impact of all engineering and technology inspiration and careers activities with young people of school age.

Activities for schools - expanding EngineeringUK's engagement to encourage more, and more diverse, young people into engineering, technician and tech roles.

**Advocacy** - providing advocacy and support to address policy and delivery challenges in STEM and careers education and workforce planning for engineering and tech.



### In 2023/24 our plans comprise:

**Carrying out and** publishing research and evidence which supports our own and the wider community's activity, including:

- Statistics on the composition of the engineering and technology workforce and its future needs
- Analysis of the educational pathways into engineering and technology
- Young people's views on science education and careers and knowledge/attitudes towards engineering careers (in partnership with the Royal Society)
- Evaluation of our schools activity
- Methodology to evaluate the impact of multiple engagements on young people's later attitudes and choices



### Leading efforts to grow collective impact, including:

- Adding more activities on Neon, growing reach with primary schools and careers guidance practitioners
- Recruiting 50 Signatories and supporting the Tomorrow's Engineers Code community
- Delivering the Tomorrow's Engineers Live conference
- Embedding a new offer of support for Professional **Engineering Institutions**
- Growing our Corporate Membership
- Working with STEM Learning, Professional Engineering Institutions and Corporate Members to understand and promote their use of STEM Ambassadors
- Increasing engagement with SMEs

### **Delivering activities** for schools, including:

- The Big Bang Fair, which will take place at the NEC, Birmingham from 19 to 21 June 2024
- The Big Bang Competition, which closes for entries at the end of March, and includes a new technology stream
- Pilot of a new cross-curricular **Climate Schools Programme** with 50 schools
- Tomorrow's Engineers Week

### **Advocacy, including:**

- Policy work with the National **Engineering Policy Centre in the** run up to the general election
- Supporting greater awareness and understanding of T Levels with employers and young people
- Launching and following up on the apprenticeship inquiry





### Our work is delivered in line with our values



Our commitments to environmental sustainability and equity, diversity and inclusion underpin all our work. Knowing that environmental sustainability is a topic that's important to young people, we use it as a way to inspire them about engineering and technology careers. Organisationally we commit to playing our part by measuring and reducing our environmental impact. By focussing our school activity on inspiring more young people from groups underrepresented in engineering, so they are better informed about careers in engineering and technology and the variety of routes into those, we aim to improve both the number and diversity of those joining the sector's workforce.

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