

Engineering better lives

Strategy 2030

Time to deliver

The world is changing rapidly. Engineers are uniquely placed to respond to that change and innovate solutions to the challenges it presents. More than ever before, it's time to engineer better lives.



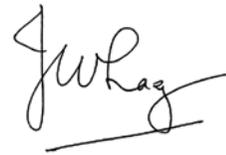
When we launched our last strategy, the COVID-19 pandemic had just begun. Five years later, humanity is having to adapt to developments that are, collectively, even more disruptive. The geopolitical context is becoming ever more complex, with economies, supply chains and security critically dependent on engineering capability. AI innovation has advanced at an astonishing pace and is increasingly embedded in our daily lives, while the impacts of climate change and nature depletion are being felt ever more acutely. All of these carry the risk of deepening divisions and inequalities and reinforce the need for engineering and technology to serve society. The pandemic showed us that in times of need we can innovate at pace to protect and preserve lives. We must now prove we can do so without the provocation of a global pandemic.

This strategy aims to respond to that urgency to use our expertise and our network to engineer better lives in the UK and internationally. It responds to the rich inputs from our extensive strategy consultation programme. Thank you to everybody who has helped shape our strategy. Collaboration is a core value of the Academy, and collaboration and partnership – across our Fellowship and wider community – will be integral to meeting our new strategic goals, just as all of our values will guide our work through to 2030.

Our plans represent an evolution, not a revolution, because meeting our charitable goals takes sustained effort and we've delivered important impacts through engineering excellence over the last five years that we can build on. What's different includes the introduction of a new goal – technology improving lives – to connect public voices to our programmes and unlock greater societal value from technology. Place is a priority: we will grow our regional presence and work with communities in lower and middle income countries to ensure that engineering is delivering to the needs of people in different contexts.

And we will embed a product management approach to ensure we are effective, efficient and agile in delivering impact for our beneficiaries. Importantly, we're also building in flexibility to respond to the rapidly evolving technological and geopolitical context.

Next year, in 2026, the Academy turns 50. This makes us young relative to other academies, but 50 years is a long time in innovation and technology. With the pace of change, the next five years will be critical in defining the next 50. It's time to deliver, for everyone in society.



Sir John Lazar CBE FEng
President
Royal Academy of Engineering



Dr Hayaatun Sillem CBE
CEO
Royal Academy of Engineering

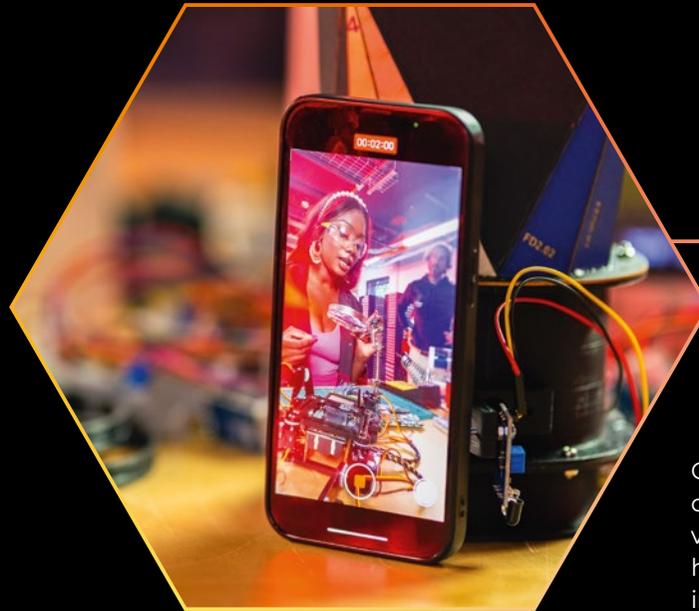


This strategy aims to respond to that urgency to use our expertise and our network to engineer better lives in the UK and internationally.

What can be achieved in five years?

The impacts we're building on from the last five years:

Created a novel £150m programme in partnership with the Department for Science, Innovation and Technology (DSIT) to accelerate climate innovation over a 10-year period through Research and Invention Fellowships.



Our 'This is Engineering' campaign films have been viewed over 65m times, and have contributed to a measurable increase in the number of students studying engineering.

The Enterprise Hub was ranked as a top three startup hub in the UK, and now supports innovators through five regional Hubs, as well as from the Academy's headquarters in London. Hub innovators have raised over £3.4bn in additional funding and created over 5,600 jobs.



