

Special topic: post-Kyoto CDM design: the wind of change is blowing!

## On the way to Copenhagen

Prices

CDM

Special Topic

Rising EUA Prices in the Short-Run

Asia, Latin America and Africa: High Growth of CDM Projects Expected

Nuclear Power in the CDM? The market Says No

Sectoral CDM Is seen as a Chance

### PRICES IN THE CARBON MARKET

#### Higher EUA prices expected

In early June, carbon market experts were asked about their short- and long-term expectations on the EU ETS market. The KfW/ZEW CO<sub>2</sub> Indicator summarises the results showing that prices for European Emission Allowances (EUAs) may on average rise up to 15.50 EUR per ton of CO<sub>2</sub> until October 2009 and reach an average price of 17.60 EUR until June 2010.

The upper and lower confidence intervals (CI) shown in Graph 1 and Graph 2 correspond to the price range that covers 95 % of the average price expectations.

For the second period of the European Trading Scheme, the average price of up to 20.90 EUR per ton of CO<sub>2</sub> is expected. During the post-Kyoto period from 2013 onwards, a ton of CO<sub>2</sub> might be traded at the price of 30 EUR (see Graph 1).

In the January 2009 survey, carbon market experts forecasted the EUA price to vary between 11 and 14 EUR per ton of CO<sub>2</sub> in June 2009. Therefore the “six-month ahead” price expectations are slightly higher now than they were in January 2009.

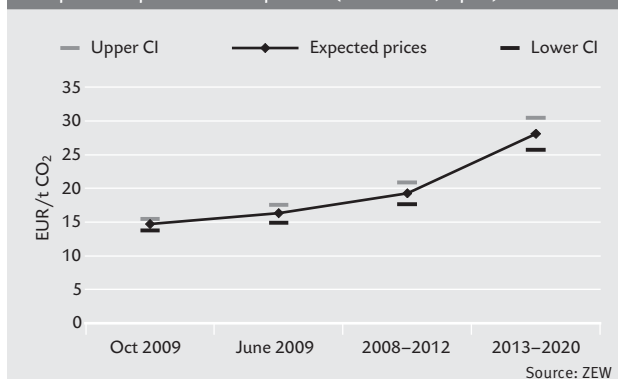
#### CER prices in the eddying of EUAs

Prices for secondary Certified Emission Reductions (sCERs) are expected to range between 11.30 and 12.80 EUR per ton CO<sub>2</sub> on average until October 2009 and may rise up to nearly 15 EUR until June 2010 (Graph 2).

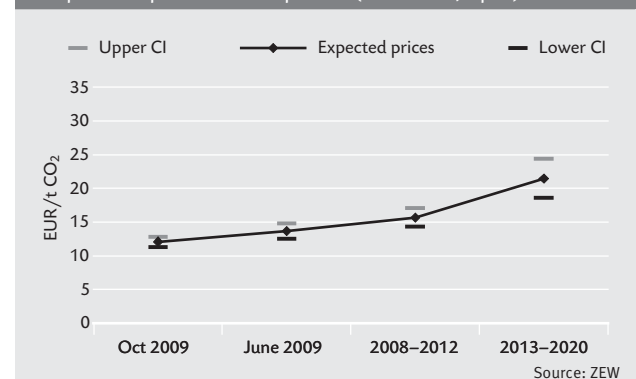
The six month price expectations are about two Euro higher than they were in January 2009. In contrast, experts forecast slightly lower sCER prices in the long-run now than in the January 2009 survey.

Experts seem to be less optimistic for the CDM than in January when sCER prices during the second period of the EU ETS were expected to range between 16 and 19 EUR and averaging up to 26 EUR from 2013 onwards.

