LEAST DEVELOPED COUNTRIES – GREEN INDUSTRIALISATION FACILITATION MECHANISM

BACKGROUND

1. Green Industrialisation in LDCs

The global economy is experiencing a period of polycrisis characterised by the simultaneous occurrence of climate change, geopolitical tensions, debt crises and disruptive technological transformations. Within this context, Least Developed Countries (LDCs) face the greatest risks due to their structural vulnerabilities, low socioeconomic development indicators and inadequate access to international finance. Currently comprising 44 countries with a combined population of approximately 1.2 billion, LDCs host 14 per cent of the global population, yet account for only around 1 per cent of global GDP and global exports. This significant economic gap continues to create major barriers to achieving the Sustainable Development Goals (SDGs).

Industrialisation remains the most fundamental engine of economic growth, poverty reduction and quality job creation. However, traditional carbon-intensive industrialisation pathways are no longer sustainable due to breached ecological limits and are becoming increasingly economically uncompetitive under emerging international trade regulations. In this context, green industrialisation is not an optional development pathway for LDCs, but a strategic necessity to integrate into global value chains, achieve structural economic transformation and build resilience against the climate crisis.

Despite sharing common development challenges, LDCs are not a homogeneous group. Their industrial capacities, innovation ecosystems and competitiveness levels differ significantly, requiring differentiated approaches to green transformation. While some countries may prioritise industrial decarbonisation, renewable energy and circular economy solutions, others require investments in agro-processing, SME development, mini-grids, basic energy access and climate-resilient infrastructure.

2. Deepening Production and Energy Gap in LDCs

LDCs continue to fall behind in the global race for industrialisation, technological transformation and green growth. Their share of global manufacturing exports and manufacturing value added remains extremely limited, with industrial production concentrated largely in low-technology, labour-intensive and low-value-added sectors such as textiles, apparel, food processing and non-metallic minerals. Medium- and high-technology manufacturing capacity remains largely absent.

At the same time, access to uninterrupted and clean energy, the most fundamental prerequisite for industrialisation and economic transformation, remains one of the weakest links in many LDCs. While global electricity demand continues to increase, many LDCs remain far behind even basic electrification targets. Approximately 730 million people in Africa still lack access to electricity, creating a major obstacle to the development of industrial, educational and health infrastructure.

The production and energy challenge therefore extends beyond technology transfer alone. Energy infrastructure, clean production systems, institutional capacity and resource efficiency must be developed in an integrated manner to enable sustainable industrial growth.

3. Bridging Capacity, Technology and Finance Gaps

The existing international finance and technology architecture established to support climate action and industrial development in LDCs continues to face significant barriers. The rationale for the LDC-GIF Mechanism lies in addressing interconnected capacity, technology and finance constraints that prevent green industrial projects from progressing from concept to implementation.

First, many LDC institutions face a capacity gap in project preparation and implementation. Technical concepts often lack the engineering, environmental, institutional and financial analysis required to move forward. Second, a technology gap makes it difficult for countries to access appropriate technologies, implementation know-how and institutional experience suited to their national priorities.

Third, a finance gap persists because too few projects reach investment-ready standards. The core challenge is often not the absence of global capital, but the limited ability to develop projects that meet technical, environmental, institutional and financial requirements. Early-stage projects frequently fall between technical assistance and large-scale finance because they are considered too small, too risky or insufficiently prepared, causing local innovations and industrial initiatives to disappear in a "valley of death" before they can be realised. The LDC-GIF Mechanism is designed to bridge this gap through integrated project maturation, technology matching and capacity support.

OBJECTIVE

The LDC-GIF Mechanism is conceived as an agile facilitation hub rather than a new, stand-alone fund. It is an end-to-end integrated technology, capacity and finance bridge designed to take projects from the idea stage to bankable status, centring on voluntary technical transfer among developing countries and from developed countries to LDCs, and operating directly under the secretariat of the United Nations Technology Bank for LDCs. Its objective is to bring together often fragmented elements within a single country-led framework built around national priorities and identified needs.

