

**EURELECTRIC RESPONSE TO COMMISSION REQUEST FOR
CLARIFICATION**

22 JANUARY 2010

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Overview of Price risk/Volatility

The Commission's request for clarification recognises the rationale for early auctions and notes the risk of "regulatory-induced and undue volatility by means of a temporary price increase with a later decline once the auctioning of allowances begins". This is precisely the concern of EURELECTRIC and carries the consequences of avoidable price increases for electricity consumers at an economically sensitive time and the risk of a further, potentially fatal, undermining of the credibility of the cap and trade scheme.

The request notes also that "an early start with too high a volume auctioned may give rise to a price decrease, if this dilutes temporarily the structural degree of scarcity over phase 3". By this it is assumed is meant that, in the current market psychology, all compliance operators would ignore their naturally short (by definition) long-term position and either sell or fail to buy allowances, thus depressing the price.

EURELECTRIC considers that the risk of occurrence of either of the above two outcomes is not symmetrical and that the potential risk of a price fall in the event of early auction is much lower than a that of a price spike due to a shortage of allowances. The primary reason for this is that, unlike in 2007/08, provision is made for full banking between Phase 2 and Phase 3 and, since phase 3 sees a significant reduction in allowances available, a short position for compliance operators over the combined period of Phases 2 and 3 is evident. Consequently a collapse in prices would not occur. However, a (temporary) shortfall in the availability of allowances will arise related to the planned optimum timeframe to establish the auction platform(s) and the non-availability of the Single Community Register. This will induce a price increase. The extent of this increase will be dependent on the scale of the shortfall and the risk premium sought by those offering substitute instruments.

On a more fundamental point, the EU has determined that a market approach be adopted towards the delivery of the emissions reduction target for operators in the ETS. So long as the target continues to be delivered (as it has in the past) then the price at any point in time is of relatively incidental consequence. Efforts to impose an "artificial" cap on the price (a floor or ceiling) undermine the efficiency of the market tool and appear to reject the principle on which the system is based i.e. that operators carry the risk for compliance. It also appears to ignore the point that operators take fundamentally different perspectives on the value of a carbon allowance when considering day-to-day operations and long-term plant investments (as is the case with fuel and other inputs to capital investment decisions).

An additional risk has now also arisen. The failure to deliver an international binding agreement on climate mitigation and adaptation at COP15 has increased policy uncertainty and is raising concerns for the future of the ETS, in particular post 2020.

PART A – On estimated hedging needs;

0 *Details of the estimate of the 1.2 to 1.4 billion allowances: How have different regional electricity markets been assessed? What are the detailed assumptions for hedging strategies in the various regional markets? How have these assumptions been checked with actual trading strategies of your members? What are the assumptions as regards the carbon price and fuel prices?*

These questions are repeated in the more detailed subsequent questions and answers are provided within the following responses.

1. *How do the figures of 1.2 to 1.4 billion in the 30 November 2009 open letter relate to the 1.3 billion referred to in EURELECTRIC's position paper of October 2009? What explains the difference and the range?*

The estimate of 1.2 to 1.4 billion allowances was derived from an analysis of information provided to EURELECTRIC by members concerning their current practices in relation to closing out forward power contracts.

Power contract practices in a range of regional electricity markets were evaluated and an adjustment was made to incorporate developing trends in forward power contracts across the EU (See Table 1 and 2). This analysis provides the basic input required to estimate the overall demand for allowances to close out forward power contracts. The future demand data is not based on a detailed plant-by-plant analysis across all 27 member states nor do we believe that such an analysis (were operators willing to release commercial information) would provide any greater degree of accuracy. The Commission would be aware of estimates provided by other analysts that concur with these estimates. The range indicates an estimated margin of error concerning the derived data. It should be noted the data does not refer to 2013 alone but to the cumulative gross need in advance of 2013 for allowances needed to close out power contracts over the period 2013-2015. The Commission should be aware that EURELECTRIC is legally limited in the amount of data it can collect in this context.

Table 1 **Survey results: average volume (%) of electricity output hedged in advance (of year n)**

COUNTRY/REGIONAL MARKET	Year				Total
	n-3	n-2	n-1	n	
Nordpool/Nordic	20	25	25	30	100
UK	10	35	50	5	100
Ireland (Single Electricity Market)	0	5	80	15	100
Central East	5	5	75	15	100
Central West	35	40	20	5	100
Iberian	10	30	40	20	100
EU Weighted	18	28	32	21	99
EU "average"	20	20	40	20	100

The 1.26 billion (1.3 corrected to 1 decimal place) allowance figure contained in EURELECTRIC's October 2009 paper was the value determined applying the estimated forward needs excluding any error margins.

