



# Financial Gradients

Understanding Climate Finance, CDM Trends and Opportunities for Africa; Introducing Financial Gradients – case study and Resilience Centres

*Durban, South Africa, COP 17, 1<sup>st</sup> December 2011*



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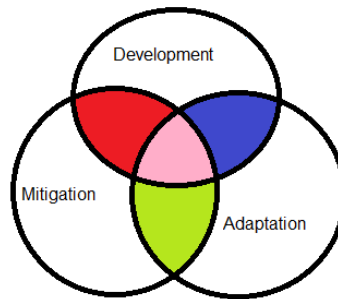
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## Definitions



Finance, Environmental Finance, Carbon Finance, Climate Finance.



## Evolution



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- UNFCCC
- Nairobi Framework
- AWG-LCA proposal
- AGF report
- Recent Financial trends in Climate Action



## UNFCCC Article 4.7

*“The extent to which developing country parties will effectively implement their commitments under the Convention will depend upon the effective implementation by developed country Parties of their commitments under the Convention related to financial resources and transfer of technology and will take into account that economic and social development and poverty eradication are the first and overriding priorities of the developing country Parties.”*



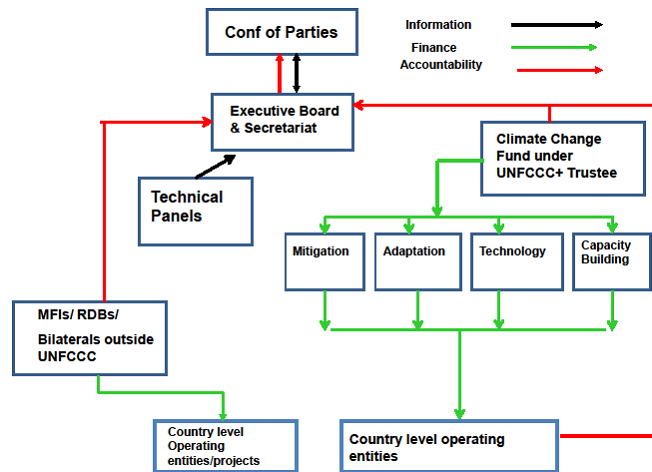
## Nairobi Framework

The Nairobi Framework (2006) - five objectives

- (i) build & enhance capacity of DNAs to become fully operational,
- (ii) build capacity in developing CDM project activities,
- (iii) promote investment opportunities for projects,
- (iv) improve information sharing, outreach, exchange of views on activities, education & training, and
- (v) inter-agency coordination, which are considered to be priority goals to move the CDM forward in the target countries.



## AWG-LCA proposal on financial architecture



## AGF report

- Sources of finance
- World economic conditions
- Project structure and accountability
- Private sector involvement

## AGF report: Financial sources

Sources	Instruments	Estimated Revenue 2020, Lower side (USD Bn)	Revenue estimates 2020(USD Billion) at various carbon prices		
			Low	Medium	High
			(USD 10-15)	(USD 20-25)	(USD 50)
Public Sources	Public carbon Markets	0 - 1	0 - 1	1 - 5	3 - 15
	International Transport	10	1 - 2	2 - 3	3 - 6
			2 - 6	4 - 9	8 - 19
	Carbon-related revenues	3 - 8	2 - 8	8 - 38	14 - 70
	Financial Transaction taxes	2 - 27			
	Direct Budget Contributions	n/a			
Development Bank	Multilateral development bank contributions	30 - 40			
Carbon Markets	Carbon-market offsets	20	8 - 12	38 - 50(gross); 8 - 14 (net);	150
Private Capital	Public/private leverage	10			
<b>Total</b>		<b>100</b>			

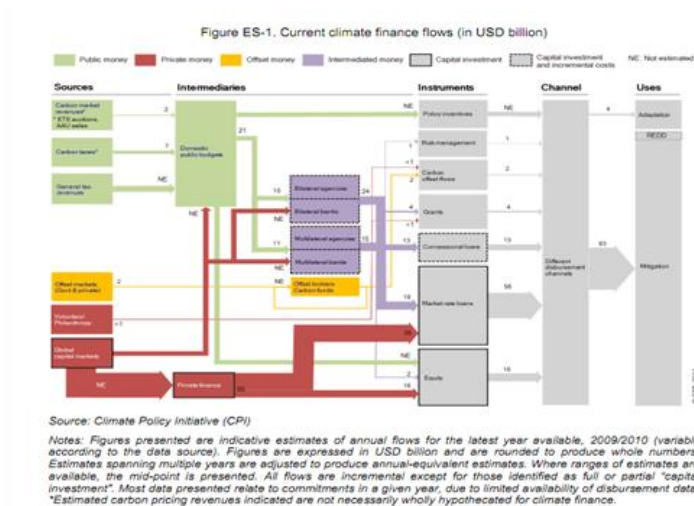


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## Recent Climate Finance Trends



