



Digitalisation: Role of International Climate Finance

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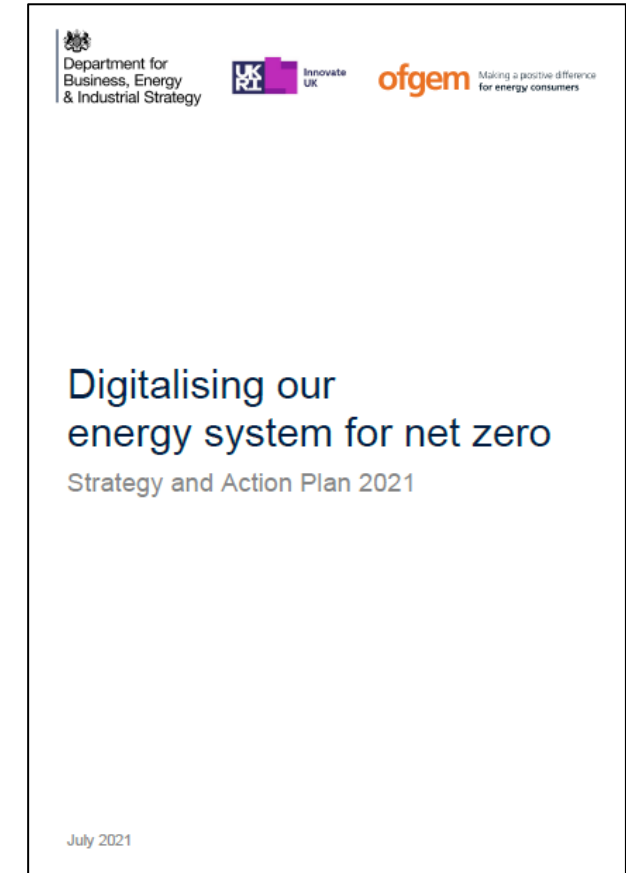
Climate Innovation & Finance

Department for Energy Security & Net Zero

UK Government

UK Clean Energy-Related Digitalisation Policy

- ❖ Digitalising UK energy system for net zero: strategy & action plan published in 2021:
 - Setting up & supporting Energy Data Taskforce (published report in 2019) with recommendations on data visibility, infrastructure & operational optimisation
 - Standards & regulatory frameworks in place to ensure energy data collection & applications meet best practice
- ❖ Artificial Intelligence for Decarbonisation Innovation Programme: supporting development of innovative artificial intelligence technologies for decarbonisation applications in the UK (£1.5m)



UK International Climate Finance

- ❖ **Commitment:** £11.6bn ODA between 2021/2022 and 2025/2026 (with at least £3bn on nature and tripling adaptation finance to £1.5bn in 2025)
- ❖ **4 main areas-of-focus:**
 - Clean energy
 - Nature for climate and people
 - Adaptation and resilience
 - Sustainable cities, infrastructure and transport
- ❖ **Clean energy:**
 - Increasing renewable power investments of British International Investment (BII)
 - Working through partnerships under the Breakthrough Agenda
 - Delivering the Ayrton Fund RD&D commitment
 - Strengthening governance, policy and regulatory frameworks for clean energy, fossil fuel subsidy reform and coal phase-out, and mobilising private finance
 - Supporting strategic systems planning (NDCs)
 - Supporting deployment of high-quality clean energy

UK Smart Energy International Assistance Offer

International Climate Finance (ODA):

❖ **Clean Energy Innovation Facility (CEIF) 1.0** (£50m, 2019-2024):

- £10m AI & Digitalisation Innovation Fund through the ADB

❖ **Accelerate-to-Demonstrate (A2D) Facility** (£65.5m, 2023-2029):

- ~£20m Cross-Cutting energy transitions pillar (including smart energy innovation)

❖ **Low Energy Inclusive Appliances (LEIA)** (£20m):

