

GLOBAL ENVIRONMENT FACILITY

INVESTING IN OUR PLANET

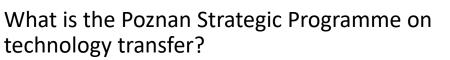
GEF Support to Technology Transfer

TEC 23

Virtual

September 7-13, 2021







- **2007**. COP requested GEF to establish programme promoting investment in technology transfer, to help developing countries address their climate tech needs.
- **2008**. GEF established Poznan strategic programme (PSP) with funding of USD 50 million.
- **2010**. GEF outlined elements of long-term implementation of PSP:
 - 1. Climate technology centres and climate technology network
 - 2. Piloting technology projects
 - 3. Public-private partnership for technology transfer
 - 4. Technology needs assessments
 - GEF as catalytic supporting institution for technology transfer

Long-term PSP elements integrated into GEF-6 and GEF-7 Strategies



PSP Highlights

- Climate technology centres and climate technology network
 - 4 regional tech centres: Africa (AfDB), Asia and Pacific (ADB/UNEP), Eastern Europe and Central Asia(EBRD), Latin American and Caribbean (IDB).
 - GEF also supported one global Climate Technology Centre and Network project.
 - Status: 3 closed, 2 extended
- Technology Needs Assessments (TNA)
 - 4 Phases of TNA Global project funded with ~\$27million in > 90 countries.

- Piloting technology projects
 - 14 pilot projects ,supporting tech transfer on:
 - *Mitigation techs*: renewable energy, energy efficiency, transport, and composting.
 - Adaptation techs: membrane drip irrigation, flood -and droughtresistant crops, sustainable land management practices.
 - Status: 8 closed, 3 under implementation, 3 cancelled



Support for Technology Transfer in GEF-7

- GEF-7 replenishment package adopted in June 2018; total replenishment package \$4.1billion. GEF-8 replenishment currently under negotiation.
- Climate change mitigation funding envelope at \$802million, set aside for \$291 million to finance EAs, CBIT, Integrated Programming (Impact Programs) and Regional/Global projects (\$18million).
- Country allocations deliver on the key climate change mitigation priorities, including technology transfer.

- Climate adaptation strategy integrates technology into strategy and recognizes technology transfer and innovation are key enablers of sustainable development for LDCs.
- The GEF continues to support developing countries in undertaking TNA and piloting priority technology projects to foster innovation and investment through CCM.
 Set aside support for TNA continues to be available for SIDS and LDCs.
- Projects continue to be country driven and required to demonstrate alignment to national priorities including in national climate strategies and plans, as well as TNAs.



GEF-7 Programming Support for Technology

Dedicated programming objectives under both <u>Adaptation</u> and Mitigation focal areas

Objective 1: Reduce Vulnerability and Increase Resilience through Innovation and Technology Transfer for Climate Change Adaptation

47. The importance of technology transfer is recognized in Article 10 of the Paris Agreement, which states "Parties share a long-term vision on the importance of fully realizing technology development and transfer in order to improve resilience to climate change and to reduce greenhouse gas emissions." Technology and innovation are engines of sustainable growth by building resilience of basic infrastructure, reducing vulnerability of communities, creating job opportunities, and expanding markets for goods and services.



GEF-7 Programming Support for Technology

Dedicated programming objectives under both Adaptation and Mitigation focal areas

Objective 1. Promote innovation and technology transfer for sustainable energy breakthroughs

115. In GEF-7, partnership with the private to promote technology transfer and deployment will be a key priority. Technology is key area for the UNFCCC and in Article 10 of the Paris Agreement, and is one of the key means to reduce, or slow the growth in GHG emissions, and to stabilize their concentrations. To that end, technology innovation with the private sector can help create or expand markets for products and services, generating jobs and supporting economic growth. Supportive policies and strategies are fundamental to catalyze innovation and technology transfer for mitigation and enhance private sector investment. Resources from the GEF play a key role in piloting emerging innovative solutions, including technologies, management practices, supportive policies and strategies, and financial tools which foster private sector engagement for technology and innovation.



Climate Change Focal Area Programming

The GEF-7 Climate Change Focal Area Strategy aims to support developing countries to make transformational shifts towards low emission and climate-resilient development pathways.





Climate Change Focal Area Programming

- Programmed through STAR (\$511 million) and Set Aside (\$291 million).
- GHG mitigation target of 1.5 billion tCO₂eq of GHG emissions will be avoided.
- Impact Programs are expected to contribute significantly to this target.
- Also, new results architecture aims to capture GHG emissions mitigated through other focal areas.
- Complementarity with other climate funds.
- Harness synergies through integrated approach for multiple GEBs.
- Focus on innovation and funding demonstration activities that can be scaled up through other means.





