

GEF INVESTMENT IN LCDs: EXPERIENCE IN AFRICA AND LOOKING FORWARD

Dr. Ming Yang

Senior Climate Change Specialist, Global Environment Facility

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GEF 6 STAR Allocation to LDCs in Africa (\$mn)

	Biodiversity	Climate Change	Land Degradation	Total
Angola	6.60	4.04	3.04	13.69
Benin	2.00	3.00	5.08	10.08
Burkina Faso	2.00	3.15	6.19	11.33
Burundi	2.00	3.00	1.28	6.28
Central African Republic	2.28	3.00	2.27	7.55
Chad	2.38	3.00	3.21	8.59
Comoros	2.62	3.00	1.00	6.62
Congo DR	16.38	9.58	1.00	26.96
Djibouti	2.00	3.00	2.83	7.83
Equatorial Guinea	2.00	3.00	1.00	6.00
Eritrea	2.00	3.00	3.60	8.60
Ethiopia	10.56	7.41	5.27	23.23
Gambia	2.00	3.00	5.18	10.18
Guinea	3.10	3.00	1.85	7.95
Guinea-Bissau	2.00	3.00	1.00	6.00
Lesotho	2.00	3.00	1.00	6.00
Liberia	3.43	3.00	1.00	7.43

	Biodiversity	Climate Change	Land Degradation	Total
Madagascar	24.54	3.03	2.57	30.14
Malawi	5.32	3.00	1.44	9.76
Mali	2.10	3.00	4.06	9.16
Mauritania	2.00	3.00	2.55	7.55
Mozambique	9.13	3.43	3.59	16.16
Niger	2.00	3.00	4.60	9.60
Rwanda	2.00	3.00	1.24	6.24
Sao Tome and Principe	3.78	3.00	3.55	10.33
Senegal	2.09	3.00	5.42	10.51
Sierra Leone	2.11	3.00	1.00	6.11
South Sudan	2.00	3.00	1.00	6.00
Sudan	4.17	5.73	2.93	12.83
Tanzania	15.90	7.13	6.06	29.09
Togo	2.00	3.00	2.21	7.21
Uganda	4.01	3.77	2.22	10.00
Zambia	4.72	3.64	3.15	11.50

Key messages: From 2014-2018, the GEF has pledged a total of \$366.54 million in African LDCs including \$153.23 million in BD; \$119.89 million in CC; and \$93.42 million in LD.

GEF 6 STAR Resources Used by LDCs in Africa as of 12/1/2016 (\$mn)

	Biodiversity	Climate Change	Land Degradation	Total
Angola	0.0	0.0	0.0	0.0
Benin	0.0	2.2	0.0	2.2
Burkina Faso	0.0	0.0	4.0	4.0
Burundi	1.0	4.0	1.3	6.3
Central African Republic	2.2	3.0	2.3	7.4
Chad	2.0	3.2	3.0	8.2
Comoros	0.0	6.6	0.0	6.6
Congo DR	1.1	0.9	1.0	2.9
Djibouti	3.2	0.0	0.0	3.2
Equatorial Guinea	0.0	0.0	0.0	0.0
Eritrea	1.7	2.7	3.2	7.6
Ethiopia	10.1	7.4	5.2	22.6
Gambia	0.0	0.0	0.0	0.0
Guinea	0.0	0.0	0.0	0.0
Guinea-Bissau	0.0	1.9	0.8	2.7
Lesotho	0.0	0.2	0.0	0.2
Liberia	0.0	3.0	0.0	3.0

	BD	CC	LD	Total
Madagascar	15.0	1.0	1.1	17.1
Malawi	3.6	3.0	1.5	8.1
Mali	2.0	0.4	1.0	3.4
Mauritania	2.0	3.0	2.6	7.6
Mozambique	8.3	3.4	3.4	15.1
Niger	0.5	0.8	3.4	4.6
Rwanda	0.0	0.2	0.0	0.2
Sao Tome and Principe	0.0	3.2	0.5	3.7
Senegal	1.0	3.1	3.9	8.0
Sierra Leone	0.0	0.0	0.0	0.0
South Sudan	0.0	0.0	0.0	0.0
Sudan	0.0	1.9	0.0	1.9
Tanzania	11.5	5.0	4.6	21.1
Togo	0.0	3.0	0.0	3.0
Uganda	0.6	3.8	2.1	6.5
Zambia	4.1	3.2	4.2	11.5
Grand Total	69.8	70.2	48.8	188.8

Key messages: GEF 6 has past two and a half years; many LDCs still have not yet used any GEF funds. Why?