- Include smart energy under its research & innovation programme



£1bn Ayrton Fund Commitment

Approach:

- Principle lever for UK ODA support for clean energy innovation: [£1bn Ayrton Fund](#)
- Announced in 2019 (part of UK's £11.6bn international climate finance commitment)
- Delivered 2021-2026 & aims to accelerate clean energy transitions in developing countries by making clean energy most affordable, accessible & attractive options

Focus:

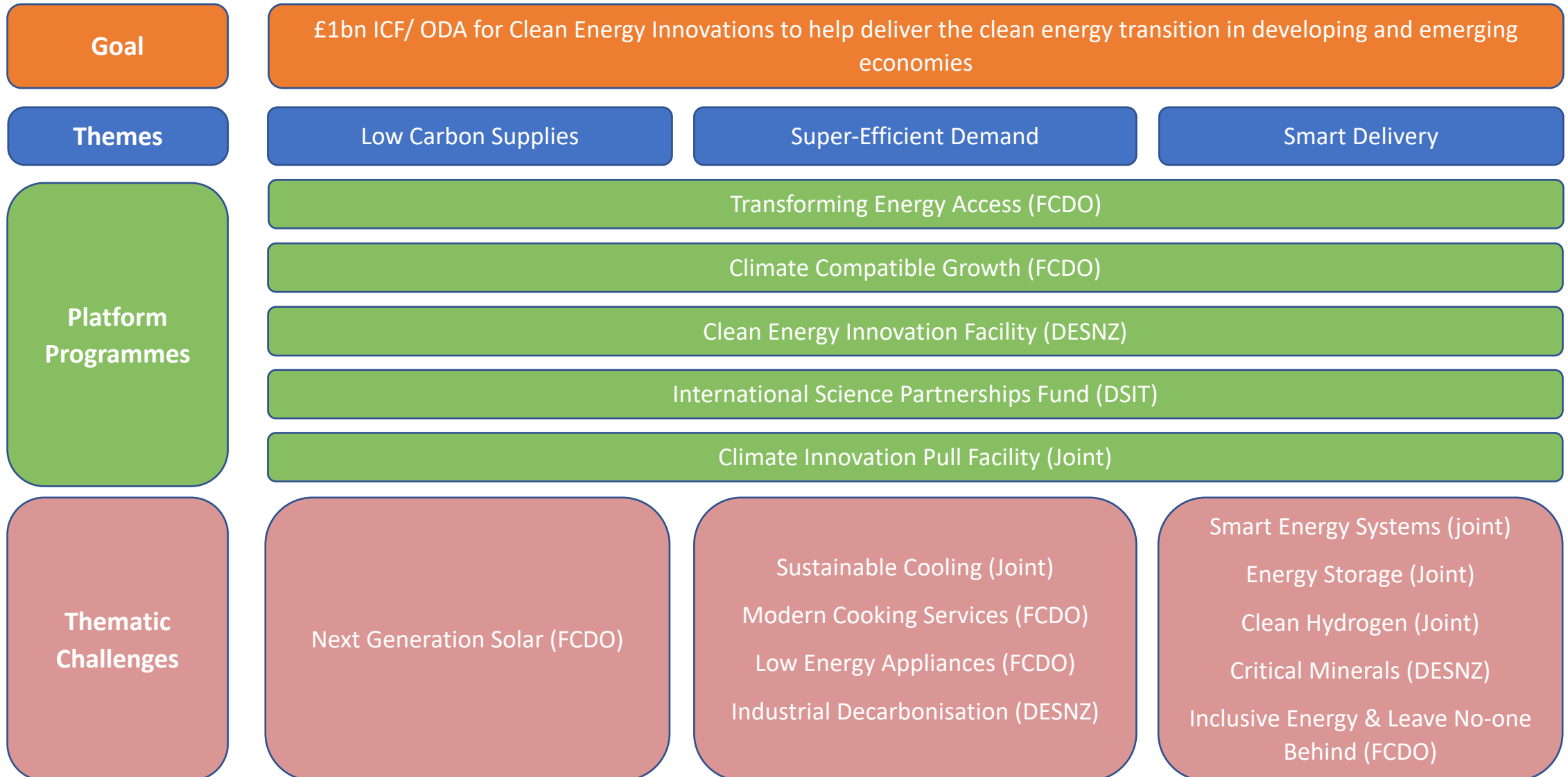
- Off-track thematic areas for delivery of SDGs 7 & 13
- E.g. smart energy / digitalisation, energy storage, energy efficiency, clean hydrogen, industrial decarbonisation, critical minerals, sustainable cooling, clean transport



