United Nations Framework Convention on Climate Change

Climate finance in the region

Latin American and Caribbean Regional Workshop on Climate Finance

8 September 2015, Santiago de Chile



Karla Solis, Regional Collaboration Centre Bogota UNFCCC Secretariat

1) Landscape of climate finance -mitigation

2) CDM's contribution to climate finance

3) Opportunities for CDM projects

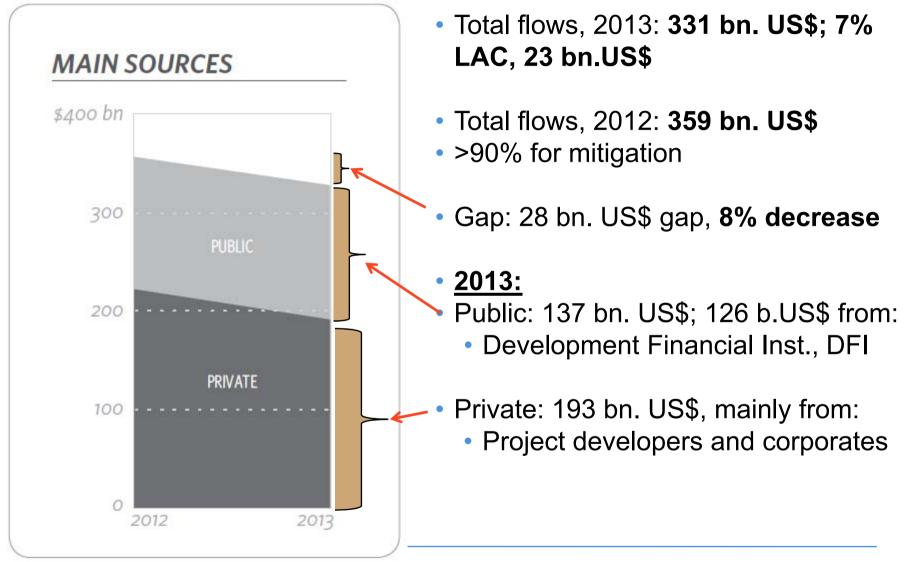
4) Final remarks



1. Landscape of climate finance



Climate finance – 2013 vs 2012





4

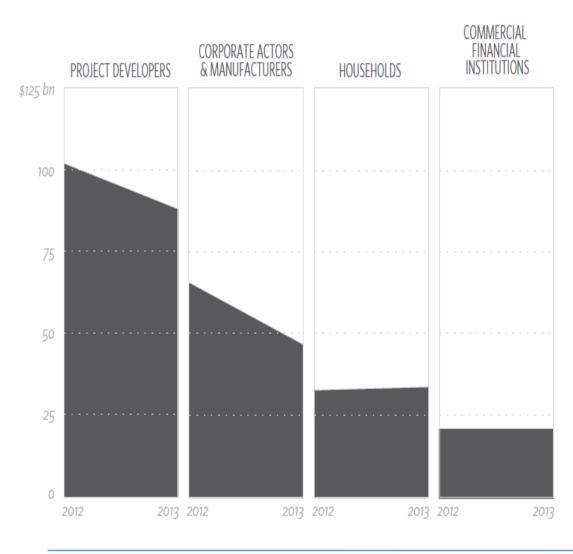
Public sources, 137 bn. US\$, 2013

- Who are they?
 - Government ministries
 - Bilateral aid agencies
 - Export credit agencies
 - Multilateral, bilateral and national development institutions, (DFIs)
- What financial instruments they used?
 - Low-cost and commercial rate loans
 - Viability gap funding
 - Equity investments
 - Policy development and technical support



Source: The Global Landscape of Climate Finance 2014, Climate Policy Initiative.

