

CDM – and beyond

Climate Change and Development Policy

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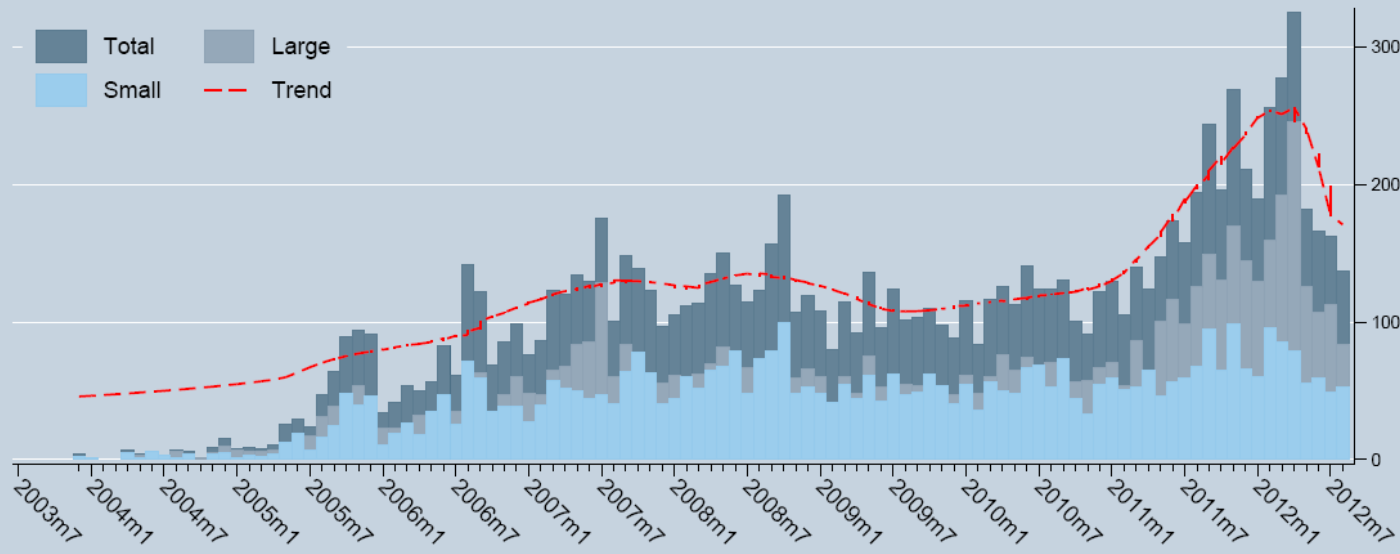
Content

1. Current profile of the CDM
2. Carbon market overview
3. Impacts of the CDM
4. Future perspectives

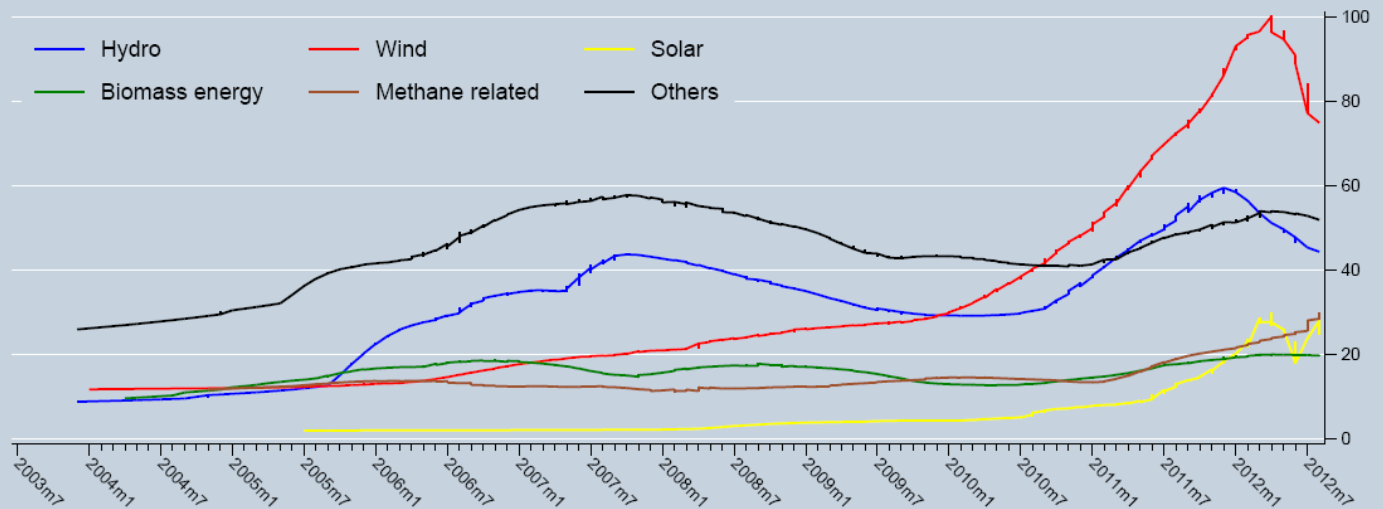


CDM facts & figures – new entrants

No. of projects entering validation per month

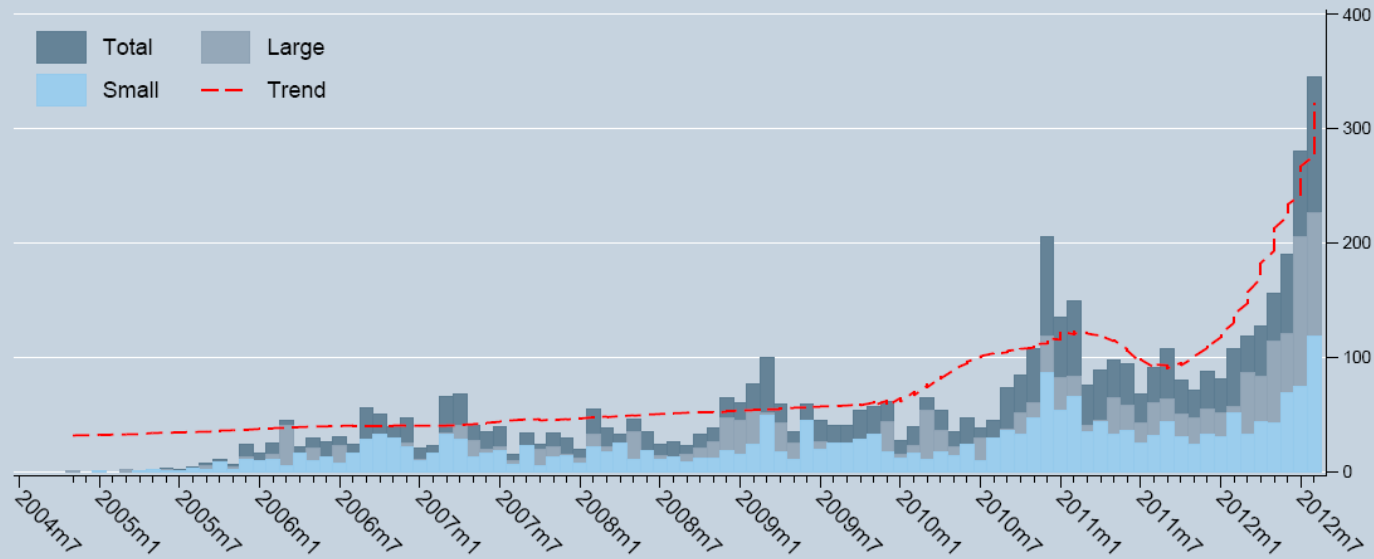


Trend of types of projects entering validation (projects/month)