Table 2 EURELECTRIC Survey Results

Question		EU	BE	NL	DK	FI	FI	GR	PL	ES	PT	DE		UK	IRL
1. To which Market Region do the responses refer?				Dutch market Overall European EUA market	Nord-pool	Nord-pool	Nord-pool	Greek market	Polish Market (Central-East)	Spain	Iberia (SW Region)	Germany	UK	UK	SEM
	MS Total Gen (2006) (TWh)	3354	86	98	48	82	82	61	162	300	49	637	398	398	37
2. What is the size of this market (TWh p.a. sales approx.)?	Sample size	1996	86	80	375	0	0	55	118	0	300	560	0	400	22
3. Please quantify, to the best of your knowledge, current market practice re forward/future electricity contracts:	% Spot (year 0)			5		30	30	100	15	55	20	5	5	5	15
	% 1 year ahead			40		20	30	0	75	35	40	20	45	50	80
	% 2 years ahead			35		30	20	0	5	10	30	40	35	35	5
	% 3+ years ahead			20		20	20	0	5	0	10	35	15	10	0
4. Please indicate standard practice regarding hedging requirements for electricity forward/futures contracts?	100% closed		yes	yes		yes	close to 100%				yes	x	x	x	
	<100% closed							x	x	x					x
	(If <100% how much?)								30						85%
5. In the absence of any option to auction futures on existing exchanges, please indicate your choice of an alternative in order of preference by ranking them, 1	Spot auction of future vintage EUAs		3	1	?	2	2		2	2	3	3	3	*	3
	Standard exchange-based futures product (not or only partially backed by physical EUAs)		2	3	1	1	1		1	1	2	2	2	**	1

Question		EU	BE	NL	DK	FI	FI	GR	PL	ES	PT	DE	UK	IRL	
being most preferred (e.g. 1, 2, 3)?	Specialised new exchange for EUA auctions		1	2	?	3	3	1	3	3	1	1	1	***	2
	Do nothing		4	4		4				4	4			****	4
6. Please indicate your view as to the likely relative costs under each option by ranking them, 1 being lowest (e.g. 1,2,3 or 1=, 1=, 3)	Exchange based futures auction		1	1	1	2	3		3	3	1	1	1	1	1
	Spot auction of future vintage EUAs		3	2	3	3	2		2	2	3	3	3	2	2
	Standard exchange-based futures product (not or only partially backed by physical EUAs)		2	3	2	1	1		1	1	2	2	2	3	3

* Whilst this would be an option if futures are not available it is not clear that it is possible under CITL timescale.

** This would only be an option if there is sufficient confidence that these products would deliver allowances on due delivery date and would be available with sufficient volume

*** Commission would appear to have ruled out auction of forwards

**** Whilst this is least preferred option likely to end up as default.

2. *Please provide the underpinnings of the claim that roughly 70% of 1.25 billion tonnes of emissions would stem from electricity companies with hedging policies in place.*

EURELECTRIC is aware that not all operators engage in active risk management. Inspection of the CITL data suggests that companies that pursue active hedging policies represented approximately 70% of emissions in 2008. This is a conservative estimate taken so as to avoid over-estimating hedging needs. This factor was applied to the total annual projected emissions from power plant for the period 2013-2015 (1.26 billion tonnes p.a.) to estimate the quantum required to close-out open power contract positions resulting in a value of 0.9 billion tonnes p.a.

2.1 *Please explain in detail, qualitatively and quantitatively, why ongoing liberalisation of the energy sector would increase annual hedging from 900 million to 1.1 billion allowances.*

The 0.9 billion tonnes of emissions estimated by EURELECTRIC as the annual quantum of emissions from utilities engaged in active risk management is a conservative value. With progressive market development more companies will engage in risk minimisation strategies involving forward power contracts and companies currently engaged in this strategy to a modest degree will potentially increase their volumes for forward contracts. Clearly it is not possible to accurately predict the extent of shift towards this behaviour by utilities. Equally, it is evident that companies will move towards the “average” behaviour in a progressive manner from a current position trading just 1 year ahead ultimately to a position with trading 3 years ahead. However, to estimate the likely impact of more liberalisation, EURELECTRIC’s October paper indicated that if the “average” risk minimisation strategy was to be adopted by utilities representing and assumed 85% of total emissions (rather than the conservative estimate of 70% used in the analysis) then the annual requirement would increase to 1.1 billion allowances (1.26 x 0.85).

2.2 *How has the regional split for the assumption of average hedging patterns (20% in year n-3, 20% in year n-2, 40% in year n-1) been established? According to the position paper, this has been based on a survey of EURELECTRIC members. Who carried out the survey, what were the precise questions, who was invited to provide information and who responded? How have missing answers been assessed? Please provide the precise definitions of the regions "central west" and "central east". What are the weights for the different regions and how have these weights been established?*

In our October 2009 paper, based on the estimate above of 0.9 billion tonnes per annum needed by utilities engaged in active hedging, EURELECTRIC estimated that a quantum of approximately 1.3 billion allowances would be required prior to 2013 to ensure close-out of power contracts over the period 2013-2015 (see Table 3). That Paper also provided the annual estimated quantities for each of the years 2010 (180m), 2011 (360m) and 2012 (720m). Tables 1 and 2 above show the basis on which these needs were estimated (20% in year n-3, 20% in year n-2, 40% in year n-1). This split differs from that which would apply if a weighted average were to be taken of the regional practices based on approximate market size (TWh). The weighted average would suggest a requirement of 20% in year n-3, 30% in year n-2 and 30% in year n-1. Here again, EURELECTRIC has adopted a conservative approach in proposing the split presented in the October 2009 paper, an approach confirmed by other commentators.

