THE QUEEN ELIZABETH PRIZE FOR ENGINEERING

Anji Hunter, QE Prize Director

From large-scale power and water infrastructure to the nanotechnology and bioengineering that are beginning to enhance our daily lives, the products of engineering are ubiquitous in modern society. This makes it a subject of huge importance to the economy, and to humanity as a whole. Yet, we take much of this for granted. It is time engineering is acknowledged not only for its contributions to improving our quality of life but the contribution that investment in technology and engineering projects makes to growth. In 2009, UK industry contributed 21% of the country’s GDP. UK engineering is highly successful, and it is vital that it maintains its competitive position.

Encouraging young people to study engineering is therefore essential. Although the number has started to increase, engineering students still only account for around 6% of the student population. An engineering career needs to appeal to more women; currently women make up only 8% of the engineers in the UK, the lowest number in Europe. Engineering industries are huge employers and ensuring that we have enough engineering graduates to meet the demand is essential; it is estimated that over the next 10 years, we will need 2 million new engineering recruits to remain competitive.

The Queen Elizabeth Prize for Engineering (QEPrize) is a new international award of £1m, for up to three individuals responsible for a pioneering advance in engineering that is of benefit to humanity. It has been established by the Queen Elizabeth Prize for Engineering Foundation, chaired by Lord Browne of Madingley. The prize will be awarded biennially and is being generously funded by donations from leading engineering companies: BAE Systems, BG Group, BP, GSK, Jaguar Land Rover, National Grid, Shell UK Ltd, Siemens UK, Sony, Tata Consultancy Services, Tata Steel Europe and Toshiba. The support of these multinational companies highlights not only the prestige of the award but also its global reach.

Media reaction to the prize has been wholly positive, with coverage stretching across the world, from the USA to Korea. The prize is stimulating a significant amount of discussion about how the public, and young people especially, perceive engineering. One conclusion is that societal development hinges to a large extent on advances in engineering, whether through innovative medical techniques or improved communications systems. The engineering press and industry are behind the prize and much debate and enthusiasm have been sparked in the engineering community. Nevertheless, appreciation of engineering remains low and raising this level is one of the key objectives of the Prize.

The QEPrize was launched officially on 17 November 2011 at the Science Museum in London and was attended by the leaders of the three major political parties. David Cameron, Nick Clegg and Ed Miliband all signalled their support for the prize and spoke of the need for engineering to be promoted both in the UK and internationally. The Prime Minister expressed hope that this “magnificent new prize” would eventually achieve the same stature and recognition as the Nobel Prize, stating that “it is a chance to celebrate our great pioneers and those committed to change our world for the better”. Cross-party support in thinking about engineering policy is crucial to the development of the economy and it is encouraging that the QE Prize is helping to place it more firmly on the radar of parliamentarians.

At the end of February, in a worldwide campaign, the website was launched, nominations opened and membership of the Judging Panel was announced. The panel is chaired by Lord Broers, who sits on the Lords Science and Technology Committee, and comprises leading figures from the international engineering community including Professor Shih, President of the King Abdullah University of Saudi Arabia, Diane Greene, a Director at Google, Professor Brian Cox of CERN and Madam Deng, Chief Executive Secretary of the China Association for Science and Technology. The prestigious panel reflects the diversity and reach of the prize, bringing business and academia together, to inspire interest in engineering globally.

The search for a winner has begun and the QEPrize team is developing media opportunities and designing activities that will engage the public, and young people in particular, in the promotion of engineering across the world.

The inaugural prize will be awarded by the Queen in Spring 2013. In the interim, the Olympics will be a major platform for great feats of engineering, from the stadia to the sports equipment to the infrastructure. Engineering in communications, technology and medicine will continue to grow.

With the announcement of the first award, the QEPrize will be on its way to securing a lasting legacy of engineering.

For more information on the prize, please visit www.qeprize.org