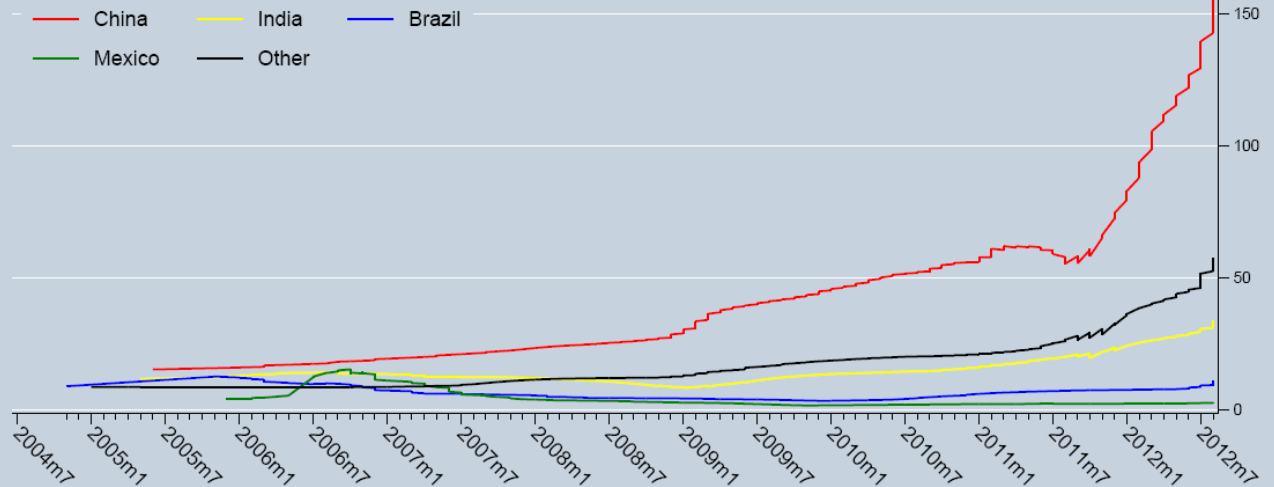


CDM facts & figures – projects

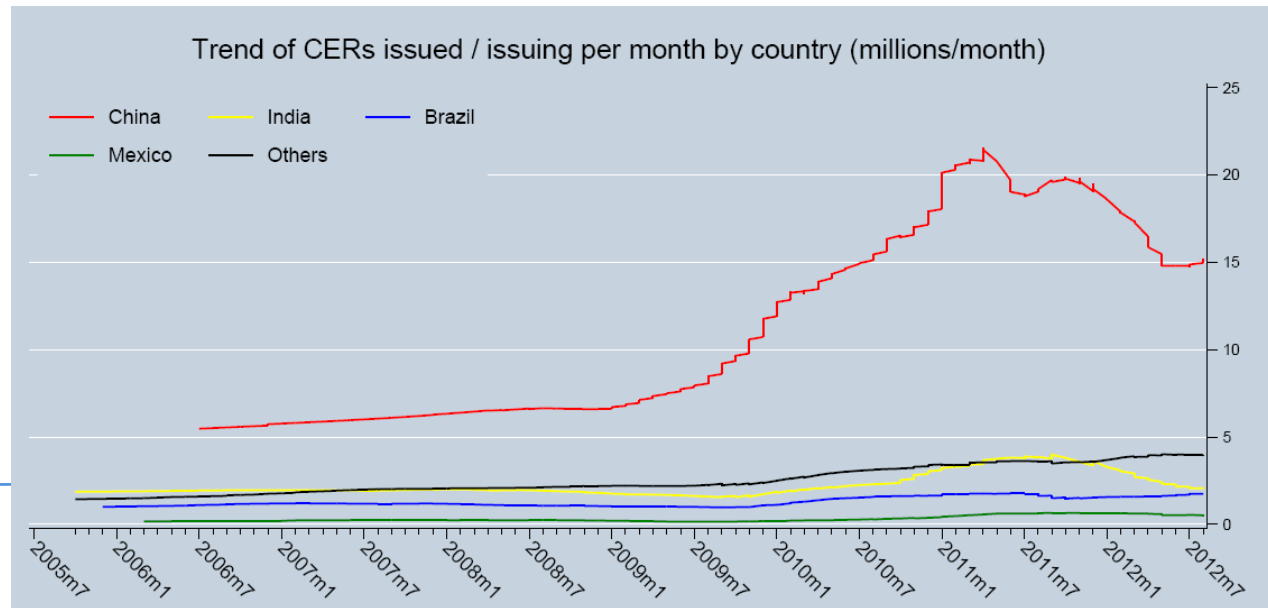
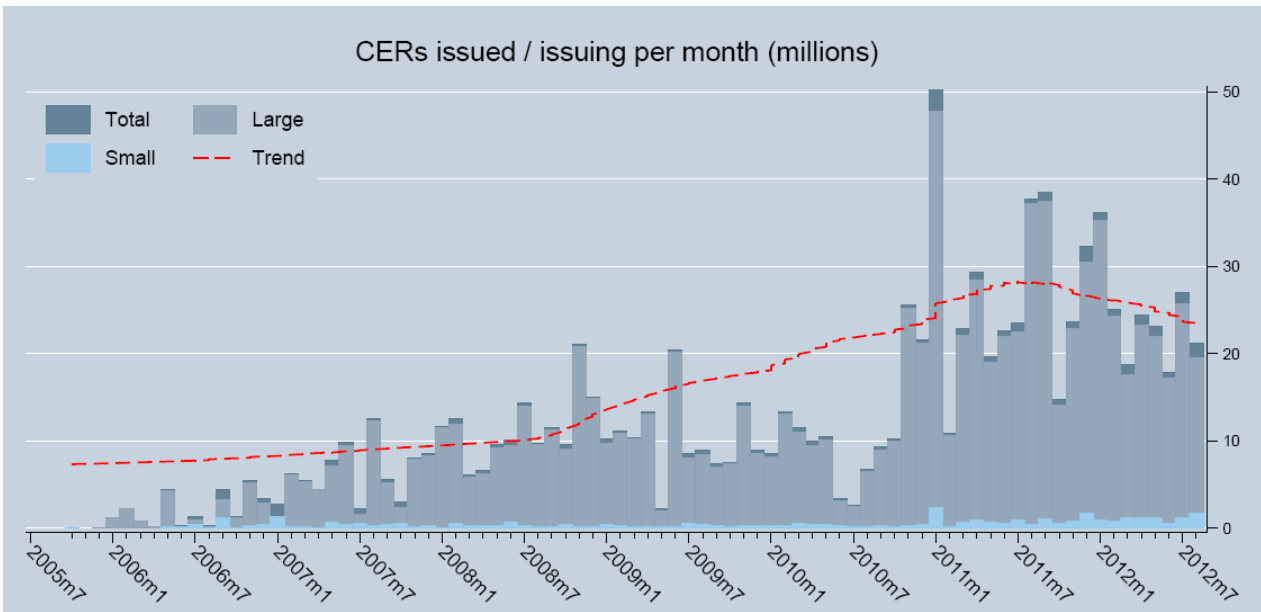
No. of projects registered / registering per month



Trend of projects registered / registering per month by country (projects/month)