Table 3 Annual allowance requirement to meet forward power contracts

	Hedged in 2010	Hedged in 2011	Hedged in 2012	Total
2013 output	180	180	360	720
2014 output		180	180	360
2015 output			180	180
Total	180	360	720	1260

As noted, the results of EURELECTRIC’s survey have been presented above. The survey was conducted by EURELECTRIC’s Secretariat. All members were invited to participate on a voluntary basis and provided answers reflecting the market region in which they operated, however, effort was taken to ensure all key market regions were represented to limit bias in the results. The specific questions are listed in Table 2 and reflect the limitations on an Association such as EURELECTRIC in seeking such information from members. The weighted results reflect relative generation volumes in the markets covered. As noted above, the weighted values were adjusted further to provide a more conservative prediction.

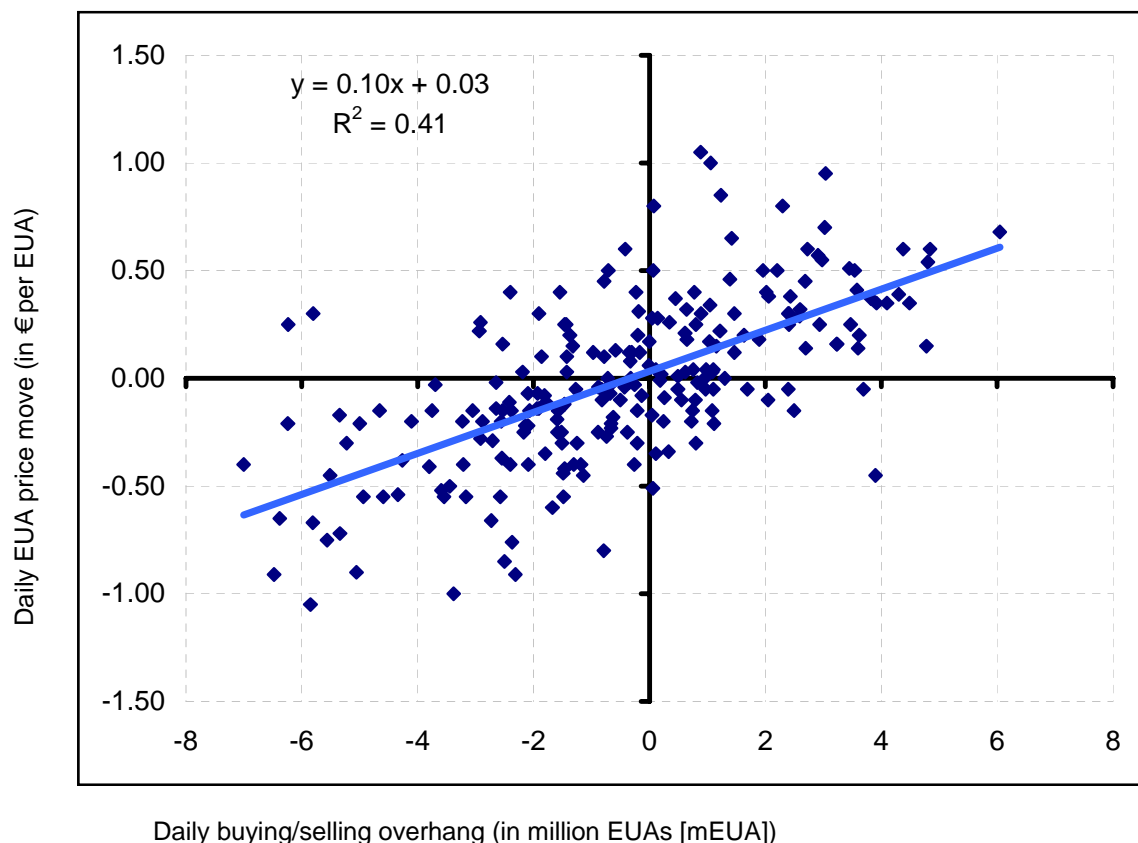
2.2.a Indicate what the underlying carbon price is for the quantified hedging needs?

We regret we do not fully understand the query in relation to carbon price and hedging needs. Hedging is conducted to minimise the risk arising from the variability in the price of carbon in the context of an industry where supply and demand for electricity must be kept in balance on a continuous basis. It is done precisely because we cannot foretell the price on the day or hour a specific power contract is delivered. Future demand for allowances is primarily determined by economic activity, weather and underlying fuel prices. The available supply of allowances determines their price. While some operational adjustment can be made on the demand side in terms of production options on the day in question, the scope is limited given the structure of the existing available generation portfolio. In this context, the price is a consequence of the specific supply and demand and not a driver. The absolute price is of very limited relevance in this context. However, long-term trends in carbon prices are (and have been since the initial years of this century) a major factor in determining the direction of future capital investments. Such analysis is not related to factors that influence short-term operational decision-making.