The National Engineering Policy Centre shaped public messaging on COVID-19 and provided government with a framework for rapid decarbonisation of the energy system.



Through a multistakeholder partnership, Engineering X secured a resolution to end open burning in Africa by 2040, signed by 54 African Ministers at the 2022 African Ministerial Conference on Environment.

Our vision

**Engineering and technology
in the service of society**

Our role

**We create and lead a
community of outstanding
experts and innovators
to engineer better lives**

Who we are

A Charity:

delivering public benefit from excellence in engineering and technology.

A Fellowship:

convening leading businesspeople, entrepreneurs, innovators and academics from every part of engineering and technology.

A National Academy:

providing leadership for engineering and technology, and independent, expert advice to policymakers in the UK and beyond.

Our values

Everything we do is underpinned by our values

Progressive leadership

Embody the courage and commitment to drive positive change for engineering and society.

Equity, diversity & inclusion

Create a culture where everyone feels valued, and can thrive and strive for excellence.

Excellence for impact

Instil a mindset where evidence, expertise, integrity and passion deliver meaningful impact.

Collaboration first

Work in collaboration and partnership with our community and stakeholders to improve outcomes.

Creativity & innovation

Pursue opportunities to think differently, try novel approaches and test new ideas.



We have three goals...



Sustainable and Innovative Economy

Where sustainability drivers, innovative industries and resilient infrastructures are aligned to drive growth and productivity that will support better lives for all.



Technology Improving Lives

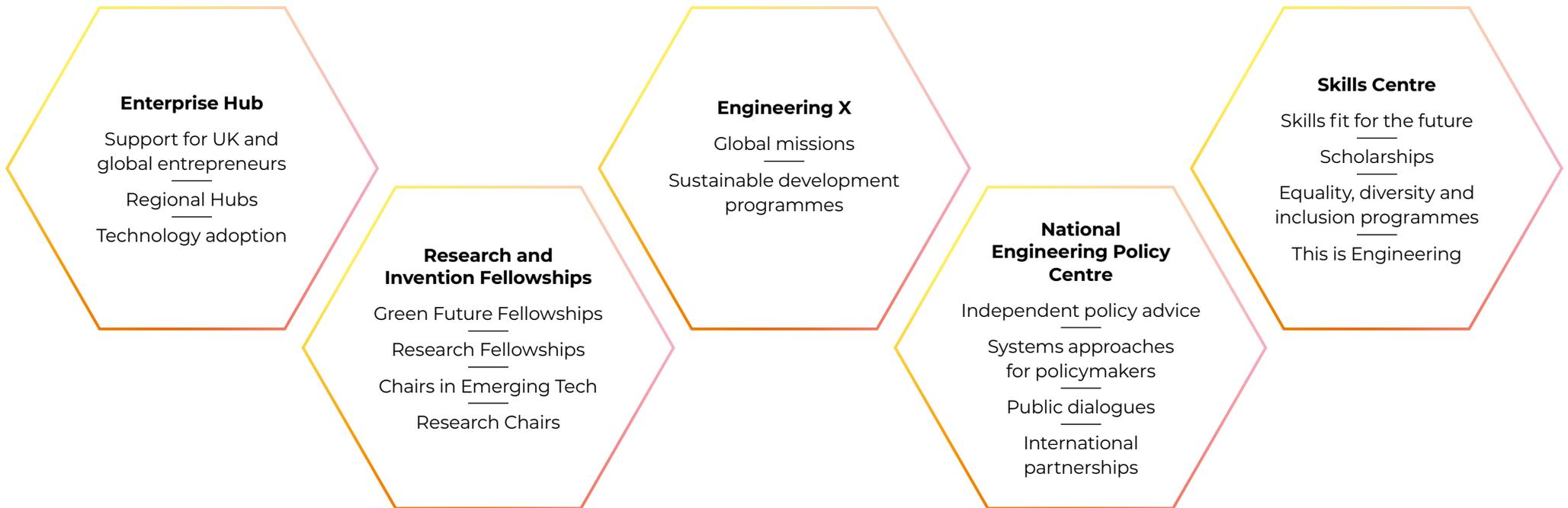
Where technology in all its forms is used to meet the most important human needs, avoid harm, support fairer societies and break down barriers to opportunity.



Engineering Community Fit for the Future

Where our community reflects society in its diversity, commits to creating inclusive cultures to help drive engineering excellence, and has the skills to meet future needs safely, securely and ethically, and to keep pace with innovation.

