GEF EE financing and GEF-7 Programming Directions

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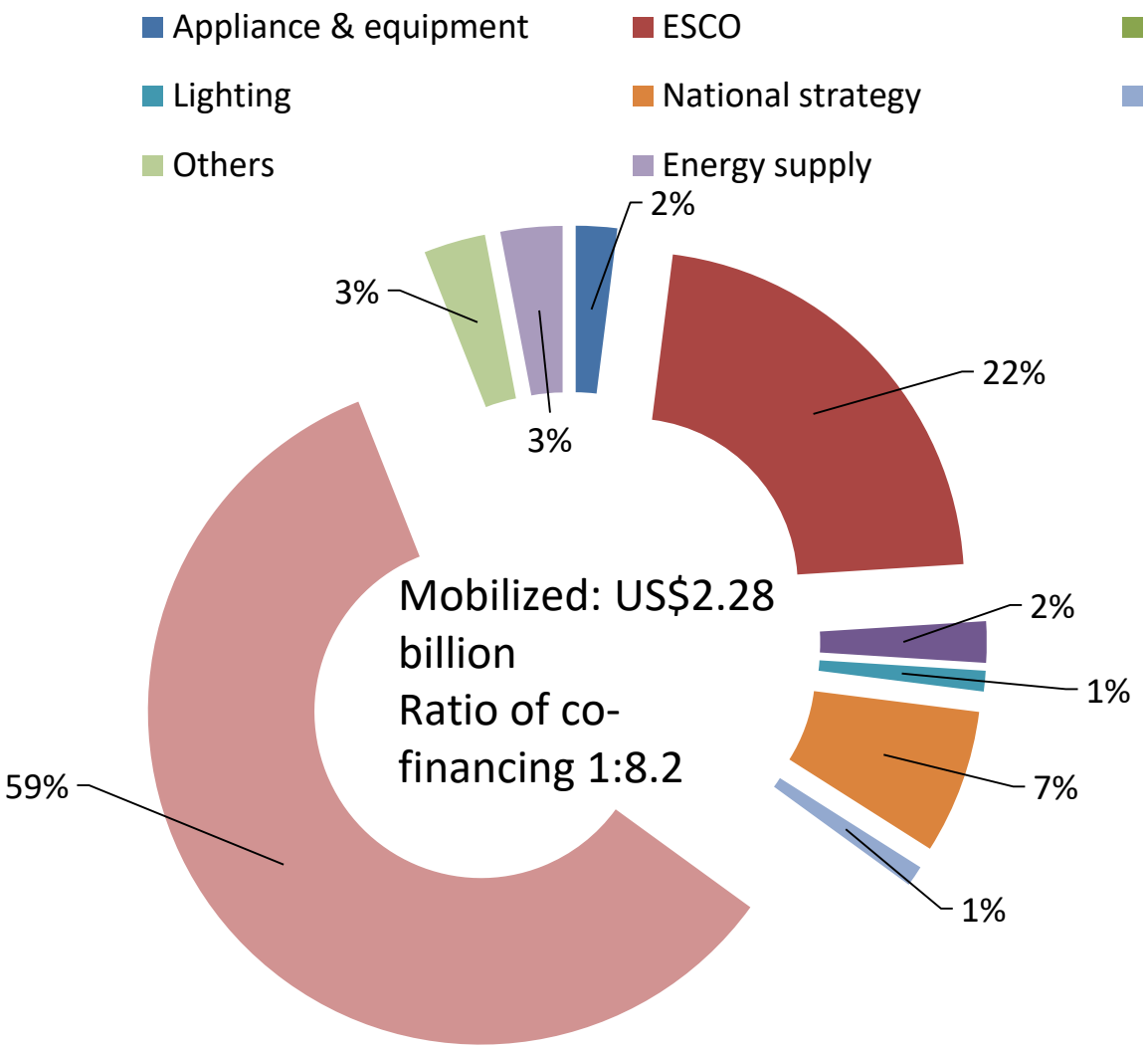
GEF's Portfolio of Clean Energy Finance

Source: GEF PMIS (April 2018)

	Number of Projects	GEF CCM investment ($ million)	Co-finance ($ million)	CO2 Reduction (million tonnes)
Pilot Phase (1991-1994)	36	232	2347	88
GEF - 1 (1994-1998)	136	366	1369	439
GEF - 2 (1998-2002)	200	620	4181	578
GEF - 3 (2002-2006)	149	790	4326	1447
GEF - 4 (2006-2010)	211	841	8339	1945
GEF - 5 (2010-2014)	313	1153	14444	9520
GEF - 6 (2014-2018)	317	775	14829	1473
Grand Total	**1,362**	**4,776**	**49,835**	**15,491**