2.2.b By how many million tonnes hedging needs would decline (increase) for every 1€ increase (fall) in the carbon price?

RWEST has undertaken some basic regression analysis on behalf of EURELECTRIC that seeks to establish a relationship between supply and demand in the carbon market and the price of allowances (See Figure 1).

Figure 1 The impact of buyers and sellers on daily EUA price moves over the course of 2009



While recognising that this presents a relatively simple model for the supply/demand : price relationship it nonetheless gives an assessment that can be considered reasonably valid (We are not aware that an anymore substantive model exists and are reasonably confident that if one did it would not produce a dramatically different answer). The model suggests that the price sensitivity of net demand equates to €0.10 per million EUA based on 2009 data.

EURELECTRIC's projection of the cumulative net requirement in 2013 of 250 - 650 million allowances (mean of 450 million) is based on the difference between our estimated need (1.2 - 1.4 billion) and various conservative projections of the market length in Phase 2 (750 - 950 million). **It is important to recognise that this estimate does not consider the market behaviour of compliance operators. The behaviour of such operators will be strongly directed towards not releasing any short-term length in the context of their naturally short position to 2020.**

Quantum of Phase 3 allowances required in 2011 and 2012

Thus given:

- The projected need for a total average volume of some 540 million allowances by end 2011 and a further 720 million by the end of 2012 to meet forward power contracts (Table 3 – taken from EURELECTRIC's paper of October 2009)
- Full utilisation of the provision for CERs
- A consequent average length in the market of 850 million allowances

Then an average cumulative net requirement of 410 million allowances is derived.

However, the expected market behaviour by industrial compliance operators will be to retain a significant proportion (at least 50% or approximately 300 million allowances) of their long position. It is also likely that a proportion of the CER provision will be carried forward to Phase 3. Ignoring any CER carry-forward and assuming the above 50% retention of surplus allowances by industrial operators then the net cumulative requirement will increase from an average 410 million to 710 million allowances. Under these conservative assumptions EURELECTRIC would propose some 280 million allowances should be made available in 2011 with a further 430 million in 2012.

PART B.1 – on RWE’s slides

The retailed replies given below in relation to the questions concerning the RWE slides have been prepared by RWE Supply & Trading (RWEST).

0 "Slide 3: industrial length in the second trading period of around 600 million EUAs and under allocation to the power sector of around 1260 EUAs"

The calculation is based on in-depth analysis of Verified Emissions and EUA allocation data as published by the European Commission. This data is available for download from the Community Independent Transaction Log (<http://ec.europa.eu/environment/ets/allocationComplianceMgt.do>). The details of this analysis and the forecasting for the years 2009 to 2012 are proprietary information of RWE Supply & Trading. However, all analysts agree that the combustion sector is forced to procure additional allowances over the course of Phase II of the EU ETS and that the industrial sector has an excess allowances. The economic downturn of the last 18 months has increased the long position of industrial sellers; the combustion sector did benefit with a smaller short position compared to forecasts made 18 months ago.

Expectations to the end of 2012: Based on its in-house forecast of summer 2009, RWEST expects the industrial Sector emission in 2012 to contract by -0.3% per annum (pa) compared to 2008. This is mainly due to the impact of the recession on the auto, construction and manufacturing industry across the EU. The power sector on the other hand is expected to see growth in emissions of around 1% pa to 2012.

Table 4 Phase 2 EU ETS Balance (before auctioning, NER & CER)

Phase 2 (in million tonnes CO ₂ e / EUAs)	Verified Emissions + Forecast requirements	Free Allocation to existing installations	Net length (+ve) / short (-ve)	Average growth in Emissions
Industrial Sector	2,795	3,395	600	-0.3%
Combustion Sector	7,532	6,272	-1,260	1.0%
Total	10,322	9,667	-660	0.7%

Source: RWE Supply & Trading

As noted in PART A, the important element of the RWEST paper on early auctioning is not the actual split between all industrial sectors and the combustion sector but the forecast overall long / short position of all installations covered by the EU ETS.(see Table 5). This shows a short position ranging from -455 million to -942 million allowances from two respected Carbon Analysts. The numbers are calculated for EUAs only and therefore do not take CER/ERU offsets into account.