## Recent Climate Finance Trends Cont..

- A study by CPI (Buchner, et al 2011) tracked climate finance flows in the 2009-10 time period which amounted to USD 97 bn in areas ranging from climate resilient development to low carbon initiatives.
- The study found that possibly contrary to expectations the amount of finance available from private sources were three times more than public sources.
- Also, that 'carbon finance' (mostly to do with mitigation efforts with interplay of market mechanisms) played a miniscule role in the overall climate finance space.
- The study further revealed that USD 74 – 87 bn of the USD 97 bn could be classified as investment category rather than the incremental cost contribution in the climate action domain.
- One last point we note from the study is that a huge majority of climate finance USD 93 bn of the USD 97 bn was for mitigation centric activities leaving very little for adaptation action.



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## Promising Opportunity for Africa

### CDM trends in Africa

Given the trends in Climate finance, the CDM trends show in Africa show a promising opportunity for attracting investment grade finance for climate action or sustainable development projects.



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## CDM Trends for Africa

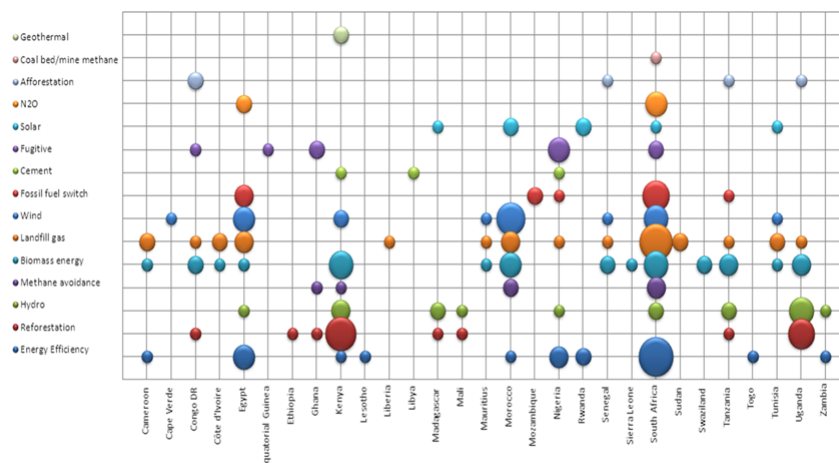
Country	Registered							Registered Total
	2005	2006	2007	2008	2009	2010	2011	
Egypt		2	1	1		3	2	9
Liberia						1		1
Morocco	2	1	1		1			5
Tunisia		2						2
Cameroon						1	1	2
Congo DR							2	2
Côte d'Ivoire					1	1	1	3
Ethiopia					1			1
Kenya				1		2	2	5
Madagascar						1		1
Mali						1		1
Nigeria		1			2	2		5
Rwanda						1	2	3
Senegal						1		1
South Africa	1	4	7	2	3	2		19
Tanzania			1					1
Uganda			1		1		2	4
Zambia						1		1
<b>Grand Total</b>	<b>3</b>	<b>10</b>	<b>11</b>	<b>4</b>	<b>9</b>	<b>17</b>	<b>12</b>	<b>66</b>