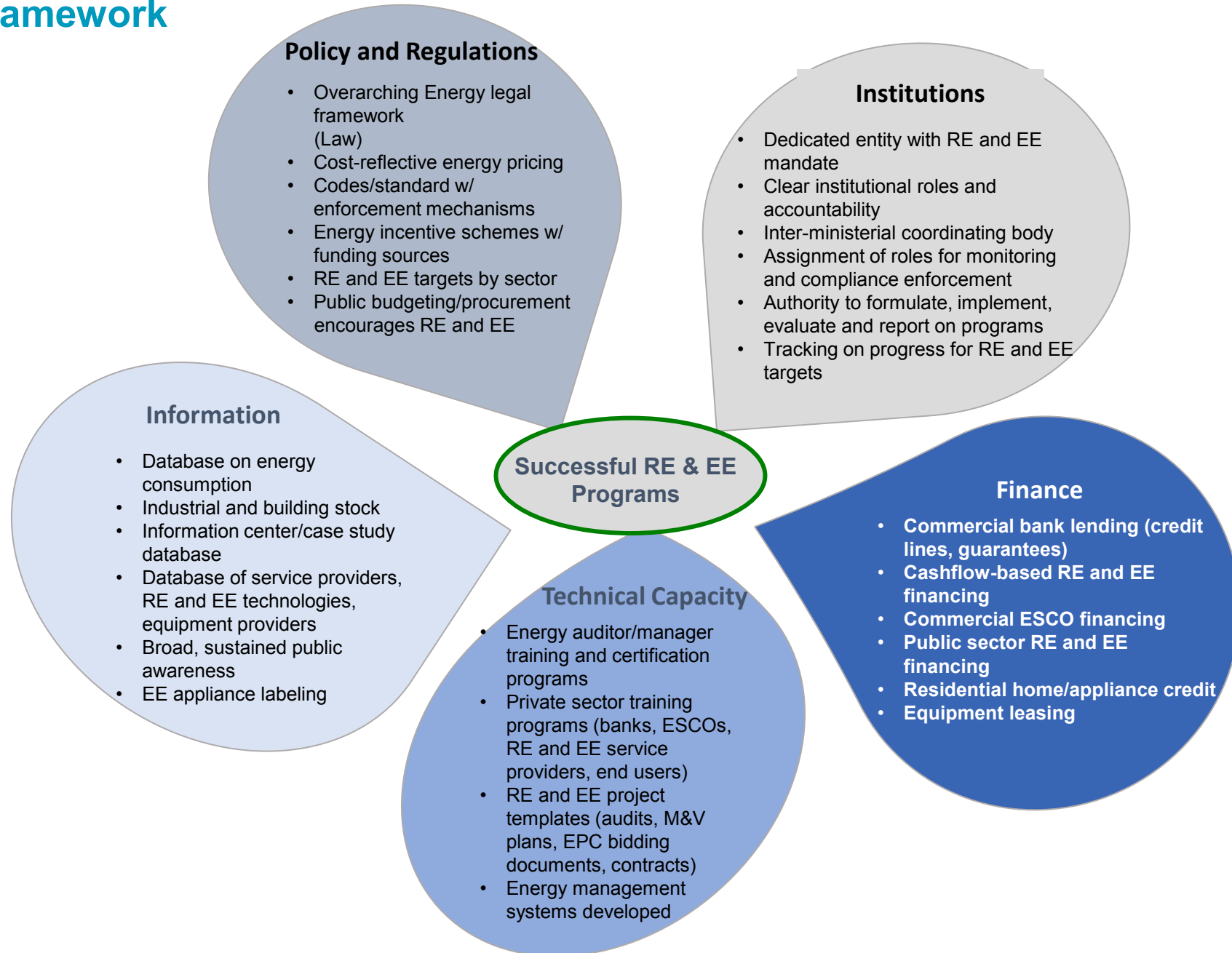
Case 1: GEF/World Bank: Tanzania Energy Development and Access Project (TEDAP), former Energizing Rural Transformation (ERT)