Table 5 Phase 2 EU ETS Balance - peer group comparison (before auctioning, NER & CER)

Phase 2 (in million tonnes CO ₂ e / EUAs)	Verified Emissions + Forecast requirements	Free Allocation to existing installations	Net length (+ve) / short (-ve)	Average growth in Emissions
Deutsche Bank (DB)	10,317	9,862	-455	-0.50%
Société Générale	10,763	9,821	-942	3.52%

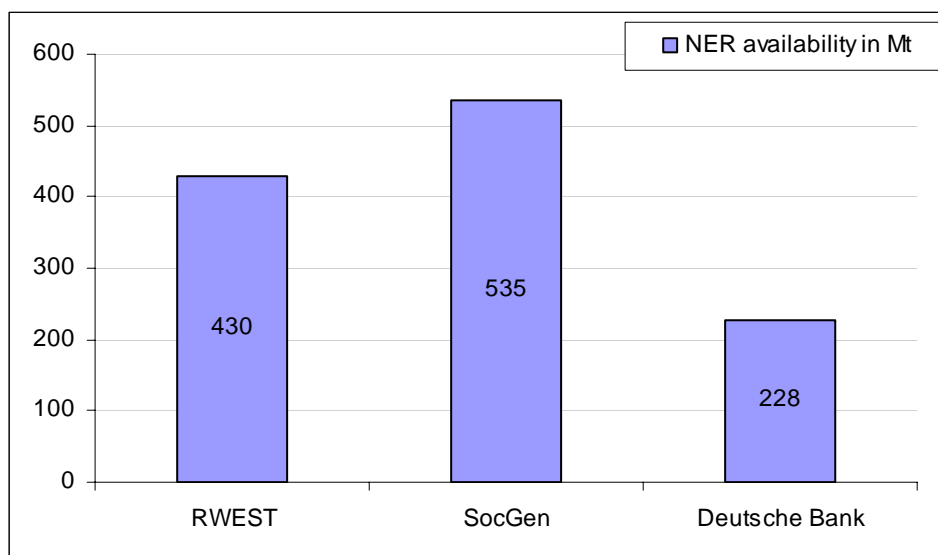
Source: Deutsche Bank Jun 2009, Société Générale Nov 2009

1 Slide 4: the forecast of 430 million EUAs used from 2nd phase NERs: why is it 100 million higher than most analysts forecast?

There is some debate amongst Carbon Analysts which share of the New Entry Reserve (NER) will come to market at what point during Phase 2 of the EU ETS. There is agreement that the total NER reserve is in the order of 540-570Mt, the range being explained by the difference in scope of the calculations (i.e. including Aviation, Norway, etc).

RWEST's estimate of 430Mt assumes that not all of the New Entry Reserve will come to market in good time as governments will need to hold back some of the reserve for late applicants. It is expected that, due to the recession, the NER will not be oversubscribed and therefore the residual might get auctioned in the later parts of Phase 2.

Figure 2 Estimated Phase 2 NER availability



Source: Deutsche Bank Jun 2009 .Société Générale Nov 2009, RWEST

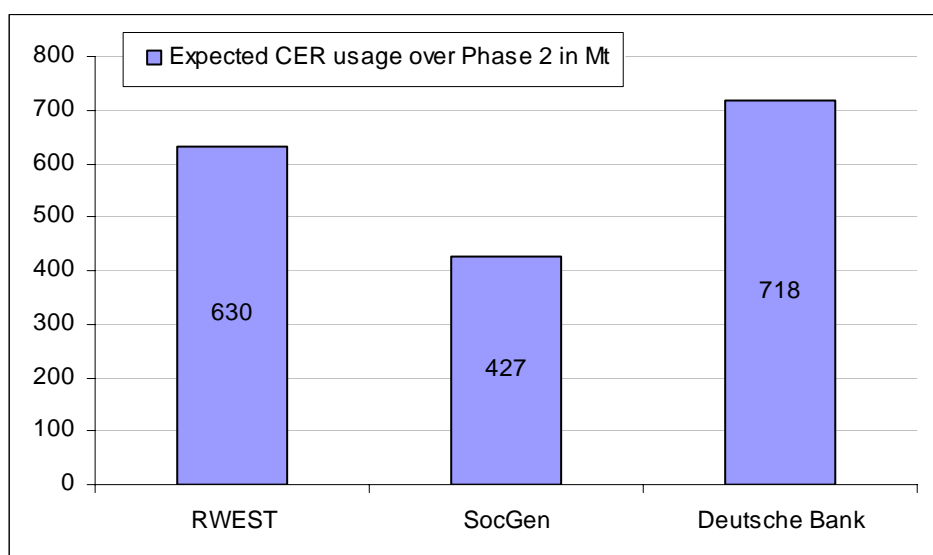
2 Slide 4: usage rate of CERs of 630 million

Forecasting the supply and demand for the EU ETS requires various assumptions on the different elements that impact this balance. Besides estimating future demand from industries and the combustion sector, the supply side offers various unknowns that need to be forecasted in order to make an overall statement on system length. Besides an assumption on the availability of the New Entry Reserve, the usage of offsets from CDM and JI projects (both referred to as CERs here), and – to a lesser extent – the release of volumes that have not yet been allocated.

Two aspects are important for the usage of CERs: First, a sufficient number of issued CER needs to be available for compliance in Europe. Second, installations with CER redemption rights make actual use of carbon offsets than just submit EUAs for compliance.

It is fair to say that the expectations on CER availability have been downgraded by most Carbon Analysts over the years. Figure 3 shows the expected CER usage in Phase 2 as forecasted by different Analysts taking both aspects into account.