Private sources, 193 bn. US\$, 2013



- Project developers play a key role: ~100 and 90bn US\$, 2012/2013.
- Renewable energy is key sector for investment: 80% in 2013.
- Investment decrease is justified due to the lower technology prices
- Others: Institutional investors, private equity, venture capital and infrastructure funds initiated investment in 2013, ~1 bn.US\$



Source: The Global Landscape of Climate Finance 2014, Climate Policy Initiative.

http://climatepolicyinitiative.org/wp-content/uploads/2014/11/The-Global-Landscape-of-Climate-Finance-2014.pdf

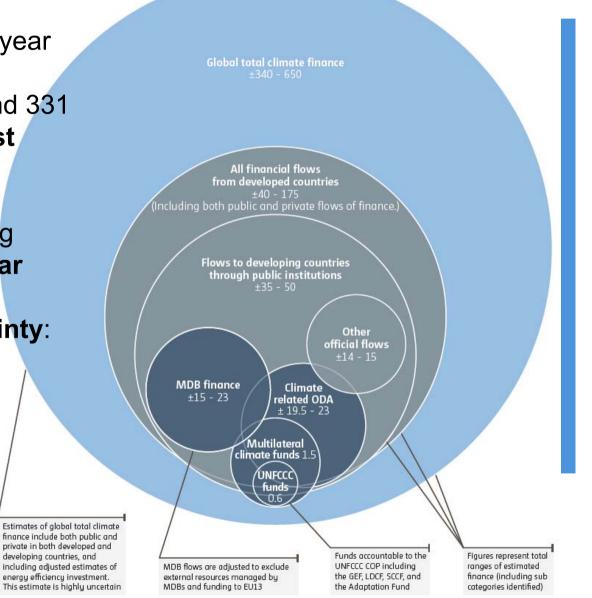
Climate finance, 2010-2011, UNFCCC

- Total flows: 340-650 bn.US\$/year
- 2012/2013 total flows, 359 and 331 bn.US\$, are similar to lowest range, 340 bn. US\$
- From developed to developing countries: 40-175 bn.US\$/year
- Three levels of **data uncertainty**: high, medium and low

Source: Biennial assessment and overview

https://unfccc.int/files/cooperation and sup

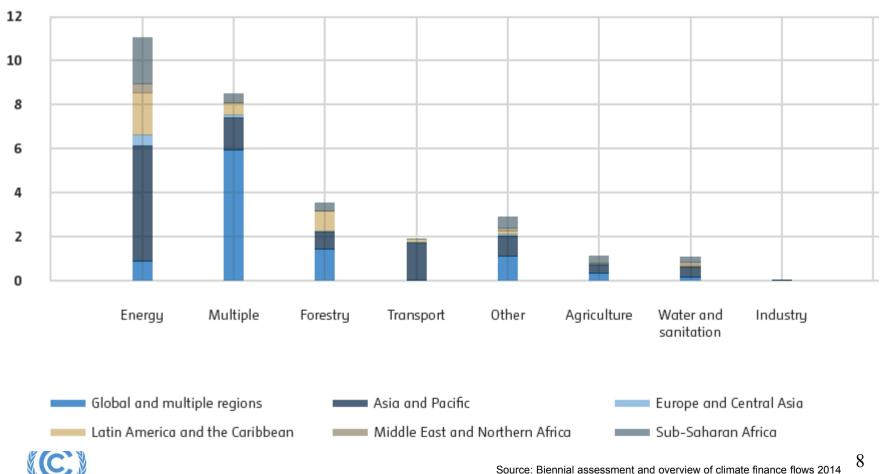
of climate finance flows report web.pdf





Fast Start Finance (FSF) by regions/sectors

- FSF, commitment from developed to developing countries, 30 bUS\$
- LAC region received 12%, 3.8 bn. US\$



* Billion US\$, 2010-2012

Climate finance 2011-2012, origin & destination

Sources of Capital	Capital Managers	Financial Instruments	Project Owners (location)	Projects
Governments	Bilateral Finance Institutions	Grants	Developed	Adaptation
USD 14	USD 22	USD 11	USD 177	USD 22
Corporations USD 168	MDBs USD 38	Low cost debt USD 69	Developing USD 182	Renewables USD 265
Households USD 33	National financial institutions** USD 74	Market rate debt USD 70		Energy efficiency USD 32
Capital markets USD 22	Commercial USD 22	Project equity USD 11		Transport USD 19
Public finance institutions / Capital	Climate Funds USD 2	Balance sheet finance USD 198		Mitigation in agriculture and forestry USD 3
markets USD 121	No capital manager USD 201			Other mitigation USD 18
Total = USD 359	Total = USD 359	Total = USD 359	Total = USD 359	Total = USD 359

