



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

Partners:  UK Government



Accelerate-to-Demonstrate (A2D) Facility

Webinar Series on Good Quality Demonstration Projects

*Webinar: Focus and Aims of Good Quality
Demonstration Projects*

Webinar Agenda

Time	Agenda Item
13:30 – 13:35	Webinar Series and Webinar Introduction
	Overview of the A2D Facility
	Core Aspects of Working with UNIDO and the UN
13:35 – 13:40	What are Demonstration Projects?
	What are Lighthouse Effects and Transformational Impacts?
13:40 – 13:45	How does the Implementation Phase differ from the Planning Phase?
13:45 – 13:50	What are the A2D Facility Thematic Areas-of-Focus?
	What is Out-of-Scope?
13:50 – 13:55	Case Study (A2D Facility-Supported Demonstration Project)
13:55 – 14:00	Further Information

A2D Facility Overview

The Solution

The A2D Facility aims to accelerate the commercialization of innovative climate solutions in developing countries by supporting catalytic and scalable demonstration projects in:

- Clean hydrogen
- Critical minerals
- Smart energy
- Industrial decarbonization



Initial Funding and Timescales

- Initial contribution of ~USD 80 million from the UK Government
- Initially operates from April 2023 to March 2029
- Global (developing country-focused) Facility
- Grants of USD 1-5 million per demonstration project for ~3-year projects
- 5 demonstration projects supported through first call-for-proposals in 2024 (in Kenya, Namibia, Nigeria, Nepal and Tanzania)
- New projects supported through the second call-for-proposals in 2025 will be announced in early 2026
- Main Sustainable Development Goals (SDGs)-of-focus:



Activities bringing transformational solutions to the market at scale.

Providing grant support for implementing transformational demonstration projects with strong scalability potential, and which create and disseminate knowledge and experiences to foster collaboration, learning and scalability. Planning-related activities for demonstration projects are out-of-scope.

Core Aspects of Working with UNIDO and the UN

- **The framing of the webinar series is on what makes a good quality demonstration project**
- **A good project idea must be complemented with strong organizational, operational and administrative capacities and capabilities:**
 - Sufficient personnel to handle stringent reporting, accounting, etc. requirements
 - Forming of consortia and identifying a strong lead organization with authority to sign and take over the risks (technically, operationally and financially)
- **Working with the UN means adhering to UN Standards and contractual conditions:**
 - UNCITRAL law
 - Significant and transparent reporting, accounting, etc. requirements
 - Strict audit, confidentiality and ethics provisions – applicable to the entire chain of stakeholders, consortium partners and sub-contracted partners
 - UN conditions must be accepted



What are Demonstration Projects?

- **Real-world conditions:** it is the first demonstration-scale project of the specific innovative solution in the developing country-of-focus and implements activities that are strategically-integrated nationally and/or internationally to enhance the potential for transformational change and catalytic impacts by the end of the ~3-year period of A2D Facility support.
- **Innovation stage:** the A2D Facility is not focused on pilot-scale projects or research and development activities (R&D) but the demonstration-scale stage. Innovative solutions that are at this technology readiness stage in the developing country-of-focus for a given project, but which are at a more commercial stage in another country (developed or developing) are also in-scope.
- **‘Lighthouse’ effects:** the A2D Facility supports the implementation of catalytic ‘lighthouse’ demonstration projects in developing countries.

What are Lighthouse Effects and Transformational Impacts?

- **Definition:**

*Successful transformational change under the A2D Facility is achieved when innovative climate solutions show anticipated progression towards **scalability, replicability and sustainability**, and show evidence of having "lighthouse" effects in the targeted country, as a result of the supported demonstration project and dissemination-related activities. It occurs when supported innovative solutions demonstrate their **commercial viability, attract follow-on co-financing and investment, and start to integrate into the market.***

*This transformation is characterized by **strengthened innovation ecosystems, enhanced private sector participation, and contributions to emission reductions and sustainable and inclusive industrial development** (SDG 13 (climate action), SDG 9 (industry, innovation and infrastructure) and SDG 1 (no poverty), as well as a range of co-benefits such as job creation, improved livelihoods, gender equality and community resilience).*

- **Enabling Environment:** implemented within an enabling environment in the developing country-of-focus, such as policy and regulatory support and alignment, available infrastructure and institutional readiness, access to finance and investment for facilitating the scalability of the proposed innovative solution, and influencing policy activities.
- **Stakeholder engagement:** local, regional and international cooperation through supported projects will contribute to the development of effective networks that will increase the potential for transformational change through knowledge-sharing, capacity building, partnerships for scaling, such as with governments, private sector developers, financiers, small-to-medium-sized enterprises (SMEs), local communities and civil society.

How does the Implementation Phase differ from the Planning Phase?

