Clean Hydrogen: Role of International Climate Finance

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UK Clean Hydrogen Policy

- **Strategy:** UK Hydrogen Strategy published in 2021
- **Action Plan:** Hydrogen Sector Development Action Plan published in 2022
- **Ambition:** up to 10GW of low carbon Hydrogen production capacity by 2030
- **Trade:** UK engaging with investors & industry to facilitate flow of private capital into UK hydrogen economy & showcase UK hydrogen investment opportunities
- **Funding:** £20m competition in 2022 for Hydrogen Transport Hub - demonstrate hydrogen use & re-fuelling for transport & securing sustainable hydrogen demand
- **R&D:** £26m Industrial Hydrogen Accelerator Programme for projects generating evidence on end-to-end industrial fuel-switching to hydrogen
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 Clean Hydrogen International Assistance Offer

- **Focus**: UK will support hydrogen collaboration & cooperation to accelerate innovation & deployment of technologies to increase supply & incentivise demand.

- **Breakthrough Agenda**: launched at COP26 – countries committed to work together this decade to speed-up clean tech. UK co-leading Hydrogen Breakthrough (affordable renewable & low carbon hydrogen globally available by 2030).

£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. clean hydrogen, industrial decarbonisation, critical minerals, sustainable cooling, smart energy, energy storage and clean transport
**Ayrton Fund Platforms**

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International Assistance:

- **Clean Energy Innovation Facility (CEIF) 1.0 (£50m):**
  - Innovative clean hydrogen projects supported through £17.7m Industrial Decarbonisation Innovation Fund (through World Bank)

- **Accelerate-to-Demonstrate (A2D) Facility (£65.5m):**
  - Innovative clean hydrogen projects supported through ~£20m Clean Hydrogen pillar (through UNIDO)

- **Climate Compatible Growth (CCG):**
  - Academic research on green hydrogen & economic development opportunities/risks (e.g. clean hydrogen optimisation models, clean hydrogen into energy source models)

- **Climate Investment Funds (CIFs) Industry Transition Programme:**
  - Supporting scale-up of technological solutions in industry including clean hydrogen
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 Industrial Decarbonisation Innovation Fund (£17.7m, World Bank)
  - CEIF AI & Digitalisation Innovation Fund (£10m, ADB)
  - 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: Market Assessments of Investment Opportunities in Clean Hydrogen

**Goals:**
- Support development of clean hydrogen industry in developing countries
- Where early private sector investment leads exist or are being generated

**Overview:**
- **Timeframe:** 2021-2023 (due to complete in August 2023)
- **Cost:** $2m
- **Outputs:** country-level technical & economic assessments for green hydrogen
- **Countries:** feasibility studies for 8 countries (including India & Pakistan)
- **Next steps:** assessments collated in a report on opportunities in green hydrogen (including on increasing women's participation in sector)
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 clean hydrogen, critical minerals and cross-cutting areas for energy transitions

- **Timeframe:** 2023-2029

- **Three thematic pillars delivered through UNIDO:**
  - A2D Clean Hydrogen Pillar
  - A2D Critical Minerals Pillar
  - A2D Cross-Cutting 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