CDM facts & figures – issuance of CERs



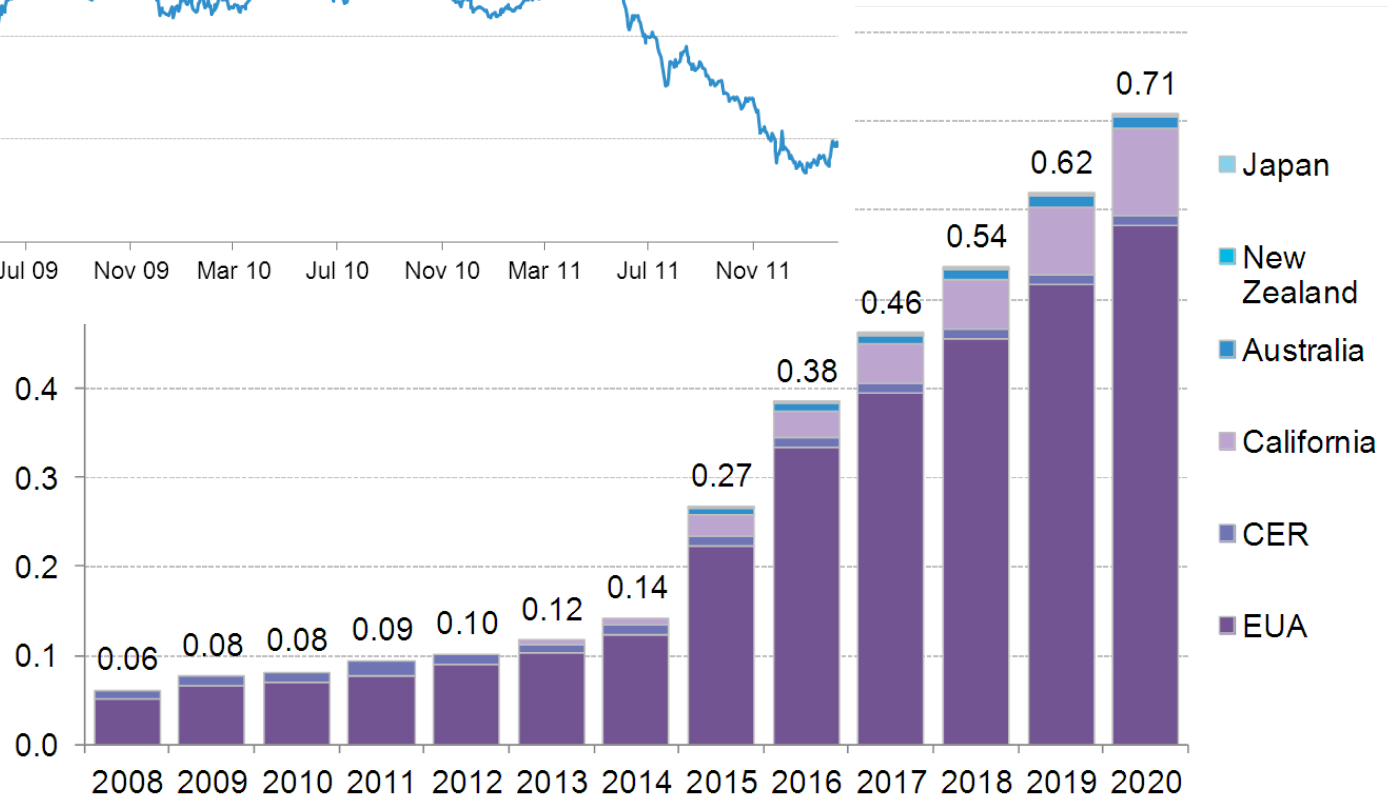
Carbon market price & supply volume

Historical CER prices, 2008-12 (€/t)



Demand is primarily driven by the EU-ETS
 CERs can be used instead of EUAs in EU ETS
 CERs have typically been cheaper than EUAs
 EUAs are projected to dominate the market

Projected growth in the carbon market (€ trillion/year)

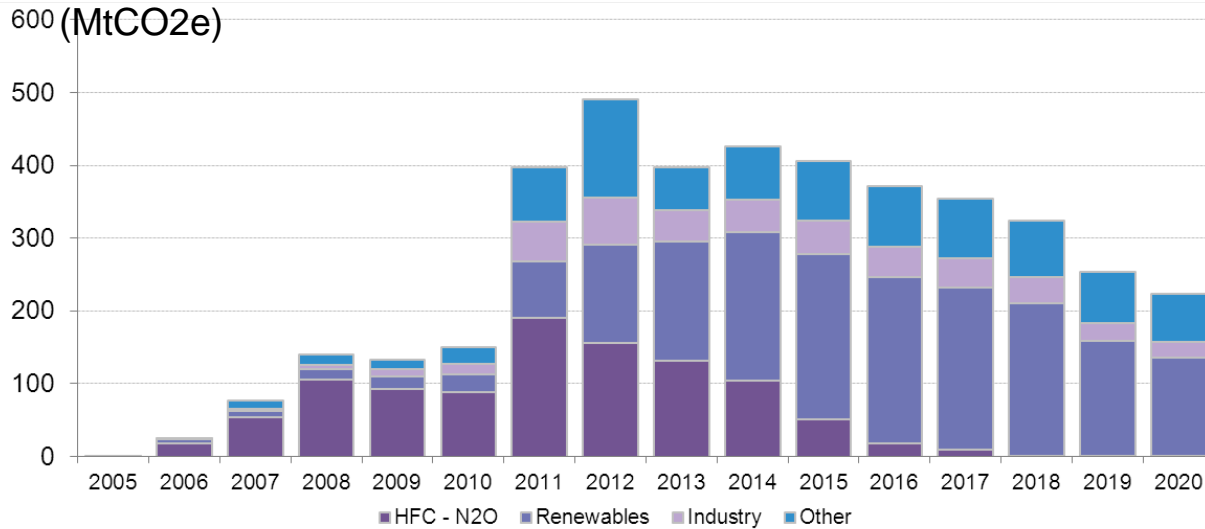


Source: Bloomberg New Energy Finance



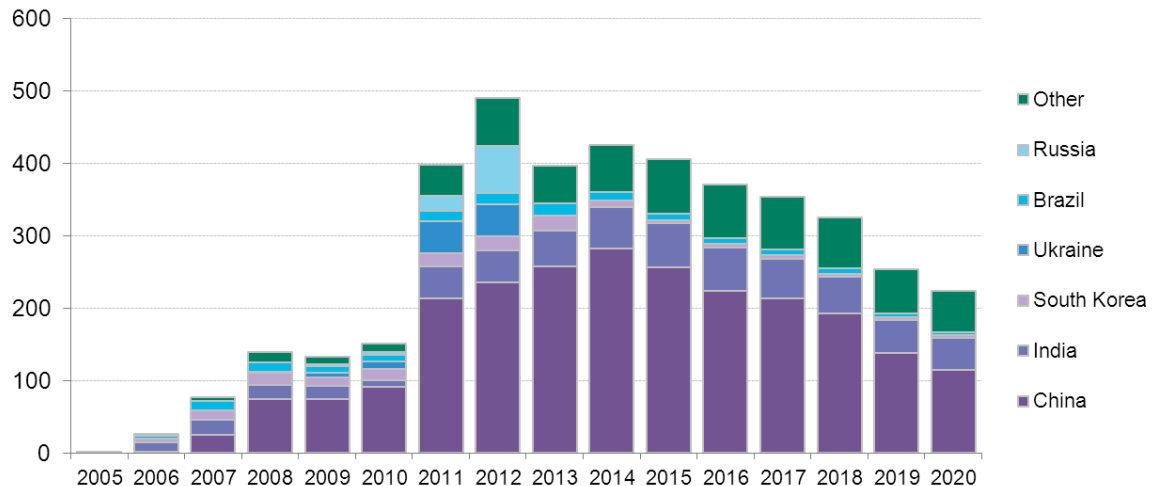
Supply by project type & country

Projected CER/ERU annual issuances from the existing pipeline by technology and country, 2005-2020



Renewables will be the most significant source of credits
Share of industrial gas credits will decline over time

China and India continue to dominate the CDM pipeline
Short term increase in supply from Russia as they continue to build JI pipeline



So what?

Has the CDM fulfilled its initial design objectives & were there any other benefits?



