Trading Green: The current state of the CER market Jan-Willem Martens



Overview of presentation

- Overview of global carbon market
 - Size, actors, demand/supply, prices
- How are CERs traded?
 - Comparing primary CER trading to secondary commodity trading
- Success and limitations of CDM



Who is trading what?

Country	entity	Project based mechanisms	Allowances
EU	Governments	CERs, ERUs	AAUs
	Private sector	CERs, ERUs	EUAs
Japan	Government	CERs, ERUs	AAUs
	Private sector	CERs, ERUs	AAUs
New Zealand	Government	CERs, ERUs	
	Private sector	CERs, ERUs	AAUs
Australia	?		
Canada	?		

Size of the global carbon market

Source: World Bank state of the carbon market, 2010

2008 figures	Value (m U\$)	In %	Value (m U\$)	In %
Secondary markets	2008		2009	
– EUA trading	91,900	73%	118,500	81%
- CER trading	26,200	21%	17,500	12%
Primary markets				
– CDM	6,500	5%	2,700	2%
– JI	367	0%	354	0%
– Voluntary market	419	0%	338	1%
AAUS	276	0%	2,000	1%
Other	738	1%	2,346	2%
Total	126,400	100%	145,747	100%

Demand and supply in Kyoto market

2008–12 (MtCO ₂)	Kyoto short position	CER/ERU purchases Governments	CER/ERU purchases private sector	Actual AAU purchases	Gap
EU	800	370	400-700	40	0
Japan	445	25	200	102	20
Canada	900	-	-	-	900
Australia	100	-	-	-	100
N. Zealand	25	25	-	-	-
Total	2,270	420	600-900	142	1,020

	Demand	Supply
CERs/ERUs	1,020-1,320	1,285
AAUs	142	1,500 - 7,000+

Demand and supply in the EU ETS

	2013 – 2020 (M tCO ₂)
Phase III Cap – Emissions BAU	-2,660
Surplus EUAs / CERs/ ERUs from Phase II	2,090
Actual reductions required in Phase III	570
Expected price	Eur 40/CER
If EU moves to -30% gap:	
– Additional gap	-1,000
- Additional CDM demand	500
 Additional reductions 	500
Total reductions Phase III under -30%	1,070
Expected EUA price in 2020	Eur 48/EUA

Note: Due to the credit crisis Phase II of the EU ETS is long (more allowances than emissions). Hence prices in the EU ETS are driven by expectations around phase III

EUA an CER prices over the past 2 years (ECX future contracts

2 leading exchanges: www.ECX.eu www.bluenext.fr



Overview of presentation

How are CERs traded?

 Comparing primary CER trading to secondary commodity trading



Global supply chain of a CER



What are typical contracts in commodity markets?

- Spot contract:
 - An agreement to buy or sell an asset today
- Forward contract:
 - A forward contract is a nonstandardized contract between two parties to buy or sell an asset at a specified future time at a price agreed today
- Future:
 - The same, but a standardised contract (delivery terms, quantity, delivery dates) traded over an exchange
- Option:
 - The right to buy or sell an asset at a specified future time at a price agreed today

Typical features of forwards / futures (secondary):

- Provide protection against price fluctuations
- Obligation to deliver. Penalties in case of non delivery
- Counterparty risk is the key risk!
- Trading via an exchange or a bank is a key way to reduce counterparty risk
- Payment of margin is a way to reduce counterparty risk
- Initial Margin (IM) paid at start of trade;
- Variation margin (VM) depending on price movement:
 - E.g. Seller agrees to sell a CER @ Eur 10/CER in dec 12. Exchange requires 25% IM: Seller pays eur 2.50. Next day CER price moves to Eur11. Seller is obliged to post eur 1,- VM

How is an ERPA different to a standard forward contract?

Standard forward:

- Transparent price (secondary market traded price)
- Hence trading futures / forwards requires a lot of cash or credit risk appetite from your bank
- Obligation to deliver
- Margin payment if market turns against you
- Key risk is counterparty risk
- Requires a good balance sheet in relation to size of trade

ERPA:

- Lower price (discount 20– 40% to secondary)
- No delivery obligation in case of no CER generation
- No Margin payments
- Buyer takes CDM and project risks: registration, issuance, construction and project performance
- Buyer often assists in project registration
- In-house experts
- Payment of CDM related costs

Overview of presentation

Success and limitations of CDM



CDM compared to more traditional development cooperation initiatives

What is it?

- Targeted at clean technology investments
- Projcts are mostly in power sector and industry
- Property right focused
- Improves the bottom line for equity investors
- Focused at near-market and proven technologies
- Technology neutral
- Performance focused

What is it not?

- Designed for poverty alleviation
- A rural electrification mechanism
- Supposed to give direct cash to project owners
- Technology focused
- Focused on R&D or demonstration projects
- Perfect

Successes of CDM

- CDM has demonstrated that finance is not the problem, but making projects economically attractive
 - Direct financial resource mobilised (CER payments) : Eur 25 35 bn by 2012 (cumulative)
- Emancipatory, decentralised approach over 6,000 projects participate:
 - Created new type of companies who are driving clean technology dissemination and private sector finance for clean technologies in developing countries.
 - Markets are the best awareness raising mechanism : Intermediaries are key in awareness raising, knowledge dissemination, outreach
- Systematic source of funding rather than one-off pilot projects with no possibility for entrepreneur to replicate
- New way of commodity trading has enabled direct participation of smaller developing country enterprises in global commodity market

Limitations

- Limitations to governance there is no "rule by law" but "rule by Board":
 - CDM governance is substandard. The question is whether this is intrinsic to the UN system
 - Move to national government based approach: EU, US, Japan
- Lack of long term regulatory certainty
- Too little consideration for project development reality and too much focused on a narrow definition of environmental integrity
- It's not designed for R&D nor for poverty alleviation projects
- Concept of additionality: explicit test to avoid free-riders. In reality it has created a lot of problems.
 - Move to positive lists of technologies?

Looking forward

- The best solution is for the world to move to global cap and trade.
 - Until then project / technology /sector specific mechanisms like the CDM will help the developing world move towards a cleaner technology path
- May be sectoral mechanisms can better address issues such Additionality, consistent rules
- How can we replicate lessons of CDM in other development areas?