* Billion US\$, 2011-2012

- Key source of capital: corporations, public finance and capital markets
- Financial instrument most used: balance sheet finance



Source: Biennial assessment and overview of climate finance flows 2014

https://unfccc.int/files/cooperation and support/financial mechanism/standing committee/application/pdf/2014 biennial assessment and overview of climate finance flows report web.pdf

9

Climate finance by MDB, 2012 – US\$ million

MDB	Adaptation	Mitigation	Total
AfDB	445	1,463	1,908
ADB	821	2,001	2,822
EBRD	188	2,812	3,000
EIB	179	3,484	3,663
WB	3,813	6,168	9,981
IFC		1,552	1,552
IDB	139	1,619	1,758
CAF	603	612	1,215
Total	6,188	19,711	25,899



2. CDM's contribution to climate finance 2004-2013



Renewable energy investment, 2004-2013

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
GTREI	39.5	64.5	99.6	145.9	171.2	168.4	226.7	279.4	249.5	214.4
GTREI- Developed	32.0	49.0	74.0	103.0	113.0	106.0	153.0	187.0	142.0	122.0
GTREI- Developing	8.0	16.0	25.0	43.0	58.0	63.0	74.0	92.0	107.0	93.0
CDM	0.0	0.9	9.3	14.1	15.8	31.1	51.8	80.5	197.5	17.9

* GTREI, Global trend in renewable energy investment

- Renewable energy, RE, investment grew from 39.5 to 214.4 bn.US\$, 2004 to 2013
- RE investment in developed and developing countries increased ~4 and 12 times, respectively.
- In 10 years CDM contributed to 418 bn.US\$; at least 100bn US\$ LAC.
 In 2012 CDM contributed nearly 80% of the total investment for RE



CDM RE projects in LAC

- >1000 CDM registered; 433 RE (hydro, wind and solar)
- Wind: Uruguay, 14; Chile, 20; Argentina, 10; Brazil, 57; Mexico, 29;

 \wedge

 \frown

Country/ Type	Afforestation	Biomass Energy	Cement	CO2 Usage	coal Bed/ mine methane	EE households	EE industry	EE own generation	EE service	EE supply side	Energy distribution	Fossil Fuel Switch	Fugitive	Geothermal	HFCs	Hybrid	Hvdro	tandfill pac	Methane	avoidance	N20	PCFs and SF6	Reforestation	Solar	Transport	Wind	Total general
Argentina		5		1			2	_	2	2					1				1	6		1	1	2		10	45
Bolivia (Plurinational State of)										1								1	1								4
Brazil		48		1				:	3		1	6	3				8	8 5	2	67	5	2		1		57	337
Chile	2	12							1	1		1		1			3	4 1	6	7	3			12		20	110
Colombia	1	3		1					Τ			1	1				1	7 1	9	5	2		6		6	1	63
Costa Rica		2																5	2				1			6	16
Cuba										1									1								2
Dominican Republic		3	1															1	1					2		6	14
Ecuador		3				1											1	5	2	7				1		2	31
El Salvador		2				1								2				2	1								8
Guatemala						1								1			1	2	1	5					1	1	22
Honduras		5								1				1			1	5		7						1	30
México		10			1	3	4		2				1	1	1		1	8 2	8 1	102	2				5	29	198
Nicaragua		1					1							1				3		2			1			4	13
Panamá		2															1	7	1						1	З	14
Paraguay																							1				1
Perú		2								3		3					4	1	4	2			1	5		В	64
Uruguay	1	9																	1	1						14	26
Multi-country						2				1							<u> </u>	2		1						1	7
Total Geneal	4	107	1	3	1	8	7	8	1	9	1	11	5	7	2	1	25	2 14	1 21	2	12	3	15	28	13	158	1005
																										/	