Figure 3 Expected CER usage in Phase 2 of the EUETS



Source: Deutsche Bank Jun 2009, Société Générale Nov 2009, RWEST

3 Slide 4: average growth of emissions of 0.7% in total CO2 emissions till 2012

There is general consensus amongst Carbon Analysts that Verified Emissions for 2008 are approximately 2120 Mt. No exact number can be provided as some data for 2008 is still missing. Verified Emissions for 2009 will likely be lower as almost the full year was impacted by effects of the recession. However, in common with other Carbon Analyst RWEST does expect an economic recovery over the years 2010 to 2012 which will also result in increased emissions. Based on the summer 2009 outlook RWEST expects 2012 Verified Emissions in the order of 2180 Mt. Compared with the number for 2008 an annual growth rate of 0.7% can be calculated.

Table 6 Estimated Phase 2 Emissions

Year	2008	2012est	Annual Growth Rate
Actual & expected Verified Emission [Mt]	2120	2180	0.7%

4 *Slide 4: assumptions as regards economic growth*

All forecasts for the EU ETS are based on the assumption on economic growth as regularly published by the European Commission and the International Monetary Fund.

Table 7 EU 27 GDP Forecasts

Year	2009	2010	2011	2012
IMF	-4.19%	0.45%	1.77%	2.25%
European Commission	-4.0%	0.75%	1.5%	

Source: IMF World Economic Outlook Database, October 2009; EC: <http://europa.eu/rapid/pressReleasesAction.do?reference=IP/09/1663>

IMF and EU commission GDP forecast are quiet consistent in their view that the EU is faced with at least 2 years of low growth. This reinforces the view of low industrial emissions.

5. *Slide 4: detailed explanation of the calculation, how it results in a net length of 740 million EUAs in phase 2 potentially to be banked into phase 3."*

The net length of 740 million tonnes CO₂e is calculated on the basis of the previous assumptions on the constituting components.

Table 8 RWEST's expected Phase 2 supply & demand balance

	Phase 2 (Mt)	Balance
<i>a</i>	Industrial Sector	600
<i>b</i>	Combustion Sector	-1260
<i>c</i>	Net Length / Short (a+b)	-660
<i>d</i>	NER	430
<i>e</i>	Phase 2 Auctions	340
<i>f</i>	Balance w/o CER (c+d+e)	110
<i>g</i>	CER	630
	Balance incl CER (f+g)	740

For reference the comparable forecasts of Deutsche Bank and Société Générale are provided in Figures 4 and 5. Figure 6 compares the 'Balances including CER' from the four sources.

Figure 4 Deutsche Bank's Phase 2 supply & demand forecast (in Mt)

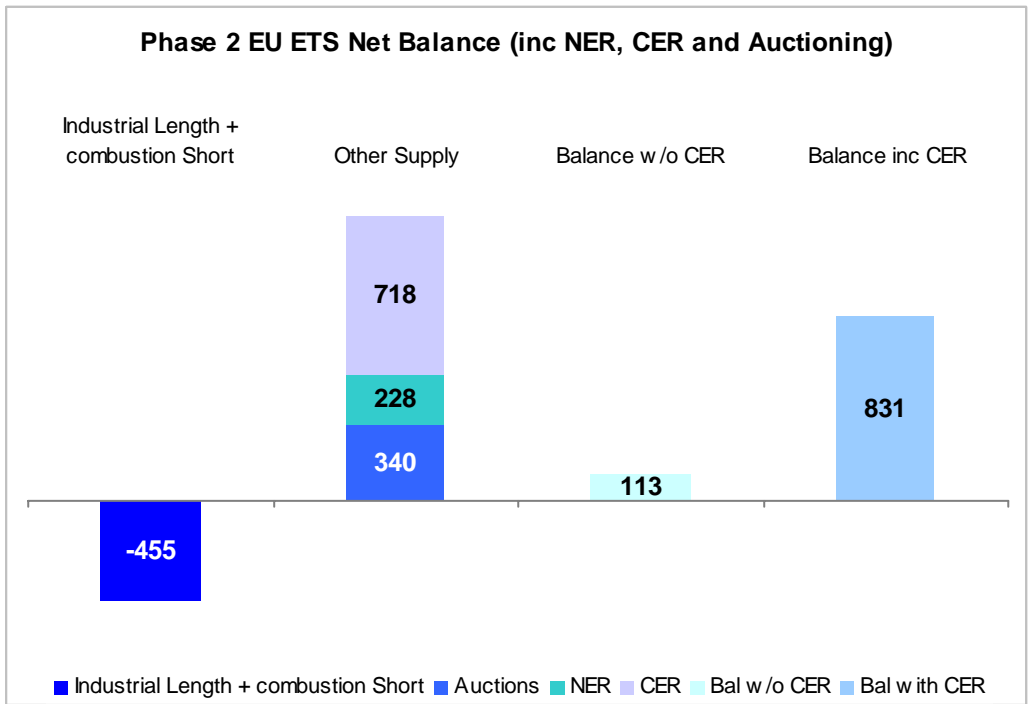


Figure 5 Société Générale's Phase 2 supply & demand forecast (in Mt)

