The role of innovation in battery development and the uptake of EVs

Neil Morris, CEO
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Our mission

Accelerating breakthroughs in energy storage technologies to benefit the UK in the global race to electrification
Demand for UK-produced batteries

Based on the three scenarios, UK and EU demand for UK-produced batteries could reach 60-200 GWh p.a. by 2040, the equivalent of 4 to 13 gigafactories.
THE ROLE OF INNOVATIVE THINKING IN THE UPTAKE OF LOW CARBON TECHNOLOGIES

Scientific breakthroughs

The model of conducting application-inspired research

Skills development
Scientific research
Application-inspired research to address known technical performance gaps

- Research began 2018
- Research to begin Sept 2019

- Lithium sulfur batteries
- Solid state batteries
- Sodium ion batteries
- Lithium cathode materials
- Electrode manufacturing
- Multi-scale modelling
- Extending battery life
- Recycling and reuse

Increased performance/impact & risk – Lower maturity/technology readiness level
REDEFINING THE RESEARCH MODEL
BUILDING CAPABILITIES – R&D
With so much at stake, innovative thinking will play a pivotal role in how central the UK will be in the global race to electrification of transport.
Thank you