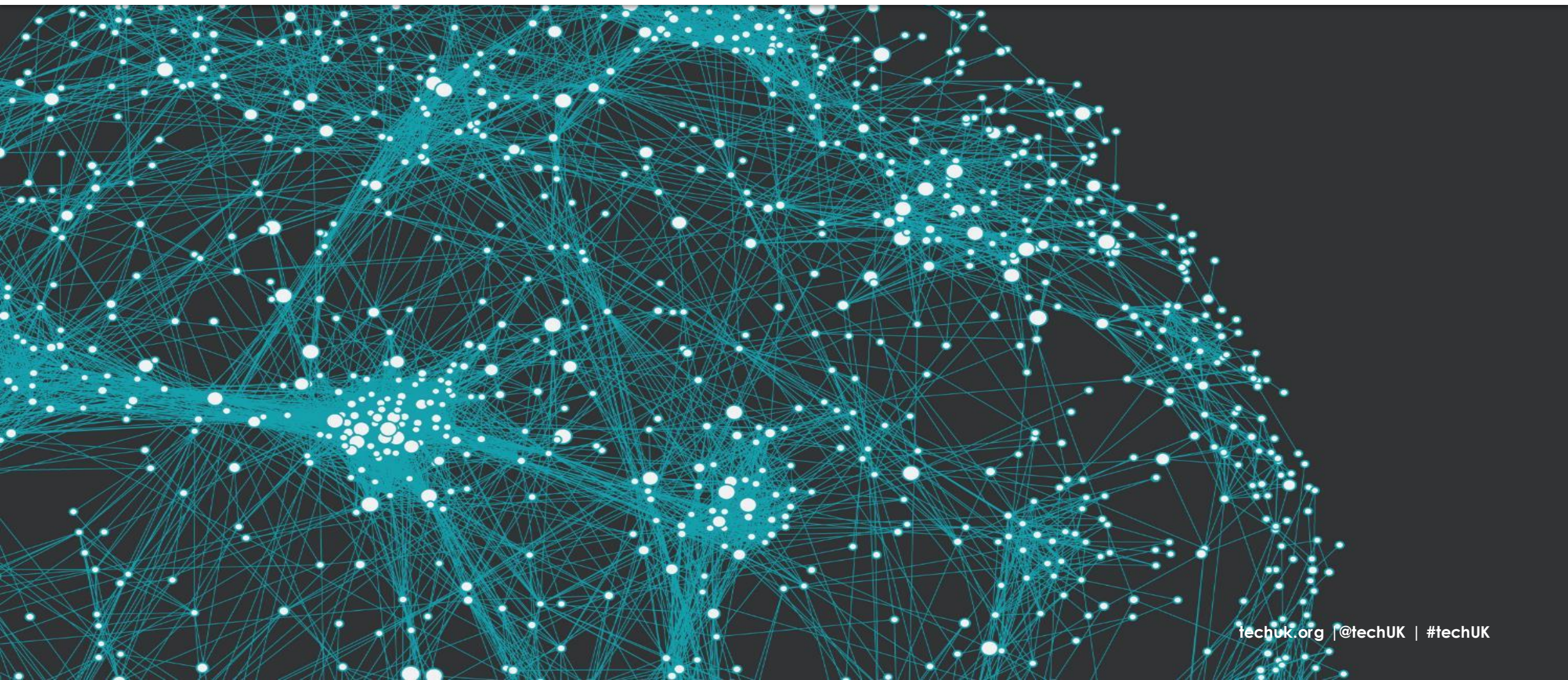


# A Vision For A Smart Energy System

Aimee Betts-Charalambous | Smart Energy Wales | 4 October 2017



Britain's Energy system will undergo large-scale change by 2030

Based on [National Grid's 'Gone Green' Future Energy Scenario](#) (2016) we expect to see:

- more wind and solar PV farms with closer integration to storage and system services
- smaller scale generation connected to distribution networks
- customers' homes and businesses able to generate and store power
- more reliance on interconnectors
- growth of domestic and grid-scale storage
- Greater electrification of heat and transport

Changing consumer requirements will disrupt demand patterns.

New players

Summer 217 – 52% of power met through low carbon sources

# Opportunities...

## 2-DAY CARBON INTENSITY FORECAST

CURRENT CO<sub>2</sub>: **238gCO<sub>2</sub>/kWh**

+ Today	☹️ 202	⬆️ 278	⬇️ 118
+ Tomorrow	☺️ 175	⬆️ 237	⬇️ 108
+ Friday	☺️ 166	⬆️ 259	⬇️ 133



(VH = Very high carbon, H = High carbon, M = Moderate, L = Low carbon, VL = Very low carbon)

Regulatory / policy actions?

Consumer engagement?

New business models?

Taking advantage of new technologies and tools in the market?

Thank You



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