GEFID / WBID	2903 / P092154
GEF Project Grant	\$6.5 million
Co-financing	\$87.8 million
Objective	To abate greenhouse gas emissions through use of renewable energy in rural areas for provision of electricity
Major components:	<ol style="list-style-type: none"> 1. Small Power Generation and Distribution (SPGD); 2. Sustainable Solar Market Development (SSMD); 3. Technical Assistance
Major outputs	<ol style="list-style-type: none"> 1. 12 MW of grid-connected renewable projects installed 4 MW of isolated grids installed 5,000 household electricity connections; 2. 1 MW of solar PV installed capacity 1,200 solar PV systems for public institutions, 600 solar PV systems for households and enterprises installed.
GHG reduction targets	1 million tonnes of CO2 equivalent
Implementation period	2008-2012

Case 2: GEF/World Bank: Rural Electrification and Renewable Energy Development

GEFID / WBID	2828 / P093080
GEF Project Grant	\$1 million
Co-financing	\$8.1 million
Objective	Pilot expansion and intensification of energy access in rural and peri-urban areas
Major components:	Co-financing of access expansion and intensification pilots; Implementation support for the National Renewable Energy Master Plan; Innovative Cross-sectoral Energy Applications
Major outputs	Electrify 8000 new customers; Rural electrification pilots designed and developed
GHG reduction targets	291,000 tonnes of CO2 equivalent
Implementation period	2005-2009

Major Challenges of LDCs in Using GEF Resources: Lack of Good Framework



Lessons of GEF in RE and EE Financing in LDCs

- **RE and EE financing is resource-intensive** and requires a long-term focus
- **Sector reforms** have been crucial to create enabling environment and proper incentives for RE and EE
- **RE and EE governance** is critical to ensure (1) strong policy/legal frameworks are in place and (2) implementation is effective (e.g., time-based targets with clear accountability)
- Development of efficient **delivery mechanisms** (e.g., credit lines, ESCOs, utility programs, labeling schemes) are more important than technologies
- **Financing** is available, but not always **accessible and affordable**
- Access to **credible data and information**, incentives, linking to other co-benefits (i.e., improved comfort) are also needed

Other Challenges of LDCs in Using GEF Resources

- *RE and EE investment needs a considerable amount of co-financing*
- *Difficult to identify experienced and well resourced executing agencies*
- *Some GEF implementing agencies do not have incentives to develop projects in LDCs due to small amounts of STAR allocations*
- *LDCs have underdeveloped energy service/ESCO markets, weak legal and regulatory frameworks, mixed track record*
- *RE and EE projects cut across all sectors, requiring cooperation with urban, water, transport, agriculture, health, education sectors*

Key messages: Anyone of the above challenges is difficult for LDCs to overcome

GEF/IFC/China CHUEE Project – Good Example

CHUEE – China Utility-Based Energy Efficiency Finance Program

- 2006, \$16.9 mn GEF grant, \$200 mn IFC loan for RE and EE marketing, development and financing services
- 2016, leveraged over \$800 mn local bank loans for 170 plus RE/EE projects
- Mitigates over 20 million tCO₂/Yr, = total annual emissions of Mongolia