# highlighted countries come in the least developed countries category

## CDM Trends for Africa cont..

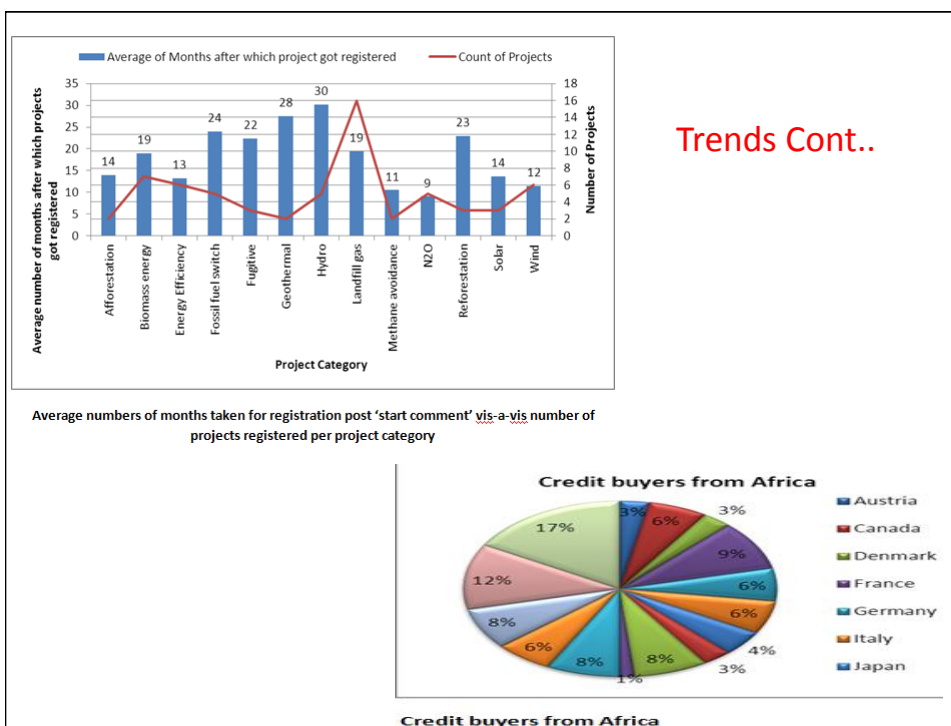
Project Categories	Africa	Asia & Pacific	Europe & Central Asia	Latin America	Middle-East	Grand Total	percentage share in project category
Aforestation	5	4	1	3		13	38%
Reforestation	20	20	2	17		59	34%
Fugitive	10	27	13	9	7	66	15%
Geothermal	2	14		5		21	10%
N2O	6	50	6	11	5	78	8%
Landfill gas	30	200	9	147	18	404	7%
Fossil fuel switch	13	124	5	27	19	188	7%
Solar	7	116		8	8	139	5%
Cement	3	66	1	9	1	80	4%
Biomass energy	32	782	3	231	3	1051	3%
Energy Efficiency	25	1016	8	70	13	1132	2%
Hydro	18	1741	22	285	1	2067	1%
Wind	22	1627	11	94	2	1756	1%
Methane avoidance	7	534	7	295	9	852	1%

## CDM Trends in Africa cont..



Sectoral and country wide distribution of CDM projects in Africa.





## Addressing the challenge of 'scaling up'

- CDM Trends point to investment opportunities and the need for scaling up
- Domestic Policy drivers as enablers
- Global Institutional structures to provide preferential arrangements based on vulnerability factors
- Scaling up will require innovative financial and business models for attracting investments

## Financial Gradients

- A financial concept which looks at the nature and sources of finance.
- Financing as opposed to funding.
- Financial Gradients for Sustainable Development.
- **Financial Gradients**
  1. An approach to analyzed the performance of a project or program.
  2. A tool to transform volatile sources of finance into stable and long term flows.
  3. A mechanism to create strategies for programs and projects in Sustainable Development including Climate Action.



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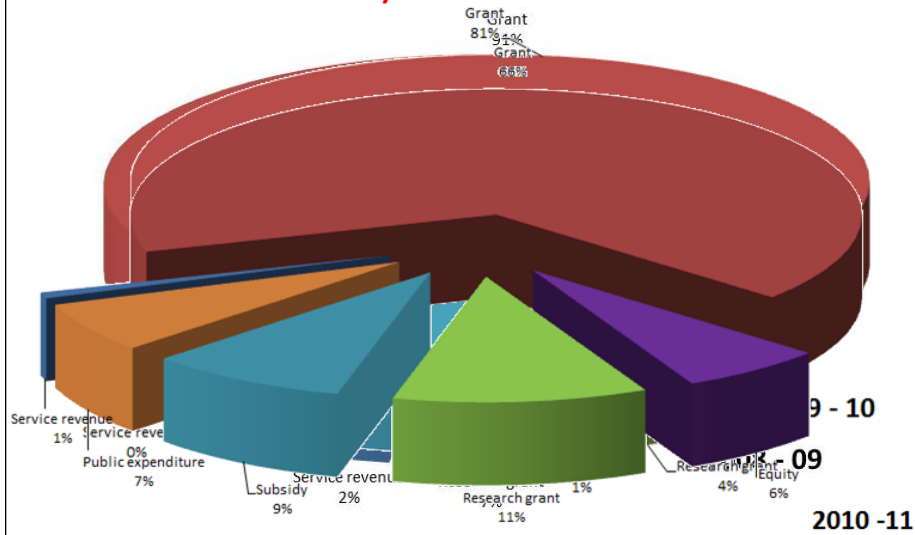
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## Financial Gradients approach: TERI case study of 'Light a Billion Lives' program.