Illustrative Examples	Planning Phase (Out-of-Scope)	Implementation Phase (In-Scope)
Technology Readiness	R&D, lab testing and pilot projects (e.g. TRLs 1-5)	Demonstration-scale projects (e.g. TRLs 6-7)
Procurement	No larger-scale equipment procurement activities, only studies and smaller-scale equipment procurement for lab-testing or pilot-scale activities	Procurement of larger-scale equipment required for installing the innovative solution
Nature of Activities	Analysis, design, modelling, permitting, feasibility, engineering design studies, research. No building, physical installation or equivalent beyond small lab-scale testing or pilot projects	Physical construction, installation, integration, operation and validation
Permits & Regulatory Readiness	Identifying permitting requirements, preparing and submitting applications (e.g. environmental permits) but permits are not yet granted	All relevant permits obtained and alignment with standards and regulations in-country
Commercialization Readiness	Plans for co-financing but not yet confirmed through MoUs, contracts, agreements, LoIs or equivalent, though financiers and investors may have shown some initial interest	Clear evidence-based scalability pathways backed up with confirmed MoUs, contracts, agreements, LoIs or equivalent with financiers and investors

What are the A2D Facility Thematic Areas-of-Focus?

- **Critical Minerals:** demonstration projects of innovative solutions to decarbonize the processes for re-finishing, processing and recycling of critical minerals (midstream and downstream). Upstream activities (related to exploration and extraction) are out-of-scope.
- **Clean Hydrogen:** demonstration projects of innovative solutions to decarbonize activities across the value chain across different sectors, such as transport infrastructure, industry, power and buildings. Green hydrogen (renewables-based technologies) and blue hydrogen (carbon capture, usage and storage (CCUS)) are in-scope. Other types of hydrogen, including blending, are not in-scope.
- **Industrial Decarbonization:** demonstration projects of innovative solutions to decarbonize industrial sectors, such as manufacturing, transport, processing and energy-intensive industries.
- **Smart Energy:** demonstration projects of innovative smart energy solutions, such as machine learning, blockchain, digital twins, Artificial Intelligence (AI), smart grid-enabling solutions and smart energy management systems, to optimize and digitalize energy management across different sectors, such as transport, industry, power and buildings. Already commercialized smart energy solutions in the developing country-of-focus for a given project are not in-scope.

What is Out-of-Scope?

- **Planning activities:** pre-feasibility studies, feasibility studies (such as environmental, financial, social, regulatory, legal, front-end engineering design or equivalent), site identification studies, obtaining permits (or still in the process of obtaining permits) or other activities related to the planning phase of a demonstration project.
- **Policy, regulatory and legislative support:** supporting the design and implementation of policy roadmaps (including innovation policy roadmaps), standards or certifications for technologies or processes, regulations and laws, and capacity building activities that are primarily targeted at policy-makers, government officials or equivalent (unless directly linked to the scaling of the solution).
- **Research and development:** research, academic papers, policy briefs or equivalent.
- **Negative environment or social impacts:** activities that are likely to threaten critical habitats or physical cultural resources that use banned pesticides and/or chemicals, or cause involuntary resettlement, or other equivalent negative impacts that do not safeguard the environment and society, will not be supported.
- **Applications:** solutions linked to unabated fossil fuels (coal, oil and gas), including blending projects.

Case Study: A2D Facility-Supported Demonstration Project



Industrial Decarbonization: Greener Tea Project

Demonstrate and operate a first-of-a-kind 'lighthouse' clean gasification plant to contribute to industrial decarbonisation of the Kenyan tea sector, including carbon capture through biochar and in gaseous form.



Duration: 3 years

Impacts:

- **Remove** 1,400+ tonnes CO₂ a year through biochar
- **Reduce** embodied fertiliser footprint and emissions
- **Utilise** excess residues
- **Displace** emitting energy, grid transmission and distribution, diesel, incineration and boiler use
- **Input costs:** improve soil health & fertiliser efficiency, and tea yield and quality, through biochar

Scalability:

- **Jobs:** within Kenya, 8-10 gasification jobs per plant (target 50% women) once solution is scaled to other tea factories, including in fabrication and after-sales
- **Market:** potential to scale to nearly half the tea factories in Kenya
- **Policy:** policy alignment and incentives and skills development in agriculture and forestry value chains and across other emerging markets



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Further Information

- **A2D Facility Website:** [Visit the website here](#)
- **A2D Facility LinkedIn Account:** [Follow the LinkedIn page here](#)
- **A2D Facility Mailing List:** [Join the mailing list here](#)
- **A2D Facility Year 1 Annual Report:** [Access the Annual Report here](#)
- **A2D Facility Year 2 Annual Report:** [Access the Annual Report here](#)
- **A2D Facility Market Assessments:** [Access the reports here](#)