Press release: Plan launched to bring smart energy technology into homes and businesses

A plan to give homes and businesses more control over their energy use and support innovative new technologies, as part of the Industrial Strategy, was set out by Business and Energy Secretary Greg Clark today (24 July 2017).

The innovative plan will transform how homes and businesses store and use energy. It will deliver a smarter, more flexible energy system by removing barriers to smart and battery technology, reducing costs for consumers. The report, 'Upgrading our energy system' describes how the UK energy system is changing and how it can ensure economic benefits for businesses and households. Over a quarter of the UK's electricity is being generated through renewables such as wind and solar, much of it located close to homes and businesses. New technologies that help store and manage energy are emerging and the costs are falling.

These changes provide an opportunity to create new businesses and jobs in the UK. At the same time new smart technologies like smart meters – and appliances you can control from your mobile phone – along with other improvements to manage the energy system will help the country save up to £40 billion on energy costs over decades to come.

Business and Energy Secretary Greg Clark said:

> Upgrading our energy system to make sure it is fit for the future is a key part of our Industrial Strategy. A smarter energy system will create opportunities to reduce energy costs, increase productivity and put UK businesses in a leading position to export smart energy technology and services to the rest of the world.

By rolling out smart meters, enabling suppliers to offer lower tariffs and making it easier for firms to develop smart appliances and gadgets, the plan will help consumers use energy when it is cheapest or get rewarded for returning it to the grid when it is needed.

The plan also recognises the role that energy storage can play in a smart energy grid and the opportunities presented by falling costs of battery technologies designed to store surplus energy. To allow industry to exploit these new technologies government and Ofgem have committed to removing barriers to the introduction of this technology into our power network.

Andrew Wright, Senior Partner, Energy Systems, Ofgem, said:

> The way we are generating and using energy in Britain is changing

> rapidly. Today's plan sets out how Ofgem, government and the industry will work together to modernise the energy system and make sure consumers get the benefits of the changes.
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> We want to open the door to new technologies and services so that they can help to reduce bills for consumers in the long term. It is vital that we get the changes in place as there is potential for a smarter system to save consumers billions between now and 2050.

The plan will also make it easier for new businesses to help customers that are interested in reducing, or increasing, their energy use at certain times, which can help balance the calls on the electricity network.

As part of the Industrial Strategy, the government has committed to modernising the UK's energy system and developing a business environment where new entrants to the market can compete. This will also allow industry to develop innovative new products and services, creating thousands of jobs.

Chairman of the National Infrastructure Commission Lord Adonis said:

> Upgrading our energy systems is vital if we are to have clean, affordable and secure supply for the long-term and meet our targets for reducing carbon emissions.
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> This plan is a clear step forward, and was one of the 12 key infrastructure decisions we said needed to be made as a matter of urgency. I'm particularly pleased that many of the 29 points listed today directly follow recommendations in our Smart Power report.
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> Our study demonstrated the revolution our energy sector is going through, and the real benefits we can get from that in terms of greater efficiency, flexibility and value for money for customers. The measures announced today will lead to exciting innovations in the industry to help make that happen.

The full implementation of the plan to move to a smarter energy system alongside other changes could help save the country up to £40 billion over the coming decades, according to research conducted for BEIS by Imperial College and the Carbon Trust..

British company Moixa offers residential battery systems which can help manage energy demands across the electricity network, make better use of energy generated by rooftop solar panels, and enable suppliers to reward consumers who charge their batteries during periods of low demand, when prices are lower. These systems have been deployed in nearly 1,000 homes across the UK, and Moixa calculate that they could help consumers save up to 60% on their electricity bills.

Simon Daniel, CEO of Moixa Energy Holdings said:

Moixa welcomes this plan which recognises the central importance of energy storage in upgrading the UK Energy System – and the potential to save £40 billion off future customer bills. The regulatory improvements proposed and Industrial Strategy Challenge Fund will help storage providers like Moixa participate better in energy markets, and enable our Utility partners to deliver smart tariffs to customers. The actions will make the UK a global leader for new smart technologies and accelerate the transition to a cost-effective, resilient and low carbon energy system.