...and five flagship products to help us to deliver them.





Sustainable and Innovative Economy

What we want to achieve

- Engineering and technology solutions and policies that contribute to a more sustainable, resilient, healthy, secure and prosperous society.
- Improvements in UK productivity, availability of growth capital and regional inequality.
- Faster progress towards sustainability goals.
- Greater agency for those in lower and middle income countries who are most impacted by global sustainability challenges.

By taking these actions

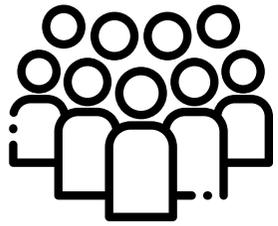
- Enterprise Hub supporting engineers to start and grow companies, driving jobs, growth, productivity and advances in sustainability, health and resilience.
- Research and Invention Fellowships developing visionary leaders through long-term support and accelerating inventions and innovations for societal benefit at scale.
- National Engineering Policy Centre shaping policymaking and its delivery through trusted, independent engineering and systems expertise to support sustainability, resilience, health and growth.
- Through our international partnerships and Enterprise Hub Global we will link UK researchers and innovators to the most exciting engineering across the world, building networks and opportunities.
- Engineering X building equitable global partnerships on the engineering issues that will make the biggest difference to lives around the world.

We will

- Have enabled creation of 25k high-value jobs and £10bn leveraged across the UK (at least 50% in regions and nations outside the greater southeast).
- Have supported at least 200 global visionaries to lead engineering research and innovation programmes in the UK.
- Have provided impactful expert advice to support UK decarbonisation.
- Have driven measurable progress on five key safety and sustainability challenges, building alliances for action through Engineering X.
- Have supported 500 entrepreneurs and tech transfer professionals across Africa, Asia and Latin America to contribute to sustainable development.



Where sustainability drivers, innovative industries and resilient infrastructures are aligned to drive growth and productivity that will support better lives for all.



Technology Improving Lives

What we want to achieve

- Improved capability of individuals, institutions and communities to use technology to improve lives.
- Reduction in inequality across different groups in society, and local communities benefiting from more involvement in how technologies affect their lives.
- Improvements in UK economic performance, public health and national security.
- Greater agency for those disproportionately harmed by global sustainability challenges and new technologies.
- More resilient UK infrastructure, processes and democratic institutions.
- Public trust and understanding of engineering and technology maintained and improved respectively.

Our actions

- Enterprise Hub, Awards, and Research and Invention Fellowships producing practical, real-world use cases for how AI, digital and deep tech can improve the lives of people from all backgrounds, and boost the productivity of businesses and the public sector.
- National Engineering Policy Centre shaping constructive and responsible regulatory environment and public policies.
- Public dialogues bringing the voice of communities into engineering practice and engendering a sense of agency among communities, including across regions and nations of the UK and internationally.
- International activities, including Engineering X missions, mobilising changemakers and driving global collaboration towards equitable development and deployment of practical technological solutions.
- Campaigns and events increasing public access to engineering expertise about how technology impacts their lives.

We will

- Launch a new technology adoption programme embedded in our Regional Hubs.
- Enrol at least 100 engineers in public dialogues across regions and nations of the UK.
- Have supported 200 engineers to engage in global dialogues on improving communities' prosperity and wellbeing.
- Provide platforms for over 1,000 engineers to engage with public audiences about the impact of technology on their lives.
- Promote engineering expertise and systems approaches through supporting at least 100 Policy Fellows and engaging 1,500 policymakers.
- Hold at least 10 international multidisciplinary summits supporting engineering and technology for societal benefit.



Where technology in all its forms is used to meet the most important human needs, avoid harm, support fairer societies and break down barriers to opportunity.