The mechanism will support resource-efficient industrial infrastructure, particularly eco-industrial parks based on circular economy principles, and bring early-stage projects developed by local actors to bankable standards through technical, legal, environmental and financial feasibility work. It will also coordinate the direct transfer of tested green industry practices from voluntary participating countries to LDCs through Peer-to-Peer, South-South and triangular cooperation.

In parallel, the mechanism will match prepared projects with relevant existing climate and development finance institutions, subject to their mandates and criteria, while supporting the alignment of green industrial projects with LDCs' Nationally Determined Contributions (NDCs), energy transition plans and industrial development policies. **Its value proposition is that it is: country-led, built around national priorities and identified needs; integrated, bringing technology, capacity, projects and finance into one framework; collaborative, combining South-South and triangular cooperation with global partnerships; and catalytic, focused on unlocking larger downstream investments.**

INITIATIVE OUTLINE

1. Implementation pillars

The mechanism will operate through four mutually reinforcing implementation pillars:

Pillar 1	**Project Development and Maturation Support** Taking green industry ideas from local stakeholders in LDCs and conducting engineering design, environmental and social (E&S) risk analyses, and financial feasibility work to bring projects toward investment readiness.
Pillar 2	**Technology Matching and Transfer** Matching the LDC institution whose needs have been analysed with the appropriate technology provider institution from the voluntary donor pool (Peer-to-Peer) to facilitate the transfer of technologies, expertise and implementation know-how.
Pillar 3	**Institutional Strengthening and Capacity Development** Organising comprehensive training and certification programmes for LDC policymakers, chambers of industry, and SME managers who will manage the green industrial transformation.
Pillar 4	**National Policy Alignment and Governance** Aligning the green industry projects and technology transfers implemented in LDCs with countries' NDCs, national development plans and relevant institutional frameworks.

2. Delivery

Operational sequence

The mechanism follows an integrated sequence from country-identified needs to investment and implementation: identifying technology needs, national priorities and opportunities; designing the project concept and appropriate technology; matching technical expertise and institutional partnerships; maturing the project through feasibility, environmental and social analysis and financial modelling; and mobilising financing and implementation.

Instruments

LDC-GIF will operate as a dynamic two-pool system based on smart matching and capacity development. The mechanism is not a static grant institution but an integrated facilitation platform combining project maturation, voluntary technical transfer and access to finance.

The Voluntary Technical Support and Infrastructure Access Pool will bring together ministries, national development agencies, technology institutes and sectoral umbrella organisations from UN Member States that voluntarily commit to transferring successful practices from their own countries to LDCs. Support may include technology, know-how, policy experience, expertise and access to relevant infrastructure.

The Strategic Financing Pool will establish focused bridges with institutional financiers that have strategic mandates related to LDC industrialisation. Support arrangements may include project preparation support, concessional finance, guarantees, blended finance and private investment, subject to the mandates, governance arrangements and procedures of participating institutions.

Both pools converge around country-owned green industrial projects, allowing the mechanism to facilitate matching rather than duplicate existing institutions or financing mechanisms.

The mechanism will build on Technology Needs Assessments (TNAs) conducted by the UN Technology Bank, which identify country-specific technology priorities, capacity needs and investment opportunities. These assessments will support project identification, technology matching and project pipeline development, ensuring that support is driven by country-identified needs.

Indicative timeline

The global launch of the mechanism will take place at COP31 in Antalya, Türkiye, in November 2026. Within three months following the summit, the Secretariat within the UN Technology Bank and the Executive Board will become operational. Within six months, international participation in the Technical Support and Financing Pools will be declared. By the end of the twelfth month, the first calls for green industrial projects from LDCs will be announced, with the project pipeline, technology transfer and investment mobilisation proceeding across years one to three.