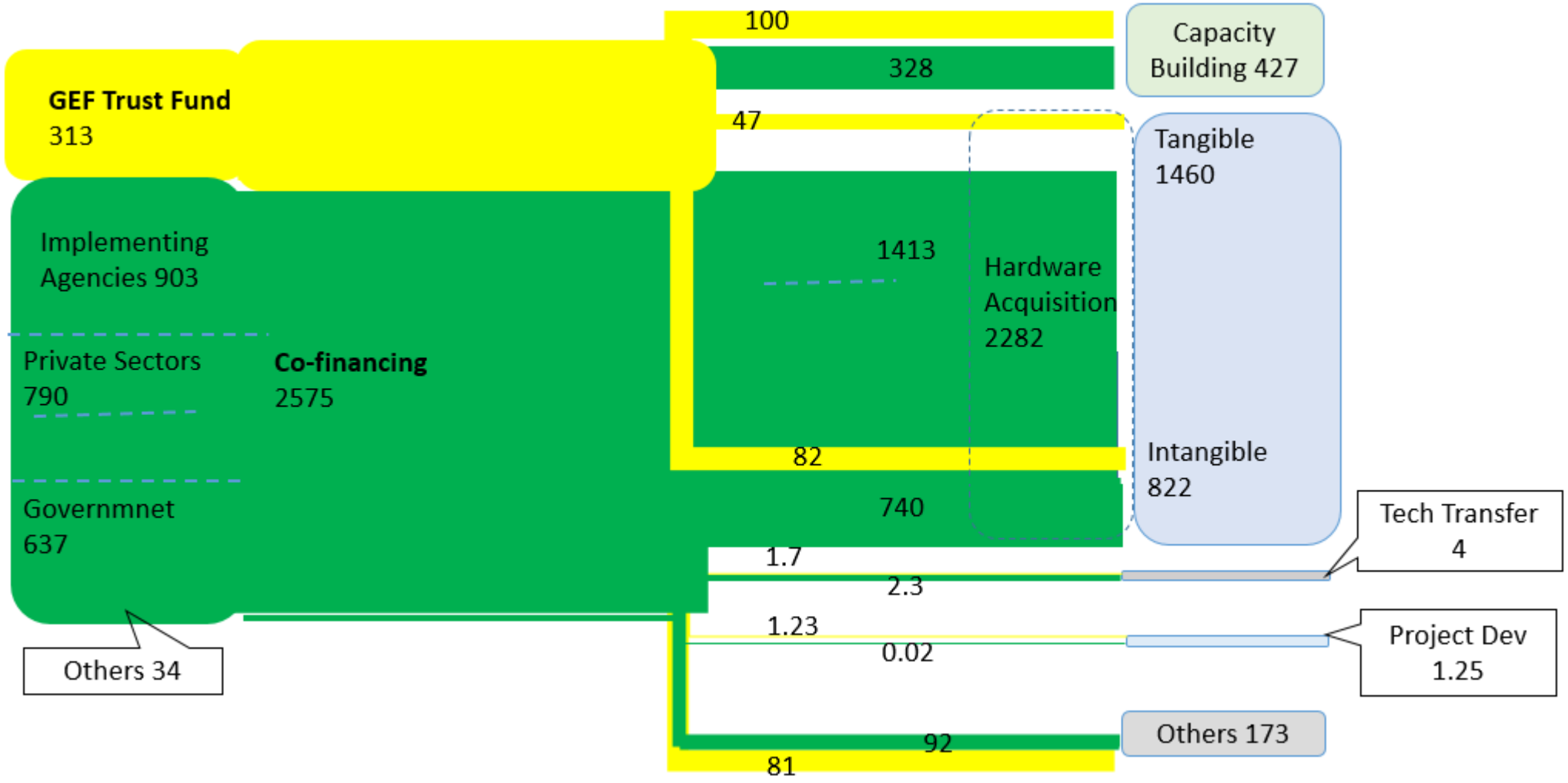
Key message: The largest sub-area is energy efficiency. It contributed to total CO2 mitigation with largest share.