Geographic distribution

Region	no DNA	with DNA	Projects 1-10	11-100	>100	Total
Africa (33)	5	27	18	3	0	48
Asia & Pacific (13)	11	11	17	7	2	37
Europe & Central Asia	1	4	8	1	0	13
Latin America & Caribbean (1)	4	8	12	7	2	29
China & India	0	0	0	0	2	2
Total	21	50	55	18	6	129
LDCs	6	25	15	1	0	41

- Distribution of CDM project activities generally follows the GHG mitigation potential available in the country
- As a result [or partly so!] LDCs & some other countries lack projects

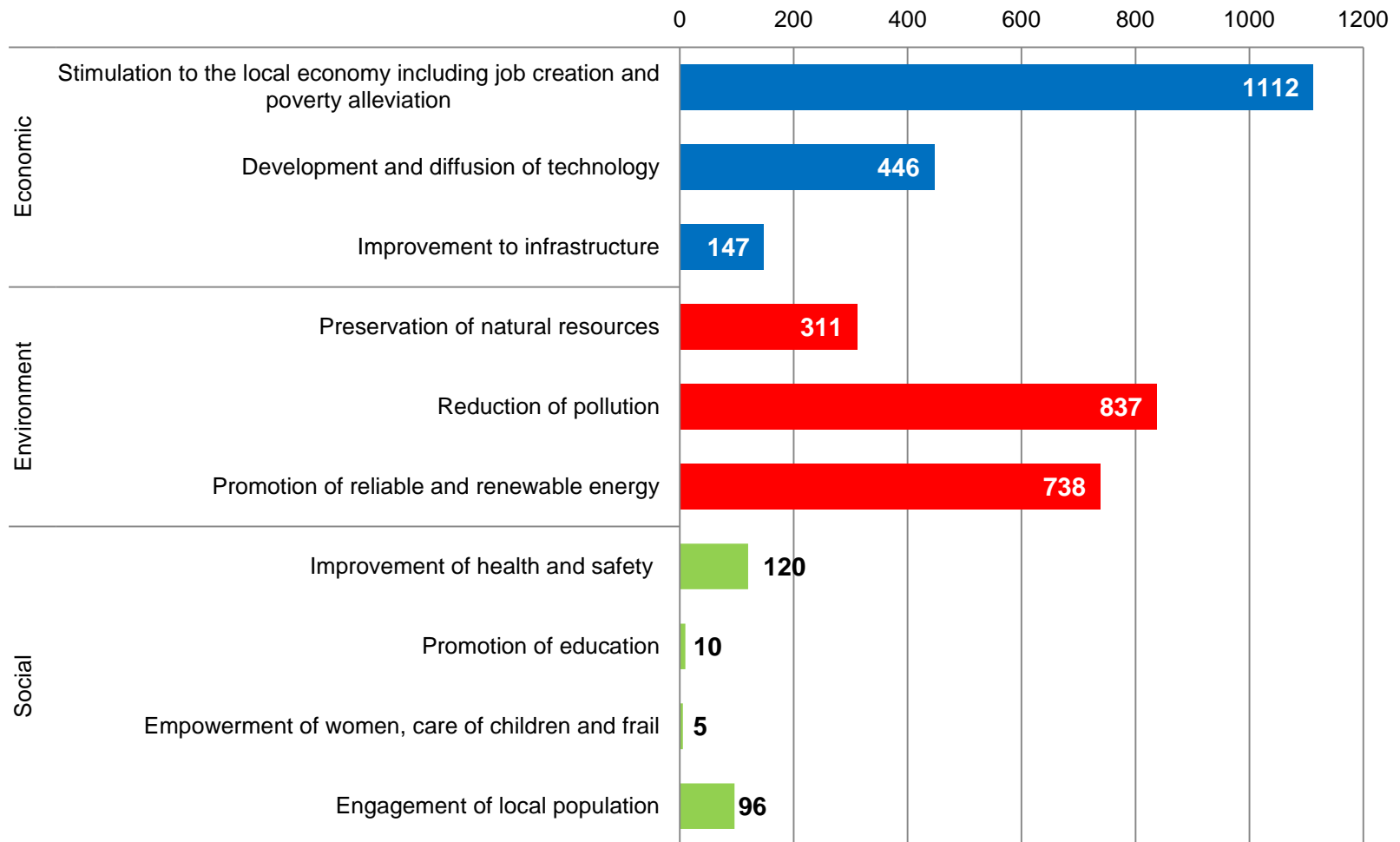


Sustainable development indicators

Dimension	Indicator	Description
Economic	Stimulation of the local economy including job creation and poverty alleviation	Economic improvements for the population through: direct or indirect job creation or retention of jobs, during the operation and construction phases; domestic or community cost savings; poverty reduction; financial benefits of the project for the national economy of the host country; enhancement of local investment and tourism; improvement of trade balance for the country; reinvestment of clean development mechanism proceeds into the community; creation of tax revenue for the community
	Development and diffusion of technology	Development, use, improvement and/or diffusion of a new local or international technology, international technology transfer or development of an in-house innovative technology
	Improvement to infrastructure	Creation of infrastructure (e.g. roads and bridges) and improved service availability (e.g. health centres and water availability)
Environment	Preservation of natural resources	Promoting comprehensive utilization of the local natural resources (i.e. utilizing discarded biomass for energy rather than leaving it to decay, utilizing water and solar resources); promoting efficiency (e.g. compact fluorescent lamps rather than incandescent lamps); recycling; creating positive by-products; improvement and/or protection of natural resources, including the security of non-renewable resources such as fossil fuels, or of renewable resources such as: soil and soil fertility; biodiversity (e.g. genetic diversity, species, alteration or preservation of habitats existing within the project's impact boundaries and depletion level of renewable stocks like water, forests and fisheries); water, availability of water and water quality
	Reduction of pollution	Reducing gaseous emissions other than greenhouse gases, effluents, and odour and environmental and noise pollution; and enhancing indoor air quality
	Promotion of reliable and renewable energy	Supplying more or making less use of energy; stabilizing energy for the promotion of local enterprises; diversifying the sources of electricity generation Converting or adding to the country's energy capacity that is generated from renewable sources; reducing dependence on fossil fuels; helping to stimulate the growth of the renewable power industries
Social	Improvement of health and safety	Improvements to health, safety and welfare of local people through a reduction in exposure to factors impacting health and safety, and/or changes that improve their lifestyles, especially for the poorest and most vulnerable members of society; improved human rights
	Promotion of education	Improved accessibility of educational resources (reducing time and energy spent by children in collecting firewood for cooking, having access to electricity to study at night, and supplementing other educational opportunities); donating resources for local education
	Empowerment of women, care of children and the frail	Provision of and improvements in access to education and training for young people and women; enhancement of the position of women and children in society
	Engagement of local population	Community or local/regional involvement in decision-making; respect and consideration of the rights of local/indigenous people; promotion of social harmony; education and awareness of local environmental issues; professional training of unskilled workers; reduction of urban migration

