

POWERING HUMAN PROGRESS – PAST, PRESENT AND FUTURE



Ian Marchant FEI, President, Energy Institute

In 2014, the Energy Institute (EI) celebrated its centenary as the professional body for anyone working in or studying energy, and this milestone has provided us with an opportunity to reflect on how energy has contributed to human progress over the past century, as well as take a hard look at future challenges.

Energy has always been a key enabler of economic development, but it has also shaped today's society. The world looked very different in 1914 and energy has been at the forefront of this change. It has transformed our existences and the towns, cities, countries in which we live. It has been fundamental to improving comfort in the home, efficiency in our work and diversity in our leisure time. It has played a major part in improving the health of individuals and nations. In 1914, in the UK alone, 63% of people died before the age of 60. Now it is less than 12%.

Energy has also turned the planet into a global village, providing access both

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geographically and through communications to every corner of the world and beyond. It has been instrumental in bringing technological change on the ground, in the air and into space, enabling us to travel faster and further, reaching new frontiers well beyond our grandparents' wildest dreams. When the EI was created, the use of telephones was in its infancy and telegrams were

used as the quickest means of bringing news. Now we can instantly contact people around the globe, whilst the development of the internet enables us to share events on a global scale and in real time.

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None of this could have been possible without the growth of the energy sector to power it all.

POWER TO THE PEOPLE

However, to continue this progress for the benefit of society, we will have to overcome very complex challenges. Barely a week goes by without some aspect of energy making headlines, as

politicians, regulators and the business community grapple with three objectives that frequently pull in different directions: energy costs need to be low for both businesses and families; energy supply needs to be secure for the economy and social wellbeing and it needs to be sustainable to safeguard the environment. These factors frequently conflict and decisions designed to achieve one can

cause adverse consequences on the others. Reconciling these needs for sustainability, security and affordability is the "energy trilemma" that the industry has been tackling for some time now and that all stakeholders must resolve.

With climate change considered to be one of the greatest threats in human history, extensive research must be continuously undertaken and technical developments deployed to produce new and cleaner energy – and there should be enough of it to provide uninterrupted supply for decades to come. The cost of generating this energy must also be controlled to ensure that people can comfortably integrate its use into their daily lives.

But there is still another huge challenge for the industry to meet: that of providing for the one billion people in the world who still lack access to clean energy, which has become an essential commodity alongside food, water and shelter. Back in 1914, the global population was estimated at 1.8 billion. Today it stands at 7 billion and the forecast is for the world to hit

11 billion inhabitants by 2100. Not only must the energy industry work tirelessly to help create a more secure and sustainable environment for people to live in, it has to do so for everyone.

POWER FROM THE PEOPLE

We generally think of energy as a natural resource, but it requires considerable human

sector's history is full of heroes: the well-known such as James Watt, Thomas Edison and William Armstrong, but also many unsung ones. Every day, a whole range of energy professionals do amazing things, from fitters on a North Sea oil rig and linesmen out in all weathers keeping the lights on, to engineers solving today's problems and scientists working on tomorrow's. Organisations such as the EI, as

on people development, providing the skills and knowledge needed for individuals to achieve the highest level of competence in their field. Access to energy and the human progress that it generates relies on these highly skilled people whose dedication to the task not only helps sustain society but also inspire new generations to join the sector.

operational good practice in partnership with industry and regulators, the EI acts as a convening authority to stimulate an open and informed debate about trade-offs, conflicts and technologies, and we can help develop a better understanding of the energy industry as a single integrated system. If our predecessors who gathered 100 years ago to start this work were around now they would be amazed at the way energy has transformed so many aspects of our lives for the greater good. They would be impressed with the technological advances that have been achieved and the wellbeing that these have brought.

I hope the same can be said in another 100 years.

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... whole range of energy professionals do amazing things ...

ingenuity to find it, extract it, distribute it, deploy it and manage its use. Throughout the last century, the development of 'human capital' has taken central place in everything the energy industry has done. Our

well as governments, businesses and academic bodies, have a key role to play in helping, encouraging and recognising these energy heroes.

Much of the focus of any professional institution is, rightly,

Professional bodies also play a key part in encouraging debate about the challenges facing industries and society. Those debates in the energy sector are as fierce, relevant and difficult as they have ever been. As an independent organisation bringing sound science and evidence-based knowledge to the table, as well as developing

ENERGY INSTITUTE CELEBRATES CENTENARY AT PGES SUMMER RECEPTION

Throughout last year and until March 2015, the Energy Institute (EI) has been celebrating 100 years since its founding organisation the Institution of Petroleum Technologists was formally launched by its first President Sir Boverton Redwood.



Sir Boverton Redwood



(l-r) Ian Liddell-Grainger MP and Katrina Williams join EI President Ian Marchant FEI and EI Chief Executive Louise Kingham OBE FEI in celebrating the Energy Institute's Centenary

To mark this milestone, the EI sponsored the 2014 Parliamentary Group for Energy Studies summer reception, hosted by Ian Liddell-Grainger MP and featuring Katrina Williams, Director General for International, Science and Resilience at the UK's Department of Energy and Climate Change and EI President Ian Marchant FEI as keynote speakers.