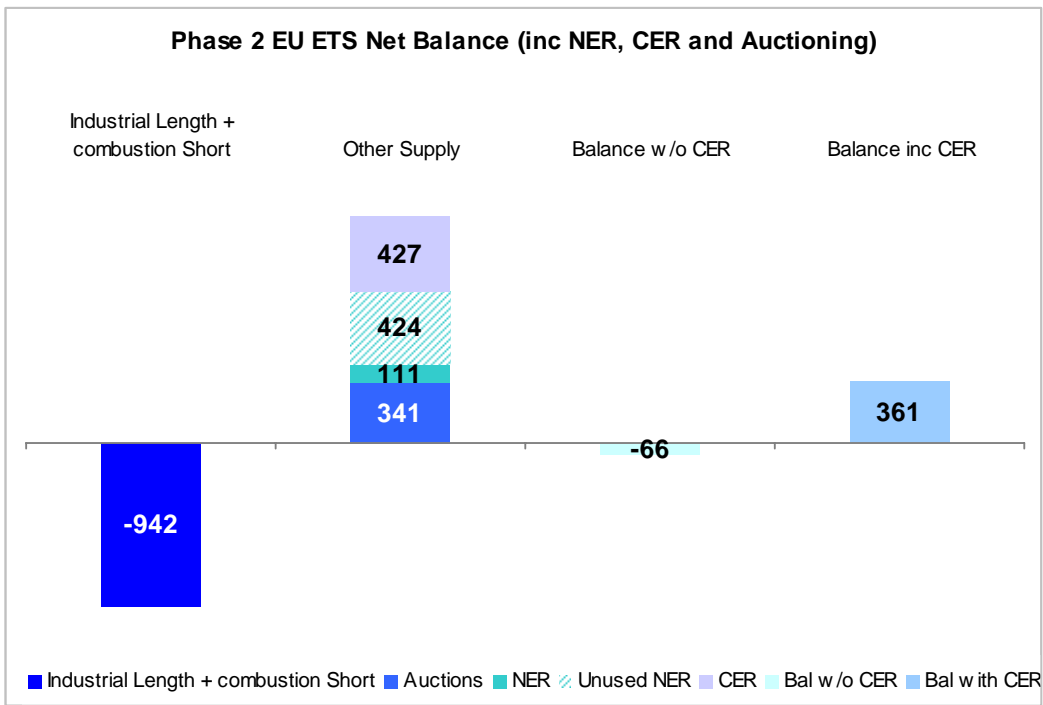
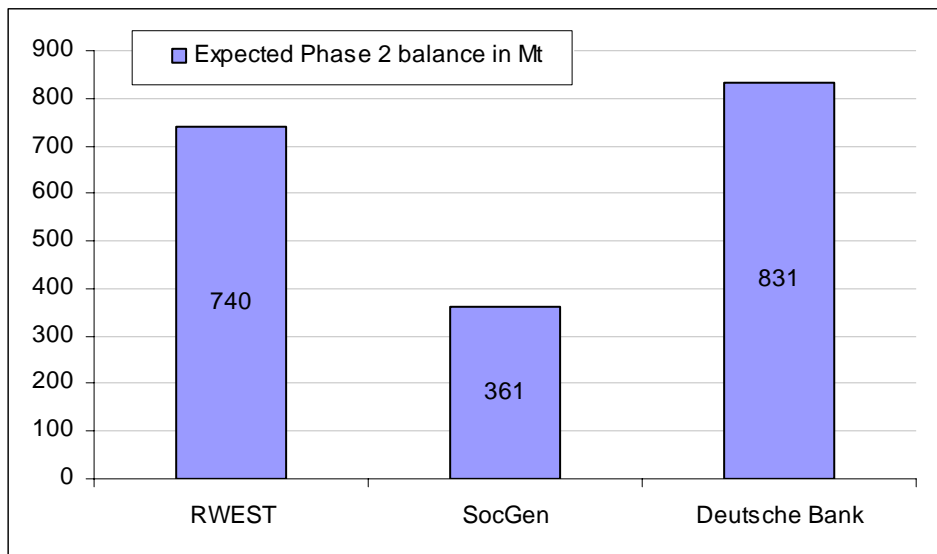


Figure 6 Comparison of expected Phase 2 balances



Source: Deutsche Bank Jun 2009, Société Générale Nov 2009, RWEST

PART B.2

0 Please provide the rationale why it would be appropriate to estimate potential price movement due to potentially auctioning too much or too few on the basis of a correlation between daily price moves and an overhang in the market

Most Carbon Analysts struggle to consistently link shifts in fundamental balances with observed price moves. The approach frequently used is based on the concept of a marginal abatement cost (MAC) curve. Carbon abatement options are sorted in order of rising cost. The carbon price is then calculated as a cross between abatement requirements (demand) and abatement alternatives (supply). This approach is widely contested, complicated and tedious.