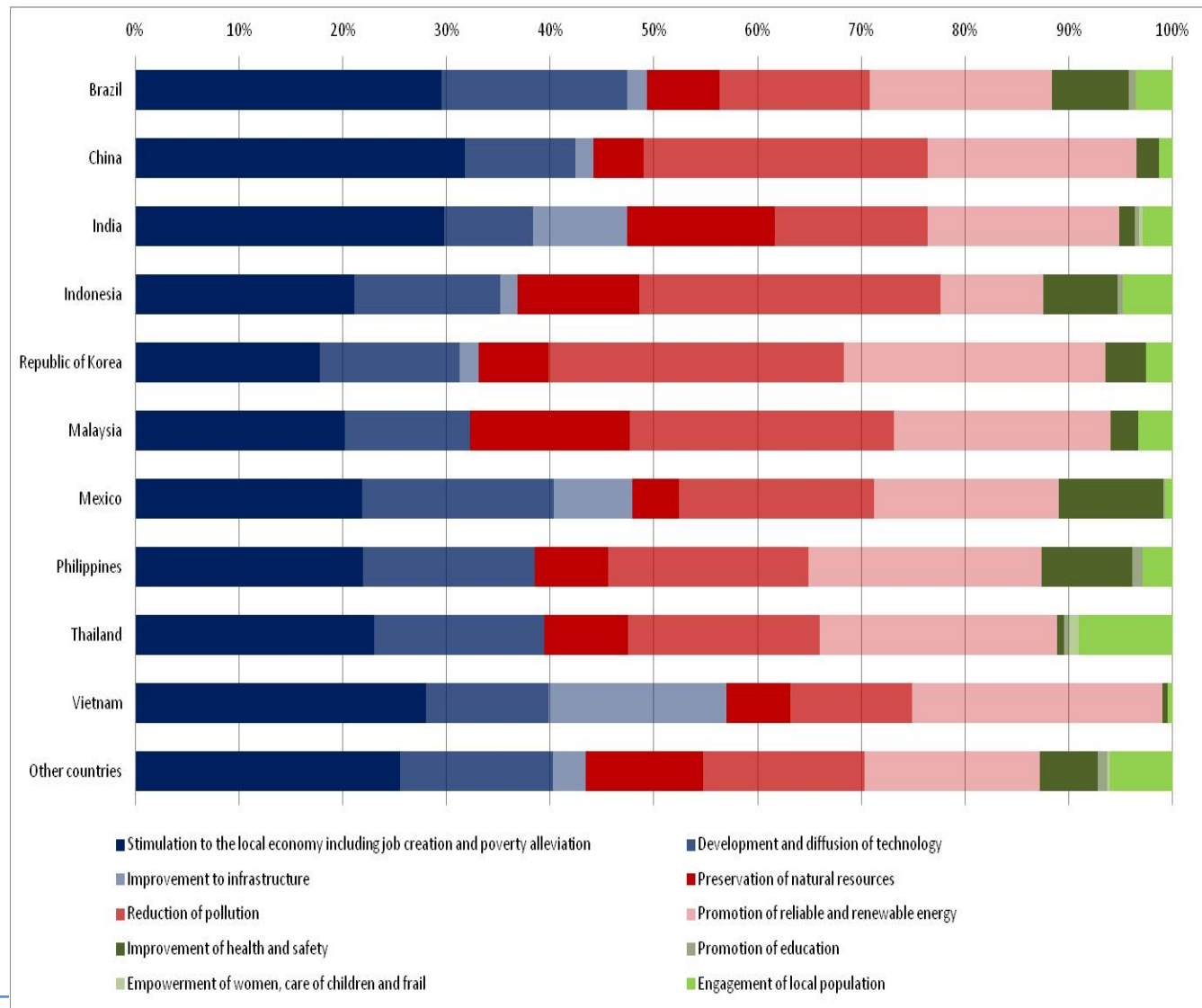


SD claims by indicator

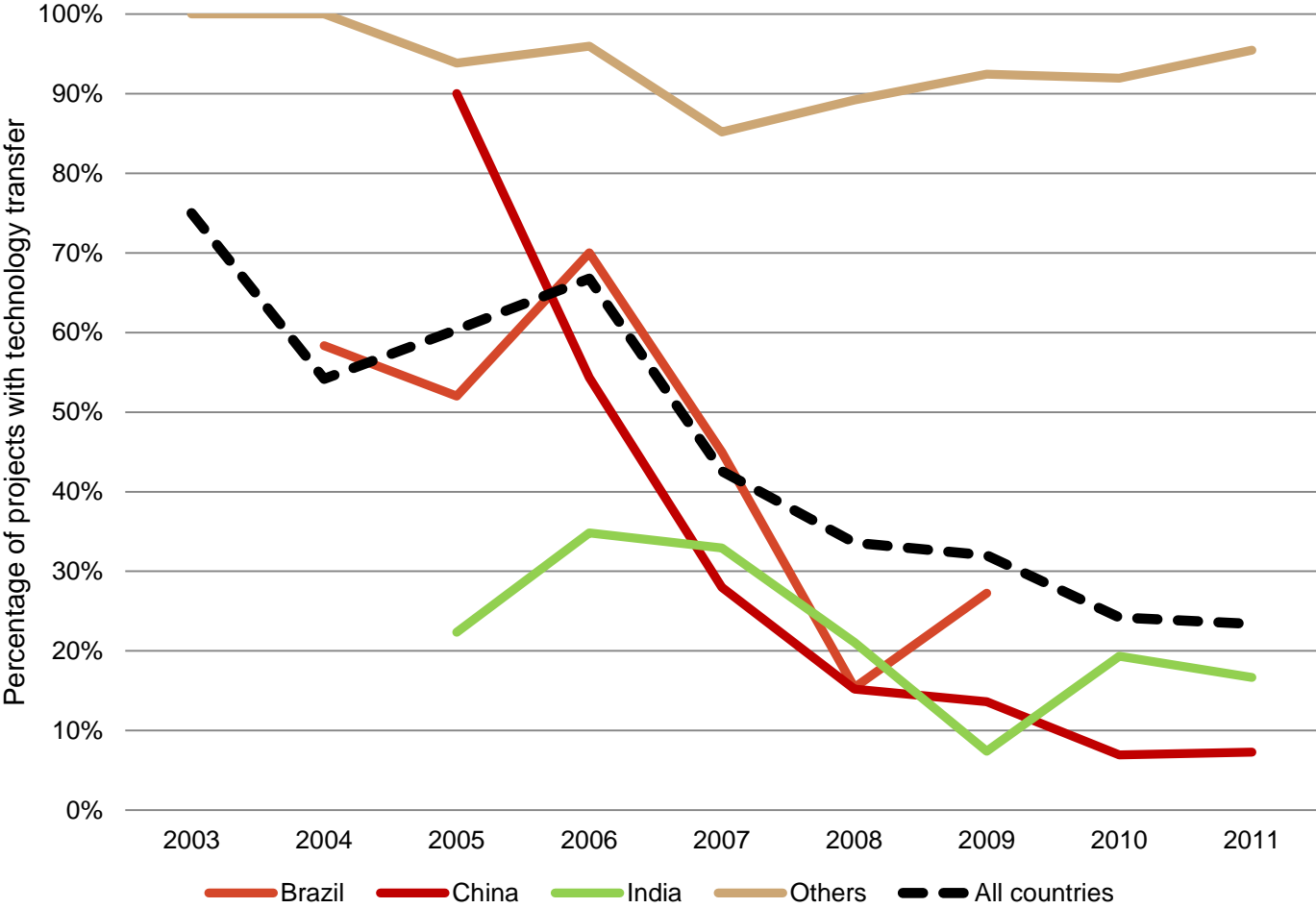


Host country has an effect on mix

CDM appears to be making a contribution to SD in addition to the mitigation of GHG emissions

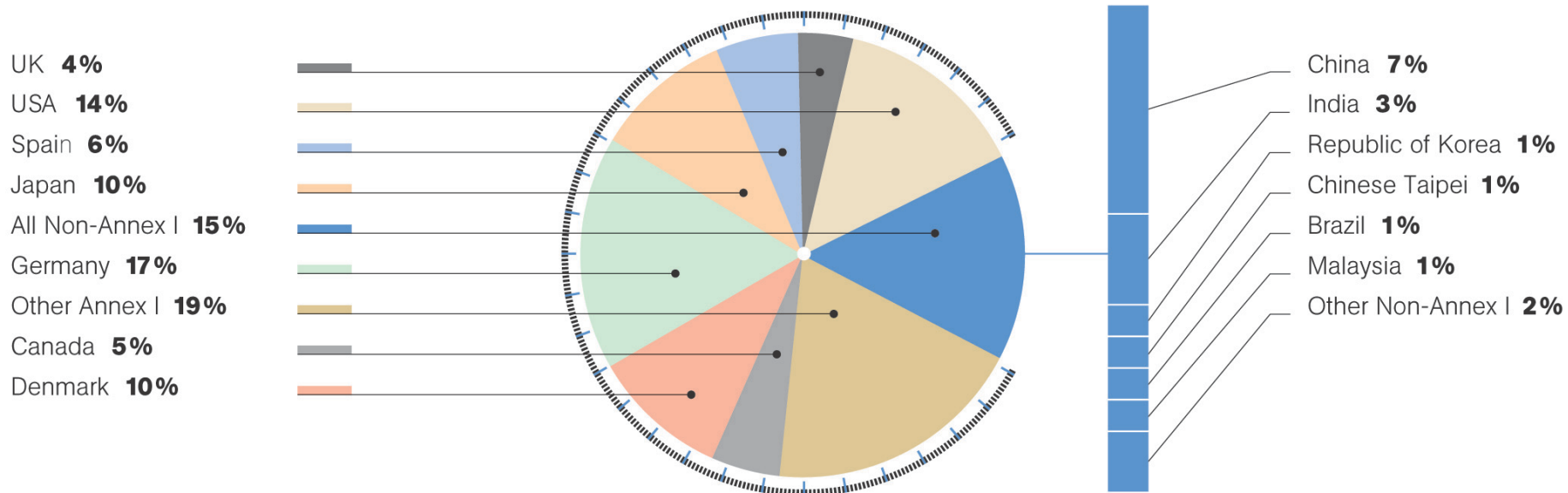


Trend in transfer of technology



Who is supplying the technology?

