



CDM Market Update



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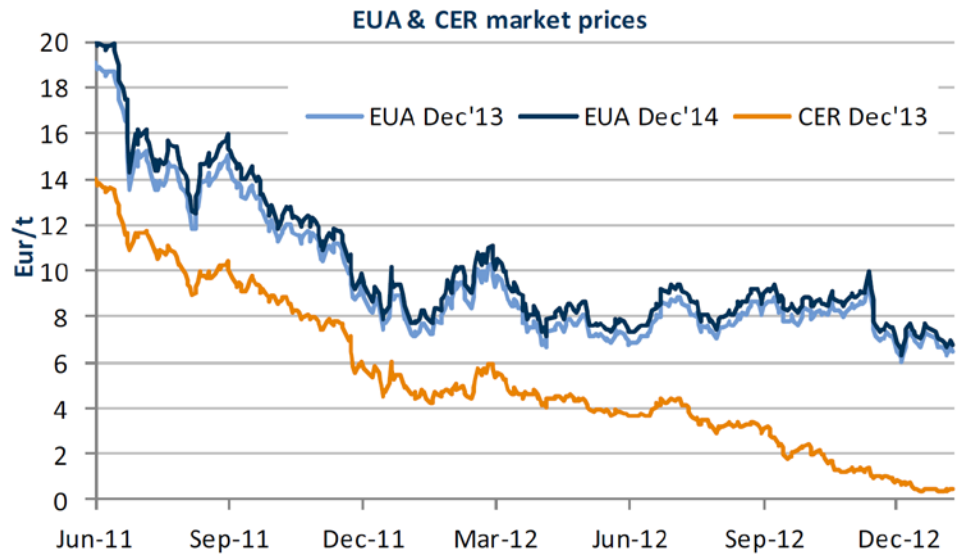
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1. **sCER and EUA prices relationship is broken**
2. **Increased ERU issuance & Oversupplied market**
3. **Grey credit & EU ETS import limit**
4. **CDM issuance costs to set the price**

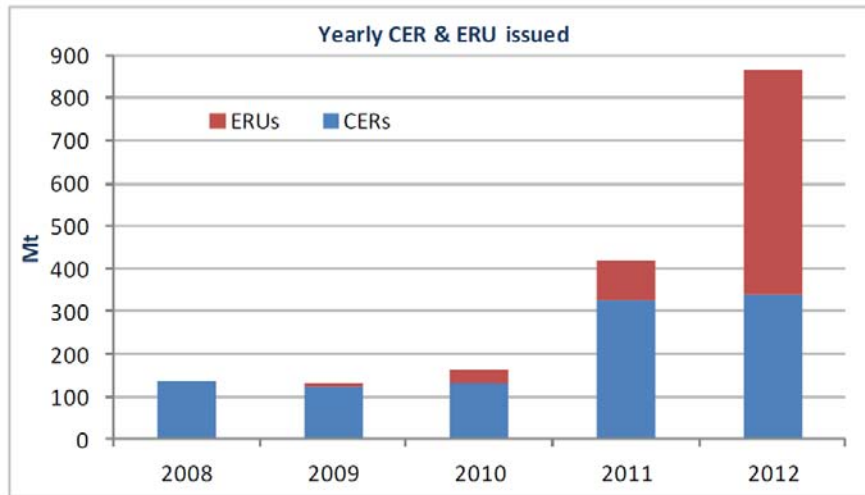
1. Relationship between sCER and EUA prices is broken



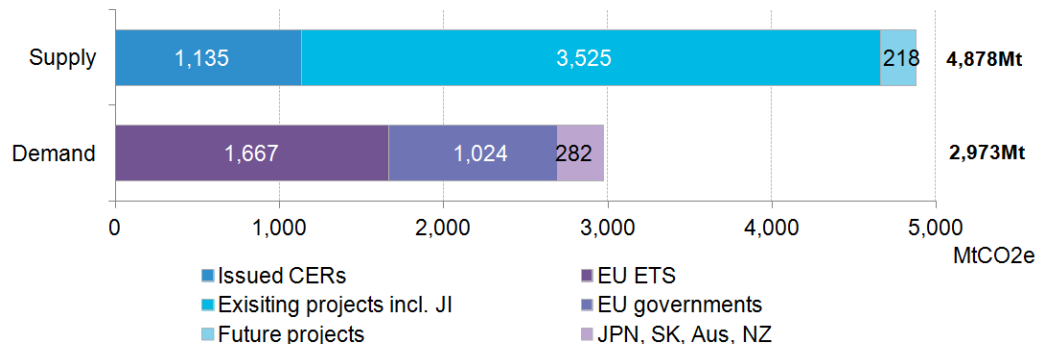
Source: ICE, GDF SUEZ (2013)