Initial three-year targets

During the initial three-year operational period following the launch, the mechanism aims to take at least 10 green industrial projects in LDCs from the early stage, completing their technical and financial maturation processes and putting them into implementation. At least 10 countries from the Global South and Global North will voluntarily participate in the Technical Support Pool to transfer their successful industrial models to LDCs.

The mechanism seeks to mobilize a total net investment of nearly 100 million US Dollars from climate funds and the private sector to LDC projects in the first three years, with the aim of achieving a tenfold leverage effect on an estimated 10 million US Dollars mechanism investment.

The mechanism will establish an operational platform for continued technology transfer, project maturation and financing facilitation in support of green industrialisation in LDCs.

Monitoring and accountability

The mechanism will build upon the existing monitoring, evaluation and reporting practices of participating institutions wherever possible, avoiding unnecessary duplication and administrative burden. Monitoring is designed in three tiers: activity and implementation monitoring at project level; institutional financial reporting and assurance at financing level; and an annual Green Industrialisation Progress Report at mechanism level.

Illustrative indicators include projects matured from idea stage to investment readiness; finance mobilised by source; technologies and practices transferred; beneficiary LDCs and supported companies; policy alignment achieved; greenhouse gas reductions and resource-efficiency gains; and eco-industrial infrastructure supported.

To ensure accountability, transparency and effectiveness, the mechanism will be subject to the existing oversight, audit and evaluation frameworks applicable to the UN Technology Bank as Secretariat. Financial oversight will be undertaken in accordance with established United Nations audit arrangements, including review by the relevant external and internal audit bodies as applicable.

GOVERNANCE STRUCTURE AND PARTNERS

Türkiye will serve as the initial host country of the LDC-GIF Mechanism, with the Ministry of Industry and Technology providing overall leadership. Utilising the political momentum of the COP31 Presidency, Türkiye will leverage its expertise in industrial zone management and clean technology to support LDCs in advancing green industrialisation. The secretariat function will be carried out by the UN Technology Bank for LDCs in Gebze, Türkiye, which will act as the main implementing body responsible for the identification of green technologies based on country-specific technology needs assessments, project design support, technical matching, preparation of progress reports and integration of relevant partners.

Strategic direction, resource allocation and project approvals will be overseen by a Steering Committee, chaired initially by Türkiye, with the UN Technology Bank for LDCs as Secretariat, two rotating representatives of LDC countries, two rotating representatives of partners in the financing pool, and two rotating representatives of countries and international institutions providing technical support, each rotating every two years. The Group of Friends of the LDCs would participate in an observer capacity, providing diplomatic and political guidance.

Developed through ongoing consultation and exchange with stakeholders engaged in *Axis 1: Transitioning Energy, Industry and Transport* of the Global Climate Action Agenda, the LDC-GIF Mechanism will support efforts to advance the Global Climate Action Agenda's objectives.

PARTICIPATION

The LDC-GIF Mechanism will bring together LDC governments and beneficiary institutions, participating countries contributing technical expertise, financing institutions, and the research, industry and development organisations that support green industrial transformation.

Participation is open to LDC policymakers, local governments, chambers of industry, enterprises and local project implementers as beneficiaries; to UN Member States, national development agencies, technology institutes, research organisations, industrial associations and international partners contributing to the Voluntary Technical Support and Infrastructure Access Pool; and to financing institutions engaging through the Strategic Financing Pool, subject in each case to their own mandates and procedures.

Parties wishing to participate in the initiative are kindly requested to submit their request through their respective UNFCCC national focal point, by e-mail to the address indicated below. The same address may also be used by other interested stakeholders to express their support of the initiative.

CONTACTS

Ministry of Industry and Technology of the Republic of Türkiye
Email: ldc-gif@sanayi.gov.tr

COP31 Presidency

Email: greenindustrycop31@iklim.gov.tr