Prospering from the Energy Revolution

- An Industrial Strategy Challenge Fund Programme

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Context: An Innovation-rich Industrial Strategy

Our five foundations:

- **Ideas**: the world’s most innovative economy
- **People**: good jobs and greater earning power for all
- **Infrastructure**: a major upgrade to the UK’s infrastructure
- **Business Environment**: the best place to start and grow a business
- **Places**: prosperous communities across the UK

- **AI & Data Economy**: We will put the UK at the forefront of the artificial intelligence and data revolution
- **Future of Mobility**: We will become a world leader in the way people, goods, and services move
- **Clean Growth**: We will maximise the advantages for UK industry from the global shift to clean growth
- **Ageing Society**: We will harness the power of innovation to help meet the needs of an ageing society
The Industrial Strategy Challenge Fund.....

...A new innovation approach

- Focused on **improving productivity and economic benefit** across the UK
- Learning from the DARPA approach
- Clear **measureable** challenges are needed
- Needs clear **industry buy-in** to be successful and should be **ambitious**
Wave 2 challenges (launched 2018)

- Audience of the future (up to £33m)
- Data to early diagnosis and precision medicine (up to £196m)
- Prospering from the energy revolution (up to £103m)
- Healthy ageing (up to £98m)
- Next generation services (up to £20m)
- Quantum technology (up to £20m)
- Transforming construction (up to £170m)
- Transforming food production (up to £90m)
Energy Revolution: The Context

- Capital Costs
- Digital
- UK Strengths
- Consumer
- Local
- Financing
Energy Revolution: Pull, not push.

“Traditional” Energy Innovation Approach

A new approach...
The energy revolution challenge:

Prove by 2022 that local, investable, consumer-centric energy approaches can create prosperous clean energy communities across the UK
Energy Revolution: Programme Objectives

1. **Prove investable, scalable local business models** by 2022, that
   - deliver cleaner, cheaper energy services
   - build more prosperous and resilient communities
   - benefit the whole energy system
   - use integrated, intelligent approaches

2. **Unlock 10x future private investment** in local integrated energy systems in 2020s (vs business as usual).

3. **Accelerate new products and services to commercialisation** creating real world proving grounds.

4. **Build UK leadership** in integrated energy services provision
Prospering from the Energy Revolution

£102m programme to prove that intelligent, local consumer-centric energy approaches can create prosperous clean energy communities across the UK

- Emissions < CB5
- Lower consumer bills
- 10x investment 2020+
- Increased local value capture

Demonstrator, Designs and research consortia awards to be announced October / November.

£40m Practical Demonstrators
£30m Future Designs
£10m Innovation Development
£22m Research Programme (Academia)
Programme Integration Service (ESC)