UK International Climate Finance for Energy Storage

Ellen Paton
Senior Policy Advisor & Climate Finance Investment Lead
Department for Business, Energy & Industrial Strategy (BEIS)
UK Government
21-22\textsuperscript{nd} January 2020
UK’s International Climate Finance (ICF)

➢ Since 1990, the UK has reduced its emissions by 42% whilst growing our economy by 72% (fastest rate of decarbonisation in the G20)

➢ UK’s International Climate Finance uses Official Development Assistance (ODA) to help developing countries to tackle climate change and move to sustainable economic growth

➢ £11.6b ODA for climate, 2021-2026
➢ £5.8b ODA for climate, 2016-2021
➢ £3.87b ODA for climate, 2011-2016
➢ Delivers UK’s share of $100 billion/year by 2020 finance commitment under Paris Agreement
➢ £1b Ayrton Fund, 2021-2026, jointly delivered by BEIS and DFID for ODA-funded RD&D in clean energy innovation

- 1,600 MW Clean energy capacity installed
- 26 million People provided with access to clean energy
- 16 million Avoided or reduced tonnes of GHG emissions
- 57 million People supported to cope with climate change
- £3.8 billion Public finance mobilised for climate change
- £1.4 billion Private finance mobilised for climate change
Energy Storage in the UK: Deployment

- ~4GW of storage on UK system (mostly pumped hydro, ~1GW batteries)
- Deploying smart, flexible technologies such as storage, demand-side response and interconnectors could save £17-40b across UK electricity system to 2050
- **Smart Systems and Flexibility Plan** – 38 actions to be implemented by 2022 (half already implemented): markets for flexibility, energy storage, demand-side response

- Government, Ofgem and industry working together to create a best-in-class regulatory framework by removing barriers and reforming markets so that it is rewarded fairly for its value.
- Potential for **power-to-gas technologies (hydrogen)** and thermal storage to manage variability and offer cheaper long-term storage solutions

Energy Storage Partnership Stakeholder Consultation
21 January 2020, Pretoria, South Africa
Energy Storage in the UK: Innovation

➢ BEIS £505m Energy Innovation programme: >£29m for energy storage innovation:
  ❖ £9m for cost reduction in energy storage
  ❖ £20m to fund up to 3 demonstrations (large-scale, long-duration)
  ❖ £600k for feasibility studies for potential first-of-a-kind large-scale future energy storage demonstrator

➢ Storage-at-Scale competition (launched in January 2019):
  ❖ £20m to develop innovative, replicable solutions at-scale (alternatives to conventional storage solutions)
UK International Support for Energy Storage

➢ **Deployment: £200m battery storage programme (ODA):**
  ❖ Announced at UNCAS – focused on ODA-eligible countries
  ❖ Delivered through the Clean Technology Fund (CIFs)
  ❖ Aims to accelerate deployment of energy storage solutions

➢ **Innovation: £20m Faraday ODA Energy Storage Challenge:**
  ❖ £17m for mid-stage TRLs in weak-grid and off-grid applications
  ❖ £3m for science & research (early-stage TRLs)
  ❖ Delivered through Innovate UK and the Faraday Institution
  ❖ Commissioned report on weak-grid & off-grid applications of energy storage

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[Images of people and solar panels]