Impacts of GEF $129 million investment in 49 completed energy efficiency projects



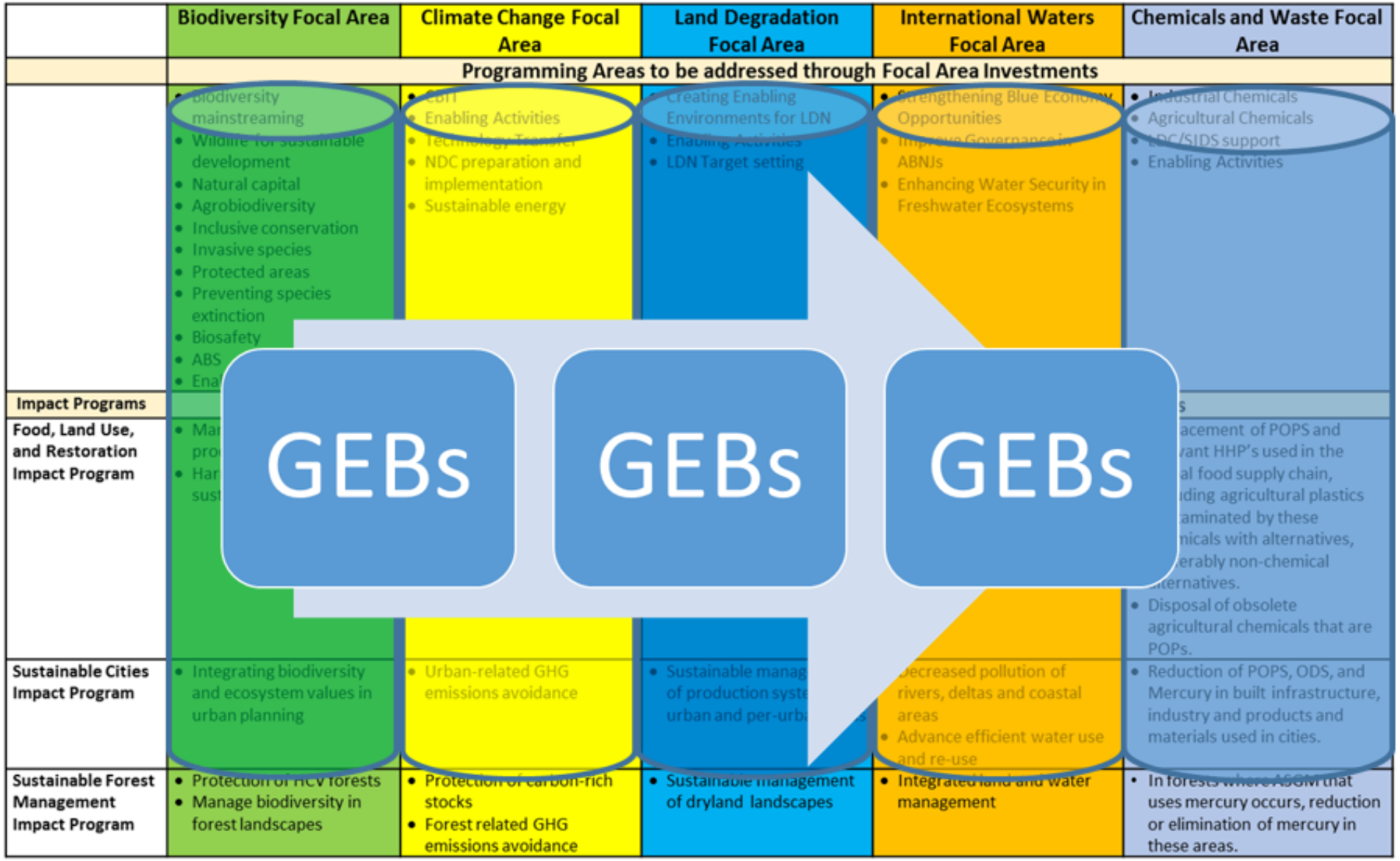
- Will directly mitigate 244 million tonnes of CO2, at $0.53/tonne
- Trained 1.3 million professionals
- Transferred 49 clean energy production technologies
- Created 17 policies and standards and codes, 21 innovative financial instruments, and 29 market-based mechanisms

GEF and co-financing funds flow by source and project activities in closed 47 EE projects (unit: US$ million)



Key messages: GEF Co-financing funds were mostly used to cover hardware investments in EE projects

GEF7 Programming Framework



Climate Change Mitigation Focal Area

I. Promote innovation, technology transfer for sustainable energy breakthroughs

- de-centralized renewables with storage (for Energy Access);
- electric mobility;
- accelerating energy efficiency; and
- cleantech innovation

