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# UK International Climate Finance for Energy Storage

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# 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

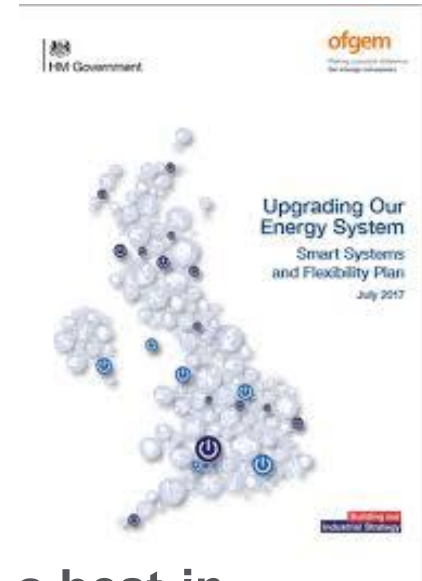


**£1.4 billion**  
Private finance  
mobilised for  
climate change

Department for  
Business, Energy  
& Industrial Strategy

# 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 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