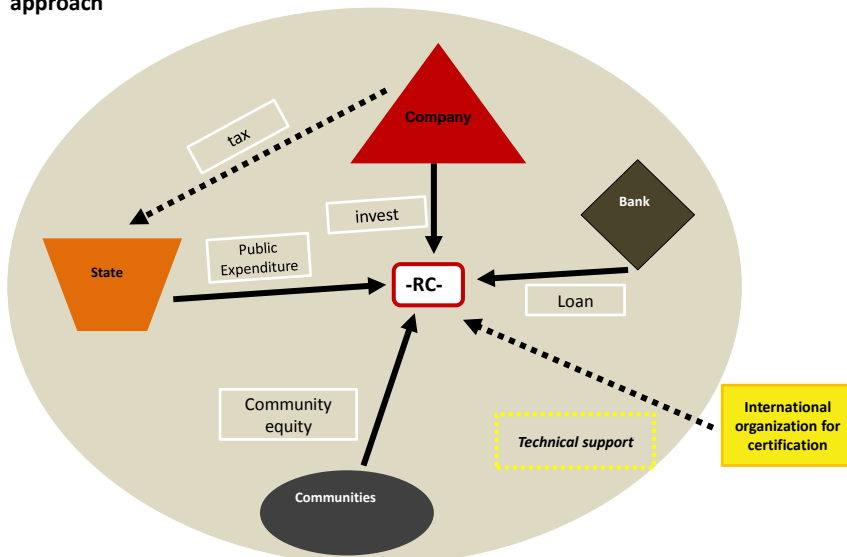
Category	Definition	Accountability <sup>1</sup>
Pure grant	Funds given as a part of philanthropic activity (tax exemption or benefits can also be claimed)	Negligible
Research grant	Funds given with a research objective and a tangible outcome is expected (a report, a product etc..)	Low
Public expenditure / Subsidy	Govt. funds with fiscal objectives.	Medium
Loans	Funds provided by a bank with a <u>ToR</u> similar to retail lending	High
Equity	User/ community/ entrepreneur contribution towards the project hardware cost	Highest
Service revenue	Payment for services provided by TERI	Not applicable

<sup>1</sup> This can be inferred as a financial flow gradient, a terminology we have formed using concepts in Information Economics

## LaBL: Inflow analysis – Financial Gradients



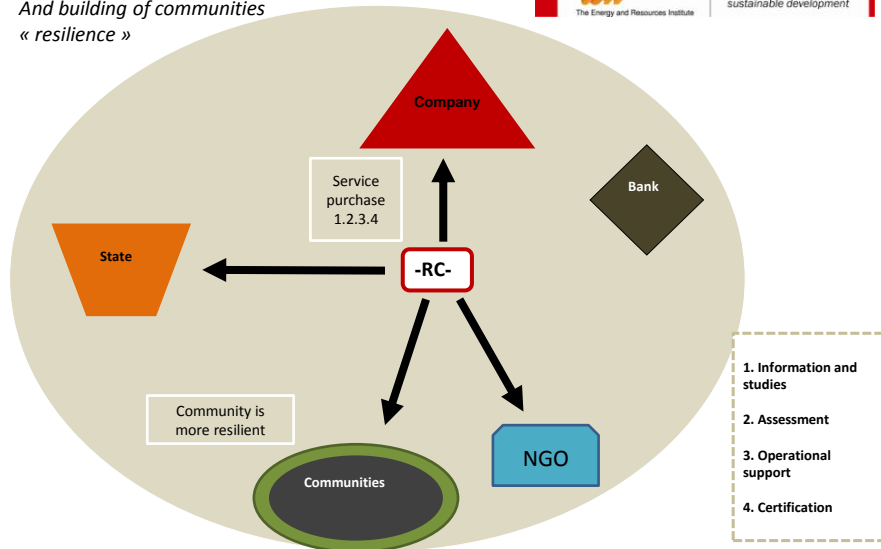
## Resilience Centres: Formation using Financial Gradients approach



*Services : assessment, study,  
information, operational support  
And building of communities  
« resilience »*



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# Thank You

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