- CER prices continued its decline in the first part of December 2012 and stabilized at about 0.40 EUR/t (Dec13) in the second half of December 2012 and into January 2013.
- High CER issuance is expected to continue in the months up to 2012 compliance deadline in April 2013, possibly weighing down further on CER prices.

2. Increased ERU issuance & Oversupplied market



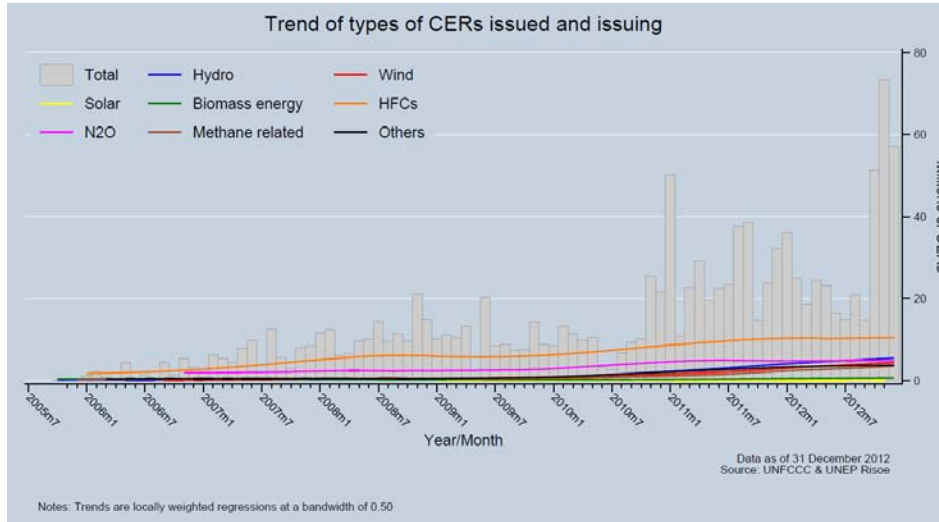
Source: UNFCCC, GDF SUEZ (2013)



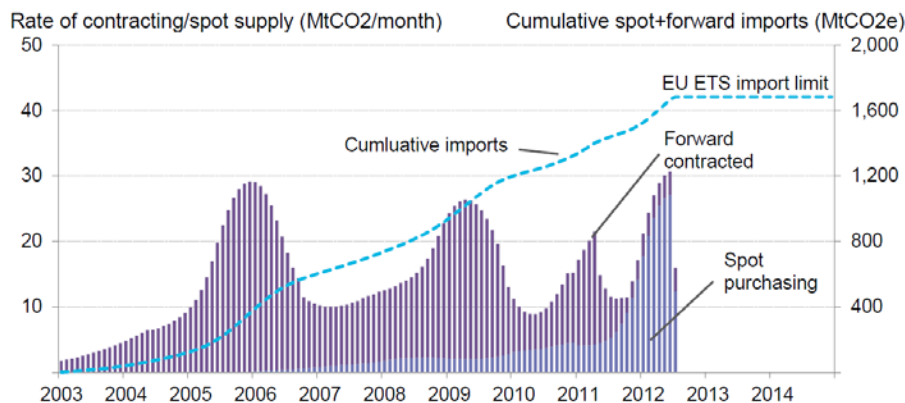
Source: Bloomberg New Energy Finance (2013)

- UNFCCC data shows a total of 1,170 million CERs and 656 million ERUs* have been issued to date. Issuance of ERUs was largely above analysts' estimates.
- *ERU issuance in 2012 was more than 400 million. In 2012 itself, ERUs were issued more than CERs.
- Based on the forecast, the accumulated global supply overhang could surpass > 1 billion credits in 2020.