Graph 1: Expected EUA prices (BlueNext, spot)



Graph 2: Expected sCER prices (BlueNext, spot)

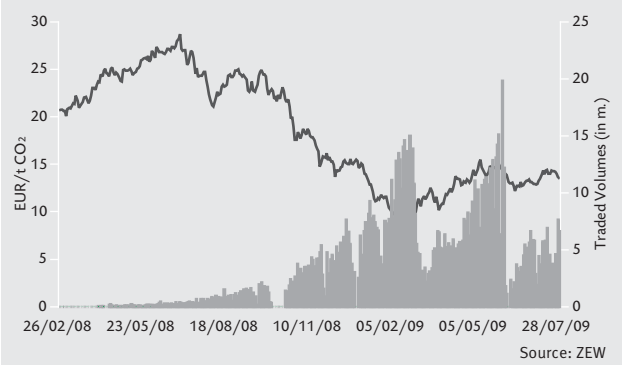


HISTORICAL PRICES AND VOLUMES

Rising confidence, rising prices?

Compared to early 2009, the spot prices for BlueNext EUAs have increased moderately in the second quarter, varying between 12 and 15 EUR (Graph 3). Remarkably, the trading volume has strongly increased compared to the 2008 level, albeit a pronounced volatility in the trading volume can be observed. Since June 2008, EUA prices have shown a downward trend due to the financial crisis and falling industrial production. Prices reached a minimum of less than 8 EUR on February 2, 2009 but increased again afterwards.

Graph 3: Prices and volumes (BlueNext EUA spot)



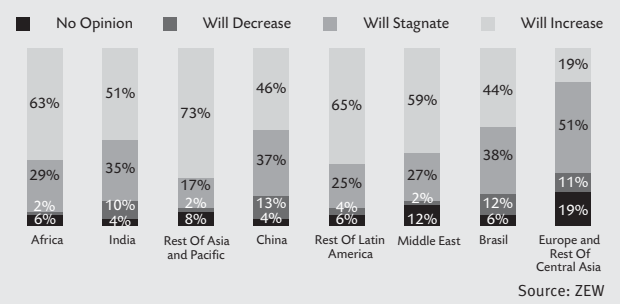
CDM & JI

CDM regions: small is beautiful!

Presently, China and India are the most attractive CDM regions. However, the recent KfW/ZEW CO<sub>2</sub> survey shows that regions next to the big players China and India are expected to have the highest growth potential within the CDM. On the top of the list is the Asia and Pacific region (without China and India), 73 % of all respondents estimate that CDM activities in this region will increase. Asia is followed by Latin America (without Brazil), Africa and the Middle East (Graph 4).

India and China are only ranked fifth and sixth out of eight. About 50 % of the respondents predict that CDM activities will increase in these countries, while a growing number expects the “big two” to have a stagnating or even decreasing share of CDM activities in the future.

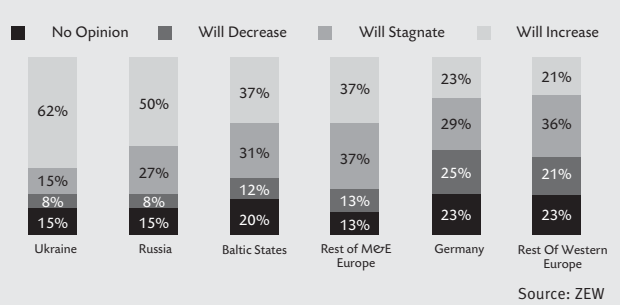
Graph 4: Future development of CDM



Jl: fast asleep?

In the “Joint Implementation” (JI) mechanism, the Ukraine, Russia and the Baltic States are expected to host an increasing number of projects. Carbon market experts estimate that all other JI regions will stagnate or will even have a decreasing share of JI projects in the future (Graph 5).

Graph 5: Future development of JI

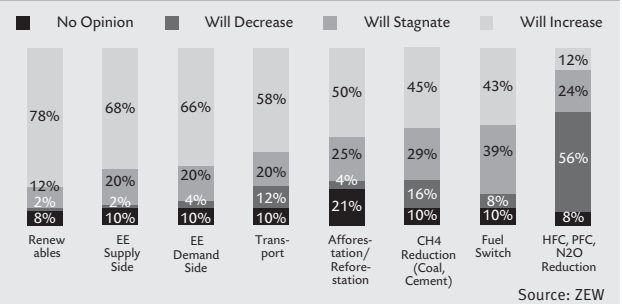


CDM project types: RET still on top

Renewable energy technologies (RET) are still seen as the most attractive technology for future CDM projects. RET is followed by Energy Efficiency projects on the demand and supply side, which are assessed as project types with very high future potentials.