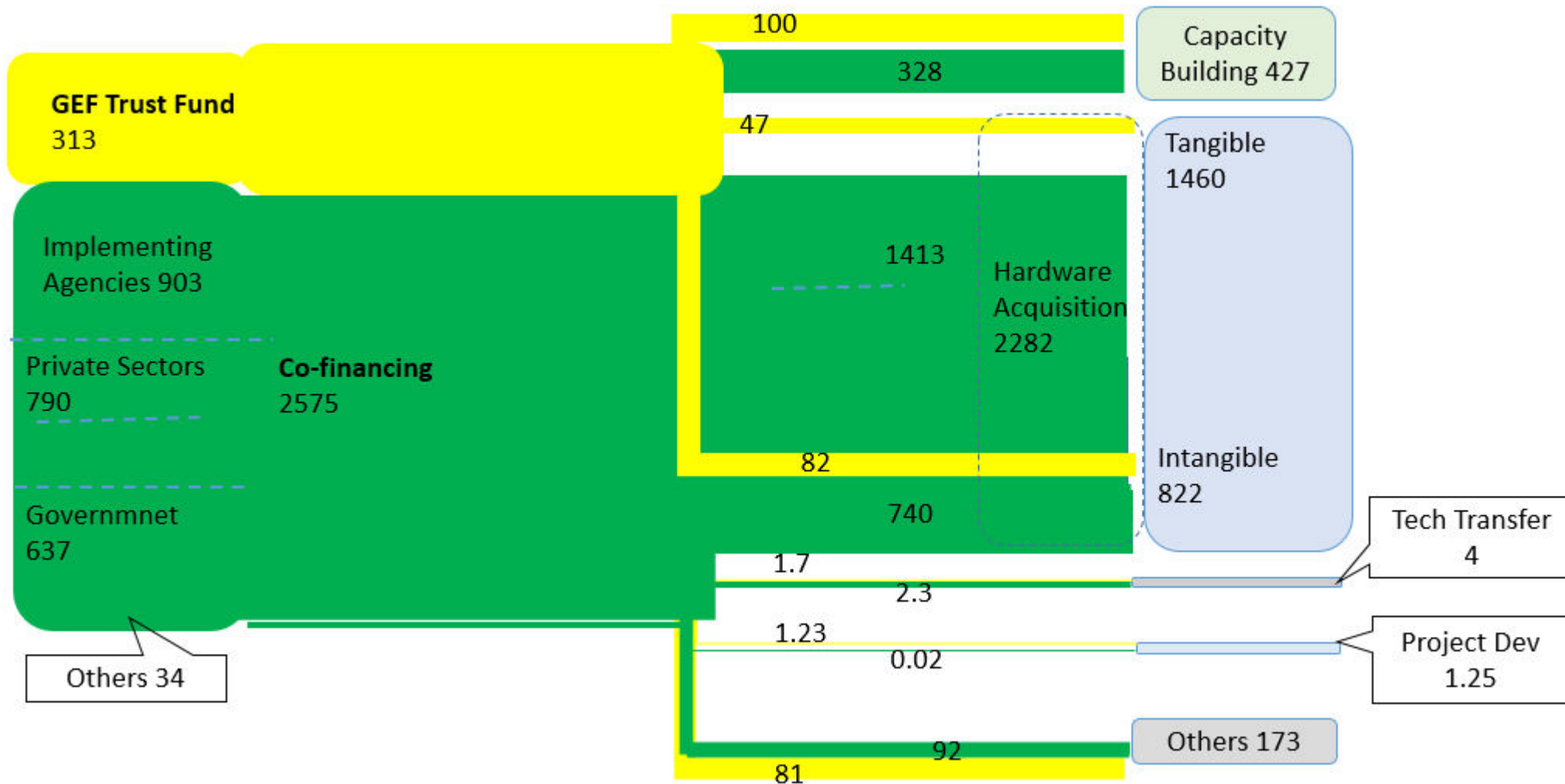


Experience of GEF/IFC/China CHUEE Project

- Integration of RE/EE in the National (or Central) government long term strategy
- The development of government institutions in charge of RE/EE investments
- The development of market based financial mechanism
- RE/EE technology transfer and development in country
- Development of market based Energy Service Companies (ESCOs)
- Capacity building
- EE and RE database development and information sharing

Key messages: These seven aspects, inter-affecting one other, form a system

GEF partnered other stakeholders in co-financing: - Funds flow in closed 47 EE projects (\$ million)



Prospects and Opportunities

- *RE&EE will remain a major programming area of climate change mitigation*
- *RE&EE can be **integrated** into other multi-focal area programs and projects*
- ***New opportunities include results-based financing, advisory services, and Sustainable Cities***
- ***Strong and sustained Technical Assistance** to develop implementation capacity, sustainable delivery mechanisms such as Capacity-Building Initiative for Transparency (CBIT)*
- ***Sustainable energy-food-water nexus** can be one of the most important areas*
- ***Prefer to partner with both international and domestic financial institutions** to develop large RE&EE regional programs or projects each of which can leverage **hundreds of million dollars or billions of dollars of co-financing** in LDCs in the Africa region*

Thank you!

myang@thegef.org

Website: www.TheGEF.org