3. Opportunities for CDM projects



Sources of demand for CERs

At national/regional level:

	2020 ⊥	
Purchase of units for compliance under national mitigation programmes (ETSs, carbon taxes, national RBF schemes)		\rightarrow
Voluntary cancellation (pre-2020 government purchase and cancellation of CERs)		
Use of CERs or of the CDM in the context of the INDC, Intended Nationally Determined Contribution		\rightarrow



Sources of demand for CERs

Package CDM projects for international				
				\rightarrow
support (NAMAs, GCF,)				
	•			_
Climate finance: GCF, PAF				\rightarrow
Direct purchases for compliance reasons:				
EU-ETS, Norway, Germany				
Direct purchases for compliance reasons:				
Switzerland				
Voluntary cancellation (pre-2020 ambition				
beyond current pledges)				
Possible direct purchases: international		10		
aviation (under discussion)		· . ·		\rightarrow
	•			

Voluntary markets			\rightarrow
-------------------	--	--	---------------



Current opportunities for CDM-LAC

Buyer	Total USD or CER credits	From	Criteria
Foundation for Climate Protection & Carbon Offset, KliK, Swiss Petroleum Association	1 million CERs	11/201 3	Maximum of 35% of total volume from one country Maximum bid size is 100,000 CERs/transaction RE technology, hydro <20MW Energy efficiency
NEFCO Norwegian Carbon Procurement Facility (NorCap)	30 million CERs	10/201 3	Vulnerability to carbon prices (stranded, abandoned) Developing country without a cap under Kyoto Wind or hydro projects, LDCs Minimum 300,000 CERs/transaction Excluded: hydro & wind in non-LDCs, HFC/N2O (adipic acid production), coal based production without CCS



Current opportunities for CDM-LAC

Buyer	Total USD or CER credits	From	Criteria
Swedish Energy Agency	10 million CERs	12/201 3	Focused on Africa/SE Asia Minimum 200,000CERs/transaction RE, energy efficiency and waste management Project should be new or vulnerable projects
World Bank Prototype Auction Facility, PAF	100m USD in 4 lots of USD25 m	2015 PAF I, July	China excluded Methane from landfill, waste-water, etc. Excludes oil and gas and coal mines Eligible monitoring period start date, Sept. 2014. PAF I: 12 winners @ 2.4 CER price, 8.7 million CERs sold
Carbon Market Foundation, KfW, Germany		2013, last call 31/08/ 15	CERs from PoA-CDM Minimum 25,000 CERs/year Maximum volume for start-up financing no more than 2million EUR/PoA Not limited to LDCs



4. Final remarks



4. Final remarks

- Financial flows in the last 5 years are > 300 bn.US\$/year, <10%
 LAC; >90% focused on mitigation, renewable energy
- 2. Development financial institutions and corporations are the key actors involved in climate finance. However, **data uncertainty** on reporting sources and destinations of funding remains a challenge.
- CDM has proven to be a market tool that promotes public and private investment. E.g. For RE contributed towards 418 bn.US\$, at least 100 bn. US\$ LAC, in 10 years.
- 4. An enhanced/new market mechanism could support filling up the mitigation gap, 17 GtCO₂, needed to achieve 2oC level.
- Mitigation potential from >1,000 CDM registered projects in the region can be used towards: (i) national commitments; e.g. country/ regional trading schemes; (ii) international initiatives; e.g. PAF II



Pablo Neruda (1904-1973) talks about ...

returning to his green earth but it was not there anymore; it was gone. His earth was disappearing due to soil erosion

Oda a la erosion de Malleco

Volví a mi tierra verde y ya no estaba, ya no estaba la tierra, se había ido. Con el agua hacia el mar se había marchado....