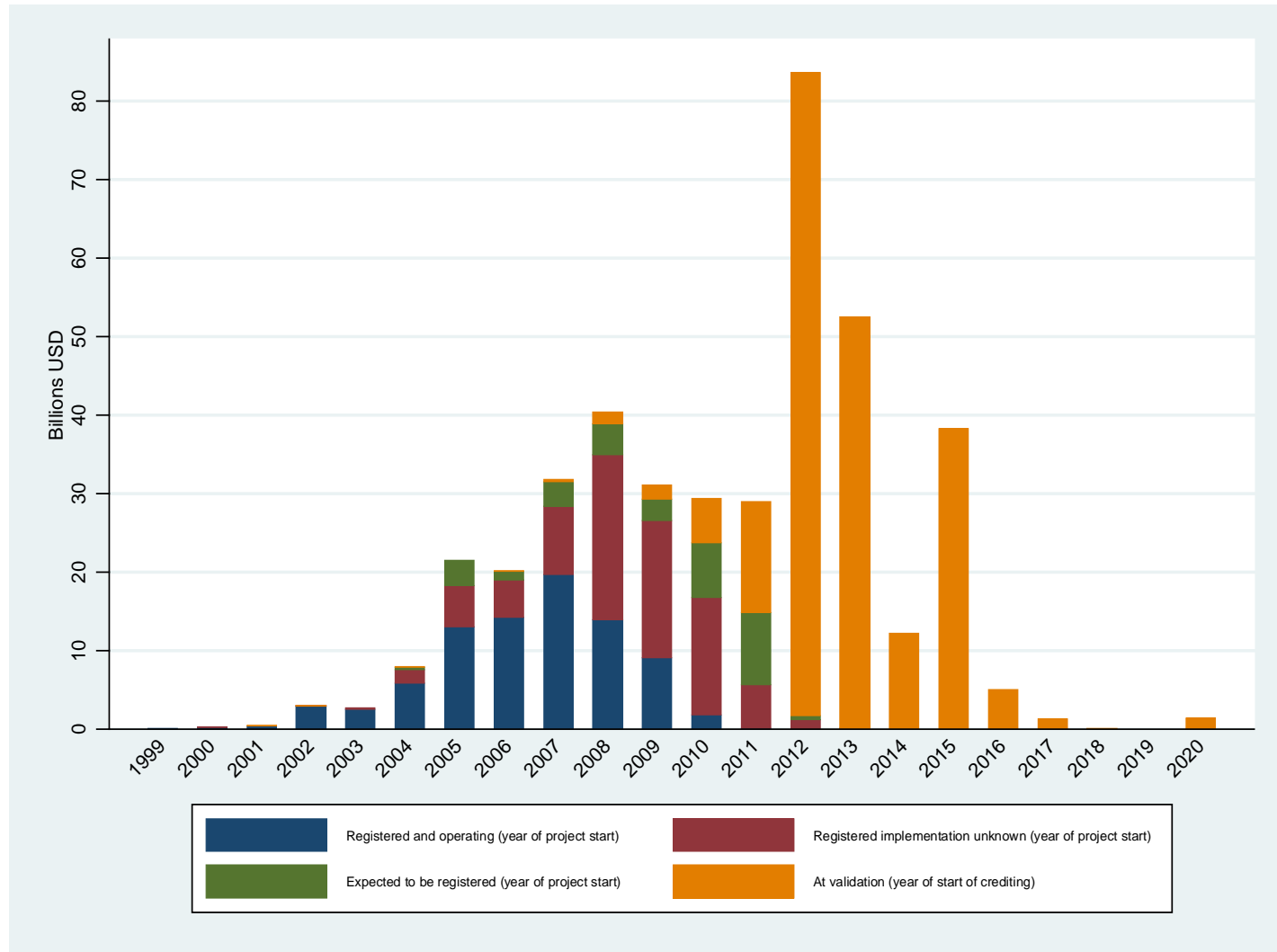
Top 5 suppliers - Germany, the USA, Denmark, Japan & China without signs of supplier monopoly and changes over time



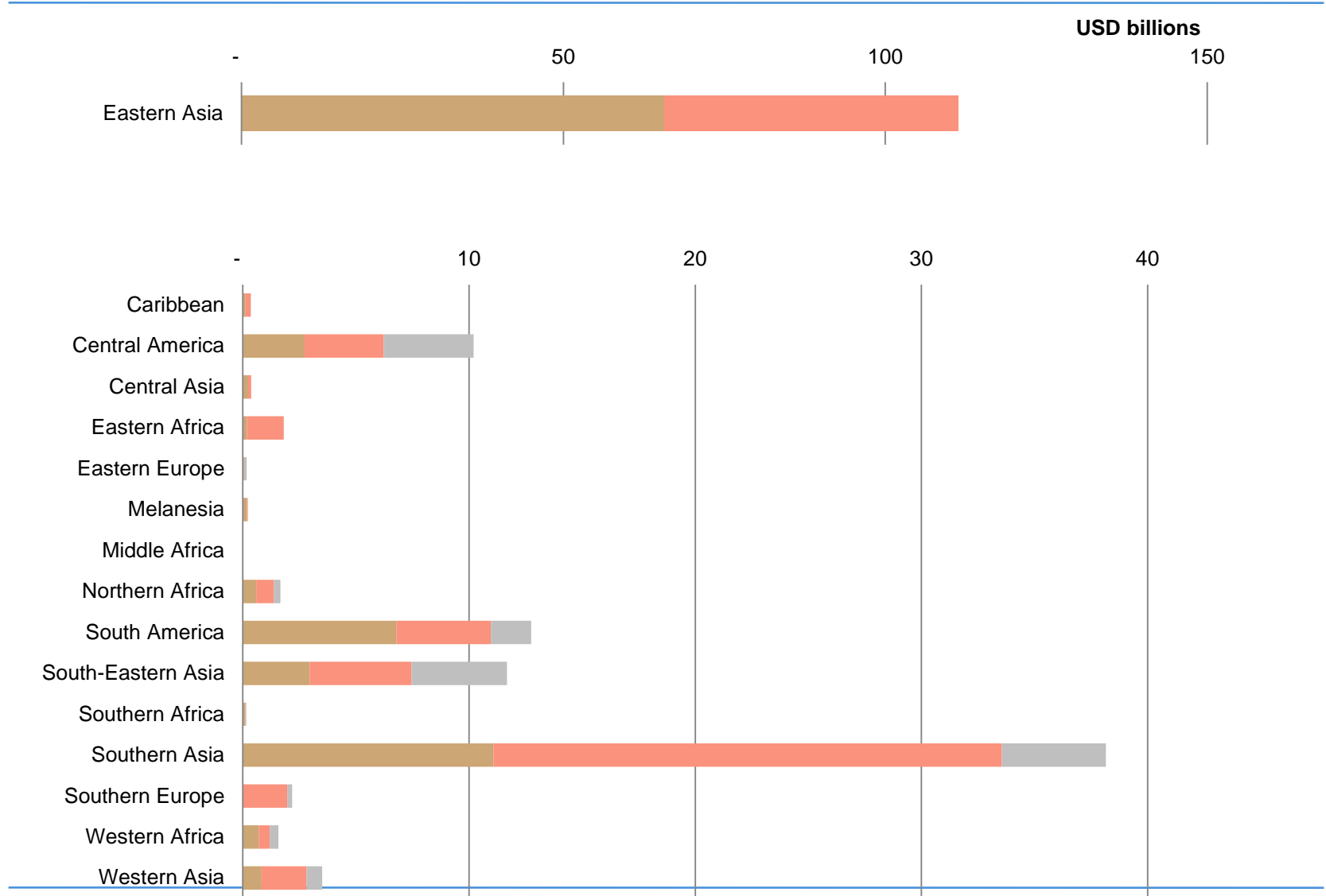
CDM has facilitated technology transfer to host countries



