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# Energy:2030 | 1

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 Local authorities broaden energy ambitions  
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Decarbonisation has already seen the UK's networks changed almost beyond recognition. Yet the shift to increasingly decentralised, low-carbon smart energy systems including electrification of heat and transport is far from complete, and there is still an urgent need to develop and refine new market mechanisms and regulations.

In this initial edition of Energy:2030, we set the scene with various energy market changes and directions we feel will be prominent and important to follow in the years between now and 2030.

In it we have provided some analysis and insight into local energy markets, giving an explanation of the smart grid concept, and covering some real-world examples where theory is already being put into practice. Also, along the new markets theme, we look at blockchain, addressing some of the questions that have to be answered if the technology is to be transformative in energy market decentralisation.

Also in this edition, we set the context for the distribution network operators (DNOs) transition to distribution system operators (DSOs). The DSO transition is an emerging necessity for DNOs as more distributed energy resources come online, demanding a more hands-on approach to network management. We also set the scene, including an overview of the latest Network Innovation Competition round winners. In future issues we will focus on projects underway.

Other major changes in the energy market are the pace at which electric vehicles are being rolled out and adopted across Europe, and developments in battery energy storage. This is a crucial development for future electric vehicle cost reductions, and for providing flexibility services across transmission and distribution networks.

Finally, we look at some interesting developments in international markets, including moves toward providing low-income households with solar panels, and an update on European market auctions. These developments are important to monitor, as they convey how other countries are obtaining low-carbon power, costs involved in this pursuit, and help highlight implications for UK competitiveness.