Portrait of Hertha Ayrton, Girton College, University of Cambridge

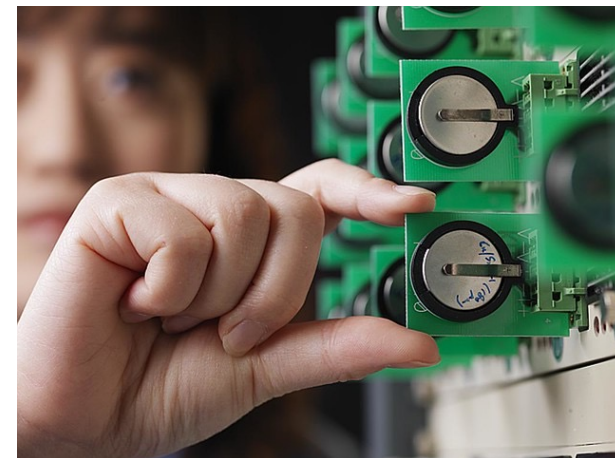


Ayrton Fund Platforms



Programme Case Study: £50m Clean Energy Innovation Facility (CEIF)

- ❖ Aim: to accelerate the commercialisation of innovative clean energy technologies in developing countries through advancing Technology Readiness Levels (TRLs 3-7)
- ❖ Timeframe: 2019-2024
- ❖ Four thematic Funds:
 - CEIF AI & Digitalisation Innovation Fund (£10m, ADB)
 - CEIF Industrial Decarbonisation Innovation Fund (£17.7m, World Bank)
 - CEIF Sustainable Cooling Innovation Fund (£15m, IFC)
 - CEIF Energy Storage Innovation Fund (£7.3m, Innovate UK)
- ❖ Impacts:
 - ❖ 87 projects have been supported to date
 - ❖ £44m of private finance has been leveraged
 - ❖ 211 knowledge-sharing and training-events have been held



Project Case Study: ECOSMART - Enabling local Circular ecOnomy hubs using SMart solar AnaeRobic Digestion Technology

❖ Goals:

- To explore the feasibility of smart integration of a novel, enhanced anaerobic digestion process with solar technology to form a basis for a circular economy model

❖ Overview:

- Project value: £254k (US\$316k)
- Location: Nigeria
- Duration: 2020-2021

❖ Impacts:

- Enhanced work of Anaerobic Digestion processes
- Completed control and data collection and analysis system



New Programme: £65.5m Accelerate-to-Demonstrate (A2D) Facility

- ❖ Aim: to accelerate the commercialisation of innovative clean energy technologies in developing countries, particularly focusing on cross-cutting areas for energy transitions, clean hydrogen and critical minerals
- ❖ Timeframe: 2023-2029
- ❖ Three thematic pillars delivered through UNIDO:
 - A2D Cross-Cutting Pillar (including smart energy / digitalisation)
 - A2D Clean Hydrogen Pillar
 - A2D Critical Minerals Pillar
- ❖ Activities:
 - ❖ [Announced by UK Prime Minister at COP27 & launched in May 2023](#)
 - ❖ In set-up phase & due to be operational in early 2024
 - ❖ Further information to be announced towards the end of 2023



Thank you