Nuevas Odas Elementales. Neruda, 1956





United Nations Framework Convention on Climate Change

THANK YOU!

ksolis-garcia@unfccc.int rccbogota@unfccc.int



Karla Solis, Regional Collaboration Centre Bogota UNFCCC Secretariat

Capital flows that target mitigation or adaptation objectives or outcomes. These flows include private and public finance; they support project implementation, policy and capacity building

Climate Policy Initiative

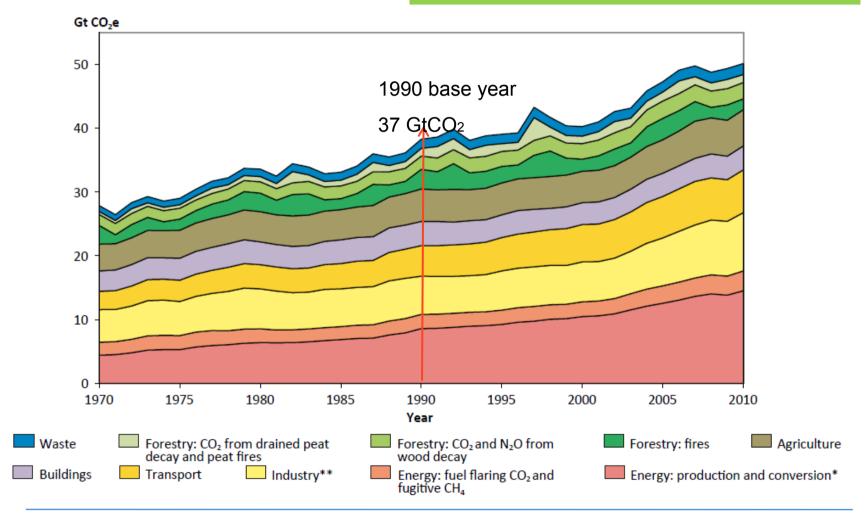


2. Global emission gap



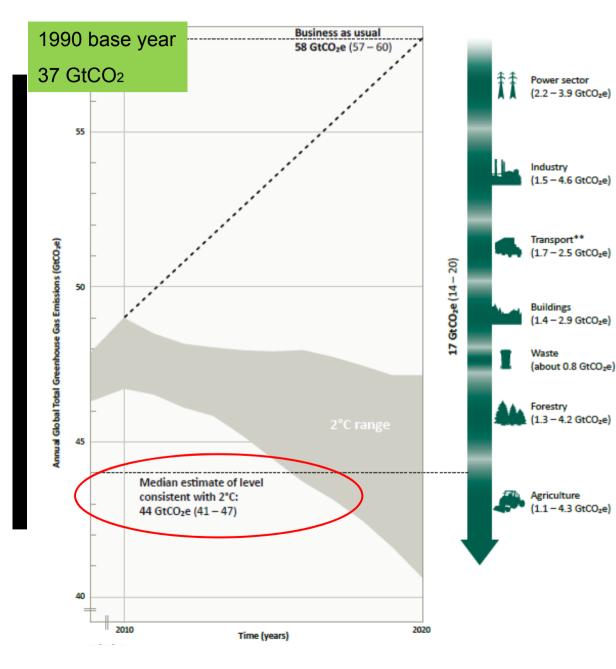
Global emissions by sources

1st Kyoto period: >5% reduction, ~1.85 GtC02





Emissions gap



Carbon markets are needed to: → Deliver costeffective mitigation → Mobilize public and private finance

Source: UNDP, 2012. Emission gap report http://www.unep.org/pdf/2012gapreport.pdf

COP21, **Paris** \rightarrow **new treaty**

- 2°C target
- Collective effort: \rightarrow 50-85% emission reduction by 2030
- Contributions are needed: INDC, Intended National Determined Contributions → INDCs report on the countries' ambitions for the 2nd Kyoto period: nearly 40 INDCs have been: Mexico, Dominican Republic, Trinidad
- Fundamental ties with the content
 - Ambition (demand), roles, principles, linking markets, infrastructure
- Emission gap, ~17 GtCO₂, that carbon markets could fill up
 - \rightarrow if ambitions (INDCs) dictate demand

