Tendances Carbone

The Monthly Bulletin on the European Carbon Market

cdc climat research | Caisse des Dépôts GROUP

May 2012
N°69

A newsletter of CDC Climat Research in partnership with BlueNext and metnext

The EU ETS within the financial instrument regulatory framework: what are the implications?

The European Commission added carbon allowances and international credits eligible for the EU ETS to Section C, Annex I of Directive 2004/39/EC, as part of its proposal to review the Markets in Financial Instruments Directive (MiFID) on October 20th 2011. This means that the European Commission is choosing to opt for the proven financial markets regulatory framework rather than for a specific framework for the EU ETS, or for the REMIT Regulation, the framework drawn up for energy markets. Even if the actual aim of the MiFID is not combating fraud, three incidents have fuelled the need for stricter oversight, namely: the VAT fraud cases identified in 2009 and 2010, the resale of Kyoto credits by the Hungarian Government in 2010 or allowance thefts in 2011.

The aim is to regulate the portion of the carbon market that is currently unregulated, so that it benefits from the protective rules of the MiFID guidelines, i.e. the regulation of intermediaries, customer safeguards and transparency, and the reporting of transactions, without jeopardising its ultimate goal, namely reducing CO_2 emissions. As a result, the systems governing the derivative[1] and cash markets and the secondary and primary markets (Auctioning Regulation) would become consistent. Other directives relating to the MiFID guidelines, such as the draft review of the CSMAD Directive (Directive 2003/06/EC) and a Market Abuse Regulation (MAR) strengthening the combat against market abuse, are expected to become applicable at the same time. Moreover, the MiFID is entrusting the oversight of the carbon cash market to domestic financial regulators, and is granting coordination powers at the EU level to the European Securities Markets Authority (ESMA). The MiFID enables the appointment of additional competent regulators and cooperation between them to be established at the domestic level. The French oversight model is already in line with this thinking. There is cooperation between both national oversight authorities involved in the carbon market, i.e. between the AMF (French Financial Markets Authority), the financial authority, and the CRE (French Energy Regulation Commission). The challenge ahead will be to try to export the French model to other Member States.

Beyond the advantages for the EU ETS, questions remain regarding the scope of exemptions for corporates with EU ETS installations and for Kyoto credit originators, who have been unregulated until now. Specifically, corporates with EU ETS installations are expected to remain outside the MiFID framework as long as they are involved in the carbon market for their own account for compliance and hedging purposes, including in the event that they are involved on behalf of their main business activity's customers, if this trading business remains an "ancillary" business. Today, however, the involvement of these entities on behalf of customers could exceed the threshold for the business that is viewed as ancillary, as the criteria for determining that threshold remain to be defined. In addition, the classification of allowances as financial instruments is not expected to enable the immediate harmonisation of domestic legal statutes, while the accounting impact of this classification is likely to remain partly at the discretion of each EU country. France, where accounting classification is dependent on legal classification, is a specific case in this respect.

Although the Council negotiations are continuing under the presidency of Denmark, which is expected to submit a compromise proposal by the Ecofin of June 22nd 2012, the vote at the European Parliament Committee on Economic and Monetary Affairs is expected to be held in July 2012, before a vote at the plenary session scheduled for September 2012.

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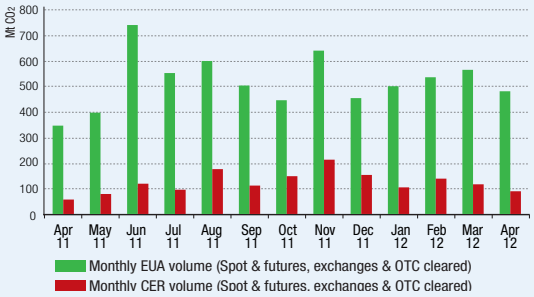
1. Financial derivatives on allowances are already covered by the MiFID directive.

Key points

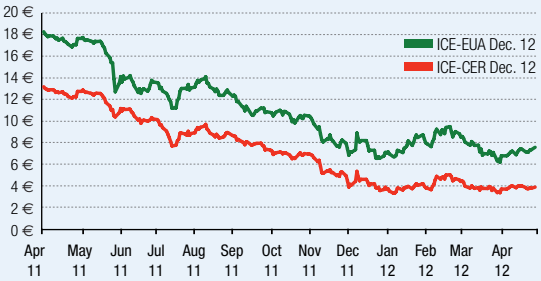
- **The price of the Dec. 12 EUA hit a historic Phase II low of €6.21 per tonne on April 4th;**
- **Monthly trading volumes declined sharply, with EUAs reaching their lowest level since the beginning of the year, CERs reaching their lowest level for 10 months, and ERUs reaching their lowest level for three months;**
- **254.7 million CERs / ERUs were surrendered by the EU ETS in 2011, an increase of 86% compared with 2010;**
- **The single registry for Phase III of the EU ETS will be operational at the end of June 2012;**
- **The EIB has begun selling NER 300 allowances on the ICE and EEX exchanges.**