Climate Change Focal Area Programming

Objective 1: Promote innovation, technology transfer for sustainable energy breakthroughs

1: Decentralized renewable power with energy storage

- Energy storage
- Renewable energy-based decentralized systems (mini-grids)
- New business models

2: Electric drive technologies and electric mobility

- Electric mobility
- Regulatory frameworks that support electric mobility
- Integration of electric vehicles into the grid
- Planning for market changes

3: Accelerating energy efficiency adoption

- Buildings and energy efficiency retrofits in multi-family dwellings
- District heating and cooling
- Energy management for industry, equipment and appliances

4: Cleantech innovation

- Foster technology deployment, dissemination and transfer through entrepreneurship
- Develop SME and private sector partnerships
- Fostering local innovations and training entrepreneurs



LDCF/SCCF
Technology
Objectives and
Entry Points

Objective 1



Reduce vulnerability and increase resilience through innovation and technology transfer for adaptation

LDCF





Incubation and accelerator support

SCCF



Challenge Program for Adaptation Innovation

LDCF/SCCF Building on comparative advantage...











Country-driven and global

National: NAPA, NAPs, translating NDCs into action Global: addressing gaps, vetting concepts, capacity building, LDC work programme

• Ability to offer integrated solutions

Multiple benefits, MEA-relevant, alignment of relevant SDGs

• Focus on innovation SCCF evaluated as "ideal incubator" to test and refine concepts

Demonstrated track record for delivery

Supporting over 330 adaptation projects
Assessed as highly effective, impactful, and with value for money in independent evaluations and donor reviews



Recent GEF Support to Technology (FY21)

- The GEF approved **1 program and 17 projects** with technology transfer elements for CCM amounting to \$106.9 million in GEF funding, leveraging \$1,790.9 million in co-financing;
- 18 adaptation projects approved with \$91.2 million, leveraging \$260.4 million in co-financing.
- •In addition, 4th Phase of Global TNA Support Project under implementation supporting 17 LDCs and SIDS with \$5 million (total support for more than 90 countries in developing TNAs and TAPs).

Detailed information available in <u>FY21 GEF report to</u>
<u>COP26</u>



Project Example:

Promoting Cleantech Innovation for Climate Action in Senegal

The objective of the project is to strengthen and connect the cleantech entrepreneurship ecosystem by:

- identifying and nurturing early-stage cleantech innovations into fast-growing, scalable and investable enterprises;
- strengthening the capacities of national institutions and other ecosystem players and connecting them; and
- supporting national policy makers to strengthen the policy framework to support cleantech SMEs.

The project will connect to the **GEF Global Cleantech Innovation Program (GCIP).**



Project Example:

CRAFT - Climate Resilience, Adaptation Finance and Technology Transfer Facility

- **Objective:** Mobilize private capital to mitigate climate change and reduce land degradation through resilience investments.
- The CRAFT will invest in companies in areas of resilience intelligence and technology-enabled physical products and services in the agriculture, water, energy, transportation and finance sectors.
- Innovative feature: across sectoral approach for applying cleantech solutions across sectors.
- GEF-7 Non-Grant Instrument (NGI) Program.
 Approved 2021.



Program Example:

Challenge Program for Adaptation Innovation

- Aims to promote innovation and private sector engagement in adaptation technologies and techniques by supporting sustainable innovation ecosystems for MSMEs;
- First call for proposals in August 2019 for \$10 million in GEF support;
- 388 concepts submitted, 9 selected. As of September 2021, all have their PIF approved and 3 have been CEO approved. One project approved with CTCN as an executing agency —"Piloting innovative financing for climate adaptation technologies in medium-sized cities"
- Second Call for Concepts in August 2021:
 - \$10 million in GEF support from the LDCF and SCCF;
 - Approximately 400 concepts submitted and currently being reviewed.

Strong potential to effectively address unmet needs for climate change adaptation innovation and attract unconventional partners.



Complementarity in Climate Finance and Long-Term Vision

- The GEF and the GCF have jointly defined <u>a</u>

 Long-term Vision (LTV) on Complementarity,

 Coherence and Collaboration between the two institutions to continue strengthening their response and enhancing the planning, implementation and outcomes of their investments.
- The two entities are also exploring opportunities to collaborate on specific projects or programs, including on technology transfer, and to further expand the portfolio of countries that could receive coordinated financial support through either parallel or sequential financing.



Looking ahead...

- **GEF-8 Programming Strategy** under negotiation;
- Next GEF-8 negotiation meeting to take place from September 29 to October 2, 2021.
- GEF-8 start date July 2022.
- Link to <u>DRAFT GEF-8 Programming Directions</u>;
- Adaptation Program Strategy under development and taking place in parallel to the GEF-8 negotiations;
- The upcoming GEF-8 and Adaptation Programing Strategies create **new opportunities for innovative ideas on the technology transfer sphere.**

Thank you!

Please email with any questions at

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