

GEF Support for Technology Transfer

TEC 22

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GLOBAL ENVIRONMENT FACILITY
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Technology Transfer and PSP Background

What is the Poznan Strategic Programme on technology transfer?

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
5. GEF as catalytic supporting institution for technology transfer

Long-term elements integrated of PSP 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)

Status: Three Closed, 2 extended

GEF also supported one global Climate Technology Centre and Network project

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 drought-resistant crops, sustainable land management practices

Status: Eight Closed, 3 under implementation, 3 cancelled

Technology needs assessments

4 Phases of TNA Global project funded with ~27 million in >100 countries



Support for Technology Transfer in GEF-7

- ❑ GEF-7 replenishment package adopted in June 2018, total replenishment package \$4.1 billion. GEF-8 replenishment currently under negotiation.
- ❑ Climate change mitigation funding envelope at \$802 million, set aside for \$291 million to finance EAs, CBIT, Integrated Programming (Impact Programs) and **Regional/Global projects** (\$18 million).
- ❑ Country allocations will 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 will continue to support developing countries in undertaking technology needs assessments (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, including TNAs



GEF-7 PROGRAMMING SUPPORT FOR TECHNOLOGY

Dedicated programming objectives under both Adaptation and Mitigation focal areas

Mitigation

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.

Adaptation

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.

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



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.

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



Innovation in priority sectors, themes & private sector



Climate security



Incubation and accelerator support

SCCF



Challenge Program for Adaptation Innovation



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, donor reviews



Recent GEF Support for Technology (FY20)

- The GEF approved **3 programs and 10 projects** with technology transfer elements for CCM amounting to **\$119.5 million** in GEF funding, leveraging \$1,236 million in co-financing;
- **24** adaptation projects approved with **\$86.6 million**, leveraging \$445.9 in co-financing.
- **In addition:** 4th Phase of Global TNA Support Project approved June 2019, CEO endorsed July 2020; supporting 17 LDCs and SIDS with \$5 million (support for more than 100 countries in developing TNAs and TAPs); Now under implementation
- Detailed information available in GEF report to COP 26



Program example: Global Cleantech Innovation Programme (GCIP)

- **Global Cleantech Innovation Programme (GCIP):** Programmatic approach building on GEF support for innovative private sector solutions on clean technology, or “cleantech.”
- **Main objective:** strengthen innovation and entrepreneurship ecosystems that catalyze the transformation of cleantech innovations SMEs into viable investment businesses and link them to financing opportunities.
- **Early experiences:** Individual projects and initiatives in support of specific technologies or business models with a potential to be scaled up and generate emission reductions at scale → GCIP approach expanded in GEF-7 into a program with \$19.6 million from the GEF, leveraging \$137.9 million in co-financing; expected to generate 10.3 Mt CO₂ eq of GHG emission reductions in total.



The Evolution of GCIP

- GEF IEO evaluated GEF5-6 support of GCIP as ***“highly relevant and will remain so as developing countries realize the economic and environmental opportunities to take up cleantech innovation as an engine of low-carbon growth.”***
- By late 2019, over 1,200 cleantech SMEs had been trained, mentored, and linked to funding opportunities;
- Small sample of 14 out of 1,000 GCIP alumni raised \$22 million in investment and created over 300 jobs while delivering 600,000tCO₂ eq in emission reductions between 2011 and 2017;
- This was achieved from a total budget of \$12 million invested across the initial nine countries during GEF-5 and GEF-6;
- Beyond the results at individual businesses level, the GCIP has also delivered outcomes at national level by nurturing innovation ecosystems and strengthening capacity at national organizations.
- More information available in GEF’s report to COP26



Program Example: Challenge Program for Adaptation Innovation

- Aims to promote **innovation** in **adaptation** technologies and techniques by supporting sustainable **innovation** ecosystems for MSMEs;
- First call for proposals for **\$10 million** in GEF support, resourced equally from the LDCF and SCCF;
- **388** concepts submitted, **9 selected**; all have received first stage approval;
- Strong potential to effectively address unmet needs for climate change adaptation innovation and attract unconventional partners;
- One project approved with CTCN as an executing agency – “Piloting innovative financing for climate adaptation technologies in medium-sized cities”



Thank you!

Please email with any questions at
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