3. Grey credits & EU ETS import limit



Source: UNFCCC (2013)



Source: Bloomberg New Energy Finance (2013)

Grey credits:

- HFC-23 and N2O adipic acid carbon credits are only eligible until end of EU ETS phase II (30th April 2013).
- The high volume of HFC and N2O (adipic acid) based carbon credits thus expected to come into the market before that.
- This creates strong bearish influences to the CER Dec-12 and March-13 contracts.

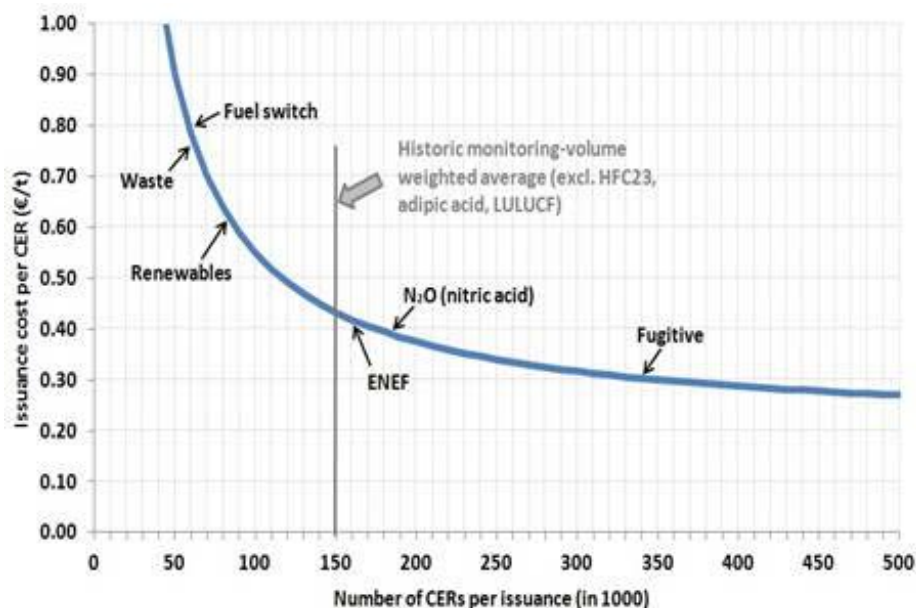
EU ETS Import limit:

- It is estimated that EU ETS import limit is at 1,641 Mt over Phase II & III (2008-2020).
- Expected 950 million CERs and ERUs already used in EU ETS Phase II (2008 – 2012) compliance period.
- Thus, only 750 million credits can be used over the eight years of phase 3, less than 100 million per year.
- With Spot + Forward contracted volumes, the EU ETS import limit could be effectively met.

4. CDM issuance costs to set the price

Cost	Description	Costs	Methodology
Operation costs	Operation of equipment required solely for the purpose of the CDM component of a project. For example, personnel, running costs of the HFC destruction process, etc	€1,500-150,000	Annual costs vary depending on project type and size
Consultant fee	The cost of employing an engineer/consultant to assist with meter calibration, other monitoring activities and preparation of the monitoring report	€11,250-22,500	Costs per verification vary depending on project type and location
Verification fee	DOE fee for preparing and processing the verification report	€15,000-30,000	Costs per verification vary depending on project type and whether the DoE is local or international
UN Issuance fee	The fee is used for administrative expenses of the UNFCCC Executive Board. Also known as Administration Share of Proceeds	€0.15-0.30	\$0.1 per unit for the first 15,000 CERs requested in a calendar year, \$0.2 per any amount in excess of 15,000
UN levy	The levy contributes towards the UNFCCC adaptation fund	2% of CERs for which issuance is requested	-
Brokerage fee	Transaction costs to monetize issued CERs	2-4%	The brokerage fee varies with issuance size and is calculated on the CER market value

Source: Bloomberg New Energy Finance (2013)



Source: Point Carbon (2013)

- Some analysts expected that sCER prices to drop to the cost of verification and issuance costs during the latter part of EU ETS phase III. These unit costs vary depending on issuance volume and project type.
- It is assumed that issuance will be put on hold below until sCER price reaches of around €0.40/CER.



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Thank You
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