II. Demonstrate mitigation options with systemic impacts (through impact programs)

III. Foster enabling conditions for mainstreaming mitigation concerns into sustainable development strategies, including CBIT, NDCs, Enabling Activities

Impact Programs

I. Address drivers and promote systemic change

II. Deliver impact and results across Focal Areas

III. Open access but proactive engagement with key countries

Food Systems, Land Use and Restoration

Achieving Transformational Shift – "Sustainability"

- **Efficient and effective** food value chains for multiple benefits
- **Removing deforestation** from supply chains
- **Expand restoration** of degraded lands

GEF-7 Sustainable Cities Impact Program (IP)

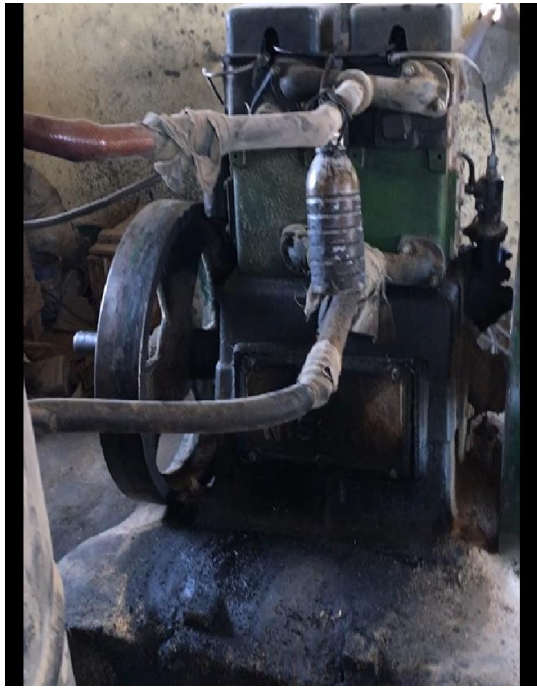
- Integrated approach to invest in cities to generate global environmental benefits.
- Multi-scale partnerships– *Global Platform, National level frameworks, Cities / Municipalities* for scaled up results
- Cross-sector engagement to ensure results at all levels and for all stakeholders
- Energy efficiency is one of the core pillars to support sustainable cities

GEF Sustainable Cities IP

- GEF aims to deliver transformational change through Impact Programs in key global systems for achieving Global Environmental Benefits.
- Sustainable Cities is one of the key global systems which are major drivers of environmental degradation.
- GEF's Sustainable Cities Impact program (SC IP) will directly contribute to GEF's climate change mitigation goals as cities consumes 75% of energy demand and contributes to 70% of global GHG emissions.
- The SC IP aims to take an integrated approach to support decarbonization of cities.
- SC IP will support evidence-based spatial planning and innovative sustainability solutions for key urban systems with focus on energy and resource efficiency across key urban infrastructure such as buildings, transport, housing and others.
- The program also aims to scale up climate change mitigation goals by emphasizing on strengthening urban governance and engaging with wider set of stakeholders such as the private sector and multilateral banks.

E.g. Integrating EE, RE, Energy Access, & Food System

Background	The Project	Results	Remaining Challenges
A rural village in Nigeria: 1. 200 residents 2. No power access 3. Two diesel engines for food processing 4. Using charcoal in bakery house	Installed 45 kW off-grid solar PV; Electrified 200 residents; Replaced diesel engines with e-motors; Powered shops Enabled water pumps Mitigated CO2	Integrated RE, RE and Food production and processing A pilot in Nigeria for a program to cover 10,000 villages in energy access	Tariffs: $0.4/kWh Government charges GST ESCOs pay import duties for spare parts



Key message: Policy is needed to remove barriers to private investments

Policy Recommendations for EE Financing in Developing Countries

- Capacity building and institutional development for EE (ESCOs, Commercial banks, etc.)
- Development of long term national EE plans, mandatory targets, and strategies
- Stopping subsidies for fossil fuel production, transportation and consumption
- Engaging private investment though blended financing, tax incentives, de-risk, etc.
- Mandatory EE codes for building systems
- Enforcing minimum energy performance standards for appliances and lighting
- Progressive minimum fuel efficiency standards for transportation systems
- Dynamic minimum energy performance standards for per unit industrial output
- Developing MRV systems and market for energy savings trading

- Integrating EE in
  - Energy Access (SDGs) and Paris Agreement (NDCs)
  - Food, land use and land restoration for national economic and social development
  - Supply chains of energy, water, food, and other commodities in urban planning
  - E-mobilities and urban transportation systems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