Project investment

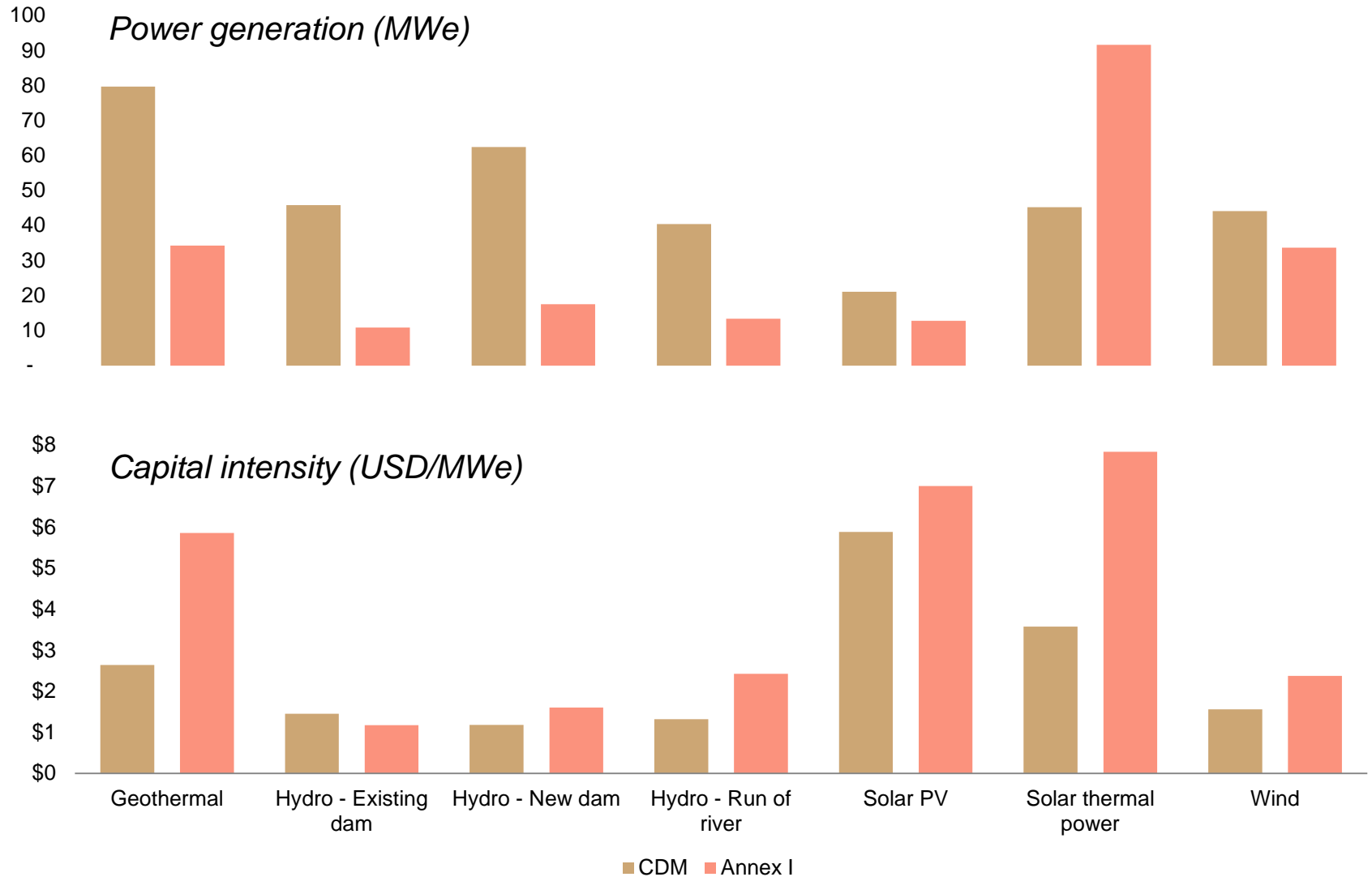


Geographic distribution of investment

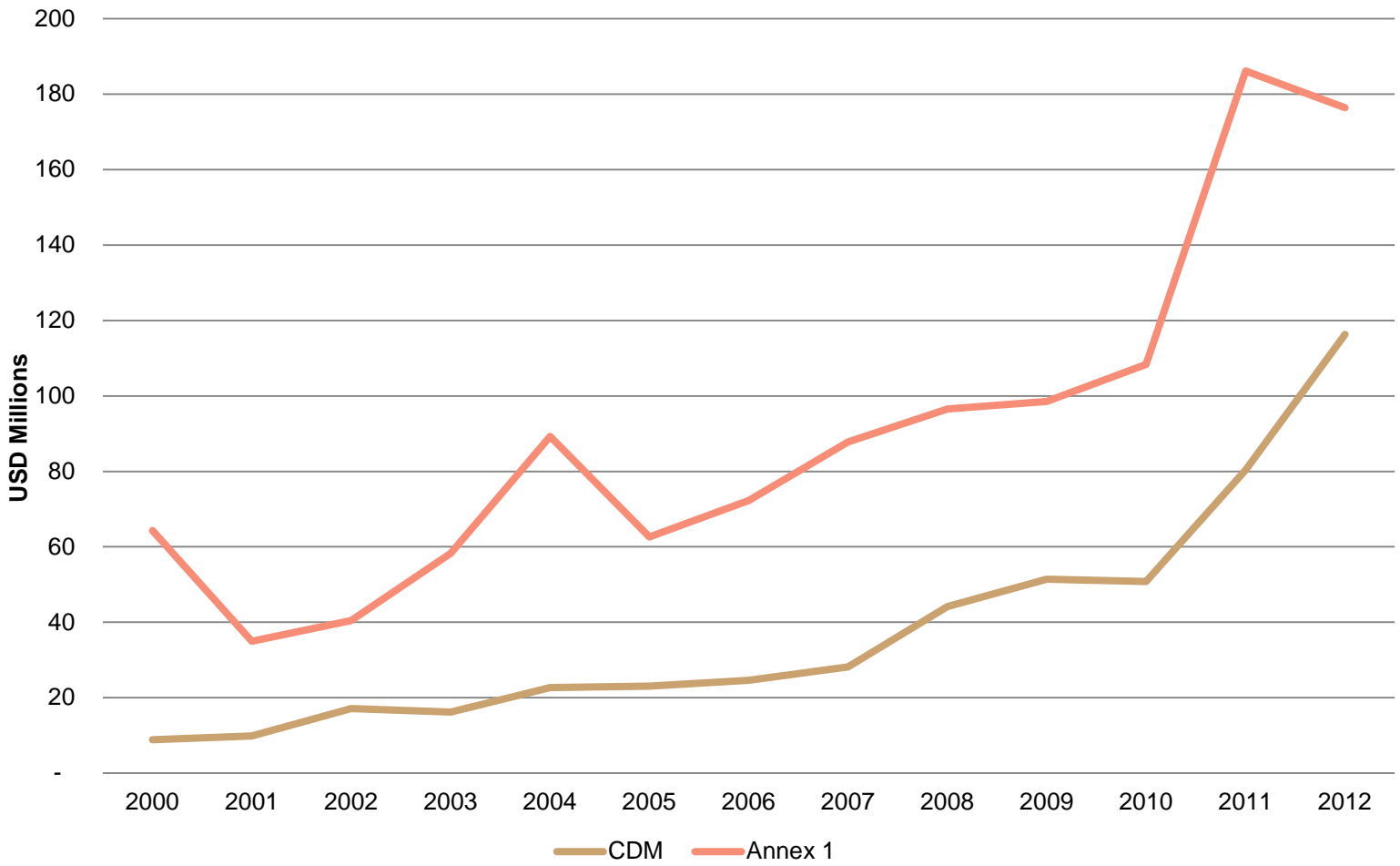


■ Operating ■ Registered ■ Registration expected

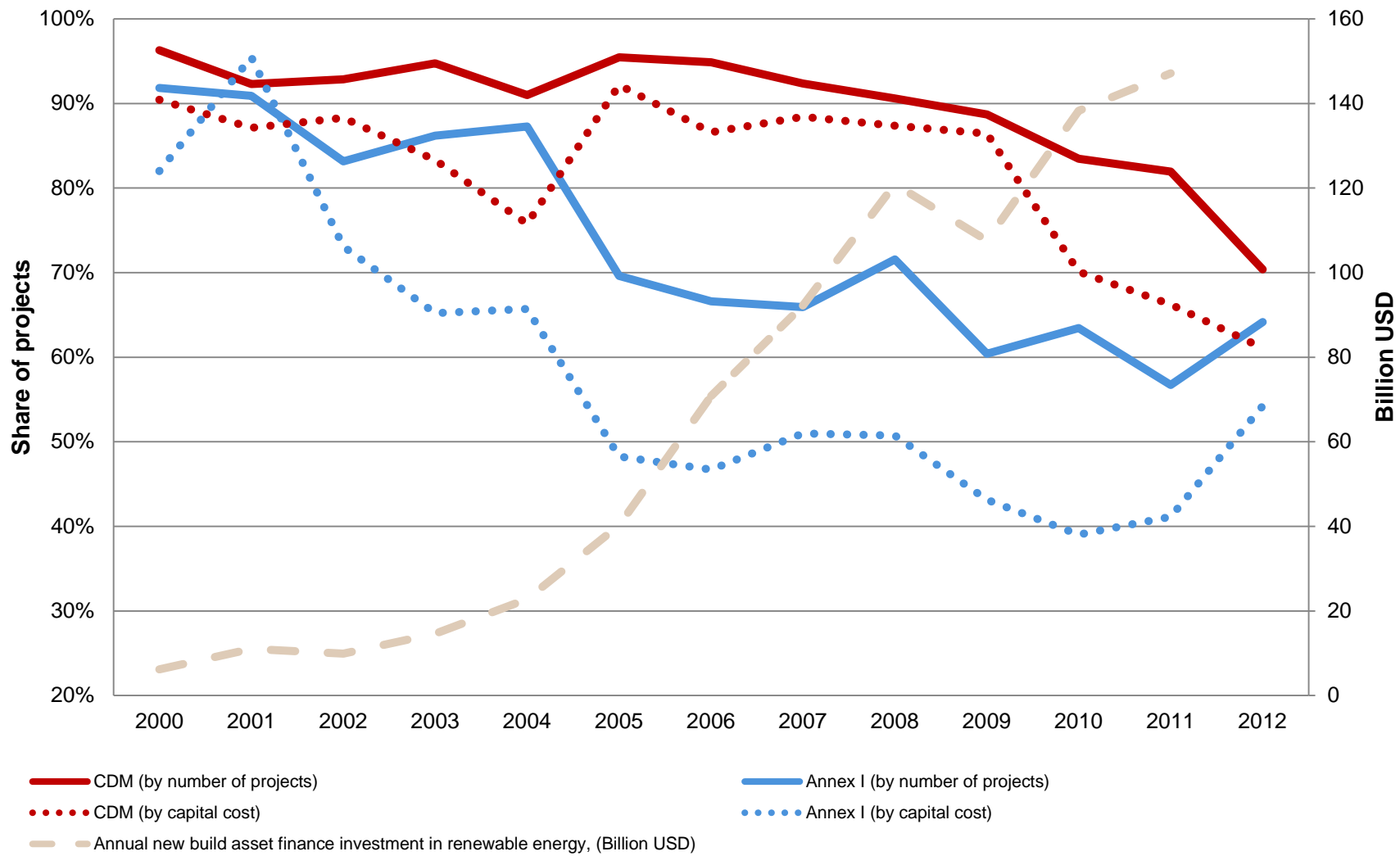
CDM vs. Annex I country projects



Capital investment - CDM & Annex I



Domestic foreign project finance



USD 21.5 to USD 43.0 billion foreign investment in projects over the life of the CDM

Savings and benefits

- The total lower bound estimate on compliance savings to Annex 1 parties and its institutions due to the existence of the CDM is USD 3.6 billion

Year	CERs Used (million)	EUA-CER spread (€)*	Saving (million €)
2008	82.5	1.90	156.8
2009	77.9	1.34	104.4
2010	116.9	3.19	372.9
2011	178.8	3.07	548.9
Total	456.1		1,183.0

- Economies of scale – lower mitigation cost per ton of CO₂e for larger projects (renewables, forestry & transport projects)
- > 750 million CERs transferred > USD 9.5 billion revenue from sale (up to 2011)
- Investors focus on projects with low abatement costs
- Untapped potential for CDM projects also where there are few project activities

The market is working relatively efficiently & effectively



Market trends

- Intense build-up of **carbon markets/mechanisms** worldwide
- **Doha negotiations important for carbon markets**
- Several Parties prepare **domestic offsets mechanisms** and/or **support offsets elsewhere**
- Other offset providers will **compete** with CDM and JI for buyers after 2012
- ETSs in CDM host countries will **impact CDM**
 - **on supply side** - existing projects might not continue plus no new ones
 - **on demand side** - additional internal demand for domestic offsets?



future?



Carbon markets emerging the world over!

COUNTRY	MECHANISM	YEAR
Australia	Carbon Pricing Mechanism	2012; C & T - 2015
Brazil	National ETS (sectoral/project) ETS in Rio de Janeiro & Sao Paulo (?)	? 2014