The transport sector, Afforestation/Reforestation projects and CH<sub>4</sub> reduction are expected to increase slightly. Fuel Switch projects will, most likely, stagnate. In the case of HFC, PFC & N<sub>2</sub>O reduction projects there is striking evidence that these project types will have a decreasing share within the CDM and JI (Graph 6).

Graph 6: Future development of CDM-project types



## SPECIAL TOPIC

# Post-Kyoto CDM Design – The Wind of Change is Blowing!

## The state of the CDM

One of the most central issues of the Copenhagen Climate Conference in December will be the post-Kyoto design of the Clean Development Mechanism (CDM). A broad range of suggestions are currently on the table on how to modify or expand the CDM. The KfW/ZEW CO<sub>2</sub> Panel has seized the opportunity to ask the market participants about their expectations for the future of the CDM.

The respondents strongly agreed that there is a need to modify the existing CDM in line with post-2012 emission reduction requirements, but there is also a consensus that the CDM is useful for companies within the EU ETS to meet the binding emission targets in a cost-efficient manner. Putting the pieces together this translates into: we need the CDM, but we need a change too.

According to the respondents, it is very important that CDM credits generated in the 2008-2012 period should be transferable into allowances from 2013 on.

The majority of experts agree that the CDM assists developing countries to cope with climate change and to realise sustainable development efficiently. However, a fraction of 25 % disagrees with this statement. And 60 % of respondents are not of the opinion that “the CDM procedures such as validation and verification of projects are transparent”.

Hence, the CDM is seen as a useful instrument in global emission trading, but the administration of the CDM, namely the UNFCCC and the CDM Executive Board, are subject to criticism. Most of the comments of survey participants referred to the administration of the CDM and requested a more professional, effective and transparent organisational structure.

## New ways within the CDM? Possible changes after 2012

Allowing new activities within the CDM framework is an appealing option to improve CDM acceptance and to introduce new carbon-saving technologies and mitigation incentives in developing countries. The position of KfW/ZEW CO<sub>2</sub> Panel respondents on the inclusion of new technologies or policies in a post-2012 CDM framework can be summarised as follows.

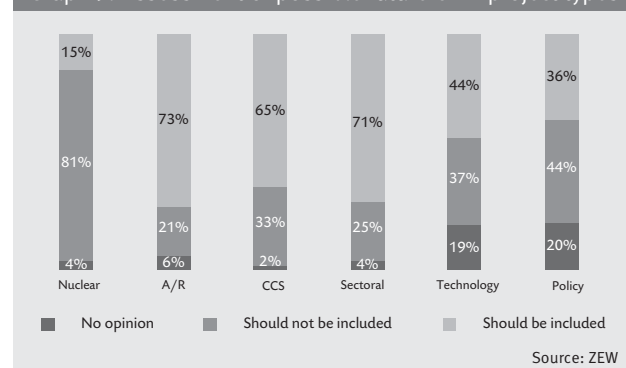
**Nuclear Power** is considered as a carbon saving energy production technology, though it is associated with other risks. A vast majority of 80 % agrees that Nuclear Power should not be included within the post-2012 CDM and that no CERs should be issued to nuclear power generation projects.

**Carbon Capture and Storage (CCS)** offers the opportunity to store carbon emissions subterraneously and make it inof-

fensive for the atmosphere. But CCS is still in the development phase and legal regulations to deal with potential risks are lagging behind. However, 65 % of the respondents see a bright future for CCS and think it should be a part of the post-Kyoto CDM framework.

**Afforestation and Reforestation (A/R)** projects were criticised because of the difficulty to prove actual greenhouse gas (GHG) reduction and “additionality”. Presently, only temporary CERs are issued to A/R projects. The majority of respondents (73 %) is of the opinion that A/R projects should be part of a CDM framework after 2012.

Graph 7: Assessment of possible future CDM project types



**Sectoral CDM** is an instrument to set incentives for branches in non-ETS covered countries to reduce their greenhouse gas emissions. The idea is that if a sector reduces its emissions compared to a specific benchmark, they can sell these avoided emissions (up to the benchmark) to companies in the EU ETS. There is no agreement yet how such a benchmark could be set. A “rolling benchmark” solution could be possible in which the benchmark adjusts every few years to the lower emission level of a branch. A vast majority of 71 % see Sectoral CDM as a desirable CDM approach and say that such projects should be credited without additional checks. The respondents further indicated that industries like cement or steel production are most appropriate for a Sectoral CDM approach.