Engineering Community Fit for the Future

What we want to achieve

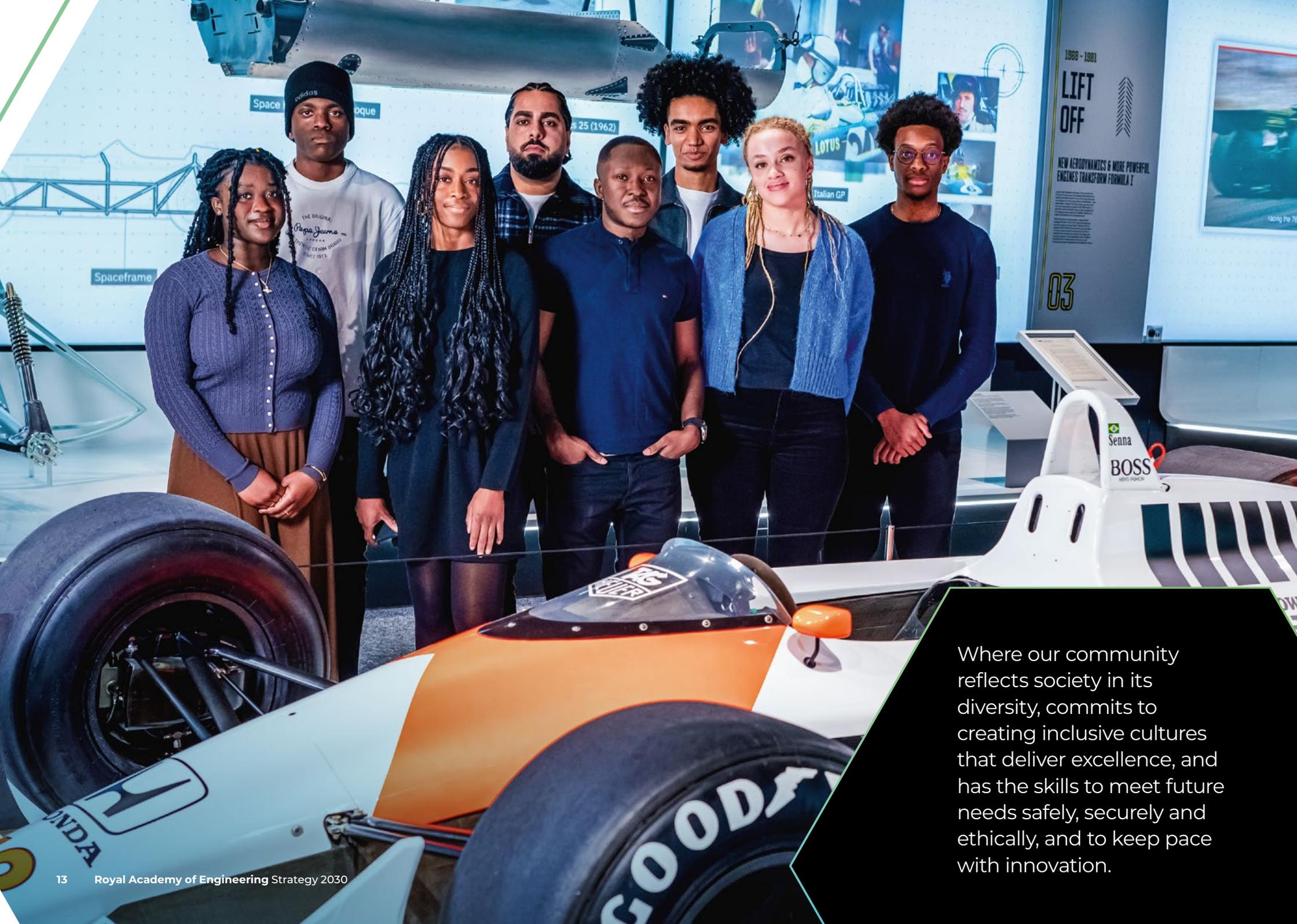
- Sufficient numbers of suitably skilled engineers, including from underrepresented groups, working in cultures that enable excellent and inclusive outcomes.
- Profession equipped to meet the needs of all parts of society safely, securely and ethically, and keep pace with technological innovation.
- Maximum impact from the Academy's unique network of Fellows, awardees and partners.

Our actions

- Skills Centre accelerating skills system transformation and upskilling and reskilling at scale.
- Scholarships and placements breaking down barriers to engineering for talent from underrepresented groups.
- Equality, diversity and inclusion programmes accelerating adoption of effective inclusive practice to support excellence in engineering organisations.
- National Engineering Policy Centre providing leadership on skills and practices needed for globally responsible engineering.
- Awardee Excellence Community and programmes supporting the development of future leaders.
- Awards celebrating exceptional engineers who improve lives.

We will

- Foster collaboration across the UK engineering community, including bringing together 42 organisations through the National Engineering Policy Centre.
- Support skills development of one million UK engineers and technicians.
- Award at least 1,000 scholarships to talented future engineers in the UK, at least two-thirds from underrepresented groups.
- Support at least 2,500 placements for UK engineers from underrepresented groups.
- At least 75% of the above will be outside the greater southeast.
- Mobilise 2,500 champions and partners to inspire young people to pursue engineering and change wider perceptions, using our content and insights.
- Engage at least 100 international decision-makers in advancing engineering leadership, skills and inclusion.