Canada	Quebec ETS BC., Manitoba & Ontario possible ETSSs	2013 2015
Chile	ETS; Crediting mechanism (NAMAs)	? 2015
China	CDM-like voluntary system National ETS (7 pilot ETSSs)	2012 2015 (2013)
Colombia	Crediting mechanism in 6 sectors	?
Costa Rica	Crediting mechanism in 3 sectors	?
European Union	EU ETS	In operation
India	Perform, Achieve & Trade (PAT)	2012
Japan	J-VETS; J-VER; BOCM; Tokyo ETS	In operation
Kazakhstan	ETS (pilot)	2013 - 2015
Mexico	ETS; Crediting mechanism (NAMAs)	?
New Zealand	ETS	In operation
Rep. of Korea	Target Management System; ETS	2012; 2015
South Africa	Carbon Tax	2013 - 2014
Switzerland	CO2 Tax – ETS	In operation
Ukraine	ETS (Domestic/Regional)	2017
USA	RGGI California ETS	In operation 2013



Demand and supply

Impossible to estimate - market developments & new actors

Supply-demand equation post-2012 influenced by many factors:

- participation of countries in the international regime (CP2)
- continuing unstable and weak global economic conditions
- setting up ETSs/mechanisms + linking & mutual recognition
- CDM efficiency improvements



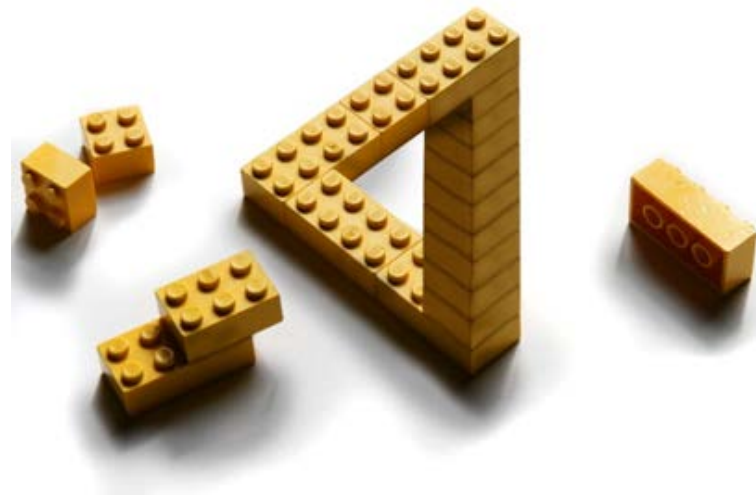
From the negotiators' table

- **AWG-LCA,, AWG-KP, ADP, Bangkok 29/8 – 5/9**
- **LCA: Various approaches**
 - **New Market based mechanism**
 - **Framework for various approaches**
- **KP: Start of CP2 & Conditions for access to KP mechanisms & length of CP2**
- **ADP: Still early days**



Conclusions

- Time of **intense development** and institutional building
- Rapidly changing conditions for the **CDM**
- Clear need for **co-finance**
- A **reference** market mechanism
- An **asset** to the UN Climate Convention – considerable capacity built up – “flight deck”



“Credible offset mechanism for a low greenhouse gas future promoting sustainable development”



[CDM Business Plan 2012- 2013]

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