The RWEST approach is based on actual historical data i.e. observes rather than theorise about how the market works, by linking market activity with daily price moves. Prices tend to trend upwards when there are more willing buyers than willing sellers.

It is expected that the hedging requirements of European utilities for the years 2013 onwards will result in an imbalance between sellers and buyers of EUAs. Utilities forward sell their power production in the electricity markets. At the same time they procure fuels and emission allowances to lock in the price spread between input cost and output revenue. Utilities usually start hedging three years in advance dependent on liquidity in the respective power markets. With power hedging for 2013 underway, utilities will buy EUAs to lock in the price spread. It is expected that this demand will not be met by sufficient supply as no Phase 3 EUAs are yet available. Utilities will therefore buy Phase 2 EUAs instead. This imbalance between EUA demand and supply will likely cause a buying overhang in the market which will push prices up.

1 The graph in slide 2 shows observations in the range of an overhang of -8 to +6 million. On what grounds can this be assumed to be sufficiently representative so as to justify an estimate of cost on potential shortage of up to 650 million?

The analysis seeks to assess how prices react to perceived tightness in demand supply fundamentals. Based on the chosen methodology a positive relationship between volume imbalances (or "overhang") and carbon prices can be observed.

As mentioned in the paper, one cannot expect that the linear relationship between market overhang and price moves can be reasonably extrapolated from 6 million to 600 million allowances linearly. The price rise will likely accelerate and decelerate over time at different levels. The exact shape of the time dependent link between buying overhang and price rise cannot be established in advance as too many interrelated factors are at work: Installations covered by the EU ETS will hopefully react to the price signal and thereby moderate the price rise. At the same time the perceived concave structure of the marginal abatement cost curve will push prices higher. Market participants may start to front run utility requirements and thereby push prices even higher.

2 What is the regression coefficient for the linear reduction and please provide a discussion on potential auto-correlation.

The simple statistics provided in the RWEST paper do not try to provide a comprehensive discussion of the causal link and the possible effects that might arise over time. It is meant to provide an easy way to understand the relationship between volume and price. Given the complexity of the price discovery mechanisms in the market and the large number of interrelated influences it is not obvious that advanced statistical techniques would provide additional insights.

3 Does the assessment take into account impacts of higher prices on demand for allowances?

The utility industry treats power plants in their existing portfolio as real options. These options are managed as far in advance as market liquidity permits. The deeper these real options are in the money the larger the portion of output that will be hedged in advance. These hedge ratios change with fuel, carbon and electricity prices over time and utilities usually adjust their hedges to account for such price moves. If EUA prices rise high enough this will trigger a gradual change from coal to gas as gas fired stations get into the money whereas coal fired stations move out of the money.

The management of the existing station portfolio is predominately focused on observable prices. Expectations on the future price trajectory are less relevant in this respect. They are most relevant in decisions on investments in the future portfolio composition which can be changed through various measures.

PART C Further questions

What is the degree of "flexibility" in hedging needs and the way to cover these needs in the market? What are, e.g., usual risk limits for the (trading desks of) electricity generators? How are sales with future delivery planned, for which clients is it difficult to change this planning and for which clients is this relatively easy? How flexibly can hedging strategies be adapted anyhow and what are the main determining factors?

There is no "flexibility" in hedging needs, given the need is derived from forward power contracts, other than disrupting the power contracts market. Clearly there is some variability in the absolute volume of the need dependent on assumptions concerning economic recovery rates, the structural shape of that recovery, compliance behaviours by industrial operators that are long and the utilisation of CER/ERU facilities. In our communications we have sought to take conservative assumptions in regard to these factors so as not to over-estimate the anticipated need.

The remaining questions refer to matters that absolutely relate to individual companies' risk appetites and competitive strategies for which there is no unique answer and EURELECTRIC is unable to gather data. What we have provided is our expectation of the aggregate forward power contracts position in the EU for 2013 – 2015 based on historical patterns and expected trends. We would comment that it would seem perverse for members to seek to manage customer needs in order to address carbon market requirements. It is customer needs that take priority.

Conclusion

As a final commentary, EURELECTRIC would like to highlight the following.

Carbon is unlike other commodity products and this is reflected in the psychology of the carbon market – which differs to that of other markets. The most obvious differences are that:

- there is no supply side response to price,
- externally imposed penalties apply for over-use and
- all operators with compliance obligations are naturally short in the long-run.

As a consequence, operators with compliance obligations behave in a more conservative manner than would be the case for participants in any other market e.g. fuels. This has obvious implications for price formation as demonstrated by the fact that today a significant positive price applies to allowances despite the fact that the market in the current Phase 2 is known to be long.

We would add that, as a further difference, the market is subject to a significant political risk.

In reaching our position EURELECTRIC believes it has taken conservative estimates of the needs of its members and has also applied very conservative assumptions in respect of the above factors.

We trust this response provides sufficient clarification of our previous commentaries.