**Technology CDM** follows the idea that the transfer of green technology could be credited with CERs (without additional checks). 44 % of respondents consider it reasonable to include Technology CDM. However, a significant minority of 37 % disapproves, doubting the usefulness of technology CDM. The remaining 19 % indicate that they are undecided about the topic. If Technology CDM would be allowed, the respondents favour renewable energy technologies to be eligible for CDM credits.

Policy CDM implies that developing countries could sell credits to the EU ETS if they go beyond “baseline emissions” via GHG reduction policies or measures. A fraction of 44 % of respondents does not regard Policy CDM as an efficient instrument to reduce GHG, but 36 % say Policy CDM should be a part of the post-Kyoto CDM. The remaining 20 % are undecided about the

topic. Suggestions made by the respondents like a “crediting of zero-emission development concept for cities and regions” reflect current discussions on the reform of the Kyoto-mechanisms and should be further examined by policy makers. Other responses though warn that Policy CDM could, most dramatically expressed, “generate very perverse incentives”.

## ODDS AND ENDS

### CITL publishes CER data

In June 2009, the Community Independent Transaction Log (CITL) published data on the usage of CERs and ERUs within the EU ETS.

In 2008, 3.9 % of Emission Allowances in the EU came from CDM projects. ERUs were only used in the UK (0.02 % of UK’s verified emissions). The table below shows the usage of CERs in the European countries.

### USA: first steps to emission trading

On June 26, 2009 the American Clean Energy and Security Act (ACES) passed the House of Representatives. The Waxman-Markey comprehensive energy bill includes a cap-and-trade GHG reduction plan, a GHG reduction target of 17 % until 2020 (compared to 2005) and supports new technologies. The planned GHG reduction of 17 % compared to 2005 equals a reduction of about 4 % with respect to 1990.

### Australian trading system starts with delay

The start of the Australian Emission Trading Scheme that was planned for 2010 is now scheduled for 2011. The decision was made by Prime Minister Kevin Rudd in view of the global economic crisis. Further, a cut of the carbon price from about 40 AUD to 10 AUD for the first year of the scheme is planned. Australia already has committed to a GHG reduction of up to 15 % compared to 2000 and possibly is willing to increase the reduction target to 25 %.

### Japan sets emission target

Japans government recently announced an emission reduction target of 15 % until 2020 compared to 2005. This implies a GHG reduction of about 8 % compared to 1990.

### G8 agree on 2 degree global warming

G8 leaders and representatives from India, China, Brazil and South Africa recently agreed at their meeting in L’Aquila (Italy) that global warming should stay below two degree Celsius until 2100, but failed to set a concrete reduction target.

lorem ipsum	
Country	% CER/verified emissions
Spain	11.18
Slovenia	9.00
Slovak Republic	8.30
Lithuania	7.64
Portugal	6.64
Hungary	6.40
Germany	5.02
France	4.18
Luxembourg	4.15
Latvia	3.76
Ireland	3.50
Italy	3.36
Austria	3.34
Finland	3.17
Sweden	2.96
Belgium	2.79
Poland	2.39
Netherland	2.38
Czech Republic	2.30
Great Britain	1.74
Denmark	1.41
Romania	1.40
Norway	1.07
Greece	0.28

Source: <http://ec.europa.eu/environment/ets/>

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BANKENGRUPPE

IMPRESSUM

#### About the KfW/ZEW CO<sub>2</sub> Indicator:

The KfW/ZEW CO<sub>2</sub> Indicator is a cooperative project of the KfW Bankengruppe and the Centre for European Economic Research (ZEW). With the KfW/ZEW CO<sub>2</sub> Indicator, carbon market experts are surveyed quarterly on the development of price expectations and on issues which will determine the shape of the future carbon market. The publications of the KfW/ZEW CO<sub>2</sub> Panel are available on: [www.zew.eu/co2panel](http://www.zew.eu/co2panel)

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