Where our community reflects society in its diversity, commits to creating inclusive cultures that deliver excellence, and has the skills to meet future needs safely, securely and ethically, and to keep pace with innovation.

Measuring success

Theory of Impact

Our model of how we engineer better lives.

Our unique combination of inputs...

Expertise, insights and skills

- Leadership and skills from our Fellows, community and staff.
- Ideas and insights from our Fellows, awardees and partners.

Community and partnerships

- Exceptional regional, national, and international networks.
- An outstanding reputation, built on our unique Fellowship.

Foundations

- Resilient, diversified funding.
- Well-managed product portfolio.
- Improving digital capability.

...shape products to deliver these outputs...

...and outcomes that drive progress towards our goals.

Through the Skills Centre and Engineering X we deliver:

- Solutions that strengthen engineering skills and diversity.

Through our Research and Invention Fellowships, Enterprise Hub and Engineering X we deliver:

- Talented engineers with enhanced careers, leadership capacity and connections.
- Inventions and innovations with potential to improve lives.
- Growing highly investable engineering and technology businesses.

Through the National Engineering Policy Centre we deliver:

- Independent engineering expertise accessed by policymakers.
- Inclusive communications and engagement on the role of technology in society.

Sustainable and Innovative Economy

- Solutions and policies that shape a healthier more sustainable society.
- Improvements in UK's economy, productivity and regional inequality.
- Faster progress towards sustainability goals.



Technology Improving Lives

- Individuals, institutions and communities using technology to improve lives.
- Empowerment of those impacted by global sustainability challenges and technological disruption.
- More resilient UK infrastructure, processes and democratic institutions.
- Greater public trust and understanding of engineering and technology.



Engineering Community Fit for the Future

- Sufficient skilled, diverse engineers working in a culture that supports excellent outcomes.
- A community of professionals who will meet the needs of society, safely, securely and will keep pace with technological innovation.



A place-based approach

We will strengthen our place-based approach to delivering our goals. Our flagship products and activities will respond to national, regional and global needs in a variety of ways, from our Enterprise Hub establishing new Regional Hubs to Engineering X building equitable international partnerships to address global safety and sustainability challenges. We will build and mobilise regional, national and global networks of innovators and pilot novel approaches to Place-based support. Prince Philip House in London will continue to serve as our headquarters and as a national centre for engineering leadership.

Regional

We will:

- Expand our existing Regional Hubs in Belfast, Swansea, Glasgow, Liverpool and Newcastle, and establish new Hubs in three further English regions.
- Ensure at least 75% of our Skills Centre programmes, scholarships and placements are delivered outside the greater southeast.
- Continue the Engineering Economy and Place programme to build place-based data and insight.
- Pilot new approaches to support technology adoption at a regional level.
- Increase our numbers of Fellows and awardees in underrepresented areas and invest in convening our network across all parts of the UK.

International

We will:

- Expand our mission-based approach to global challenges through Engineering X.
- Work with local partners to build communities of impact-driven entrepreneurs and researchers in lower and middle income countries.
- Build influential international partnerships, focusing on a smaller number of key strategic partners and geographies.
- Bring outstanding engineers to the UK through the Global Talent Visa scheme.
- Build our capacity to convene our international network and connect it to our UK regional and national network.



Activities to enable delivery

Our ability to deliver this strategy will be enhanced by:

Expertise, insights and skills

- Refreshing our People Strategy to match our structure and skills to delivery needs.
- Investing in audience insight and marketing expertise to ensure our communication is effective.
- Electing Fellows who represent the full breadth of contemporary engineering excellence.



Foundations

- Embedding digital capability across all of our activities.
- Growing unrestricted revenue to improve our resilience and flexibility.
- Adopting a product approach so that solutions meet user needs, and are standardised, modular, and regularly reviewed for effectiveness.



Community and partnership

- Using data to improve the experience and impact of the Fellowship community.
- Leveraging the Awardee Excellence Community to better connect our talented awardees and the wider community.
- Investing in new and improved partnerships and collaborations.
- Empowering and equipping our community to be ambassadors for our work.





Royal Academy of Engineering

Prince Philip House
3 Carlton House Terrace
London SW1Y 5DG

020 7766 0600

www.raeng.org.uk

Registered Charity: 293074