Trading volumes - EUA: –15%, CER: –23.5%, and ERU: –67.5%



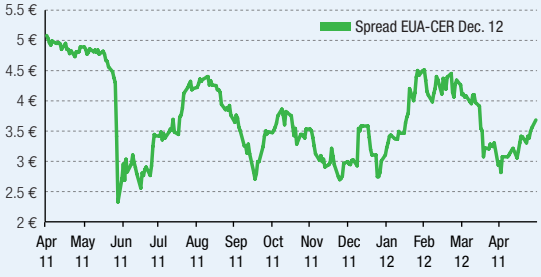
Source: CDC Climat Research calculation, based on data from BlueNext, EEX, ICE Futures Europe, Green X, Nasdaq OMX, and LCH Clearnet

Dec. 12 prices: EUA: +6.7% and CER: +2.6%



Source: ICE Futures Europe

Increase in the Dec. 12 EUA-CER spread: +11.5%



Source: ICE Futures Europe

Energy

Primary energy prices and electricity prices

			Apr. 2012	
Coal	API # 2 CIF ARA (First month in USD/t)		97.4	▲
Natural gas	NBP (spot in €/MWh)		24.9	▲
	TTF (spot in €/MWh)		24.8	▲
Crude oil	Brent (First month in USD/b)		120.5	▼
Electricity	Germany (€/MWh)	Spot	41.2	▼
		Calendar	51.2	▼
	United Kingdom (€/MWh)	Spot	55.9	▲
		Next summer	63.8	▼
		Next winter	60.4	▼

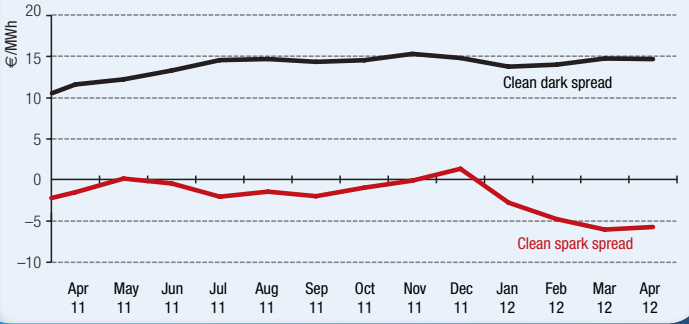
Sources: CDC Climat Research, Thomson Reuters

Clean dark, clean spark spreads and switching price

	Clean spark (€/MWh)		Clean dark (€/MWh)		Switching Price (€/tCO2)	
	spot	forward	spot	forward	spot	forward
Germany*	–11.0	–5.7	9.3	14.7	26.6	28.0
United Kingdom*	8.9	0.9	23.1	27.6	26.3	32.4

** Germany, 2013 calendar contract, United Kingdom, winter 2012 contract.*

German baseload – monthly average of Cal. 2013 clean dark and clean spark spreads



Sources: CDC Climat Research, Thomson Reuters

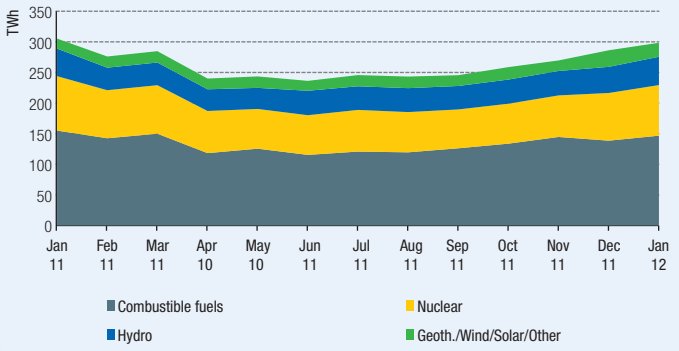
The price of Brent Crude posted a 3.2% month-on-month fall, against the backdrop of a deteriorating economy in the euro zone countries and a lowering of tensions with Iran. The price of CIF ARA coal for 2013 delivery followed this downward trend (–5.2%) in response to low demand, while stabilising at around USD 97 per tonne for month-ahead delivery. The fall in the cost of fuel and public holidays weighed on average day-ahead and cal.13 prices in Germany, which decreased by 6.8% and 2% respectively, and on the price of the Winter 2012 contract in the United Kingdom, which fell by 1.7%. The price of gas, which was boosted by an increase in demand due to lower than average temperatures, posted an average monthly increase of 3.7% on the NBP and of 3.4% on the TTF. The gap between clean dark and clean spark spreads in Germany and the United Kingdom widened. In Germany, the theoretical CO_2 price, which encourages energy generators to produce electricity from gas rather than coal, reached €28 per tonne (excluding the cost of transporting the coal to the power station), i.e. around four times the current EUA price (compared with €34.20 per tonne in the United Kingdom for the Winter 2012 contract).

Production

Electricity production (TWh)

EU 20 (in TWh)	Jan. 12	Jan.11	Past year (% change)
Production	298.2	304.9	–2.2%
of which - Combustible fuels	146.6	154.9	–5.3%
- Nuclear	82.6	88.9	–7.1%
- Hydro	46.2	44.9	2.9%
- Geoth./Wind/Solar/Other	22.9	16.3	40.0%

** Gas, coal, oil.*

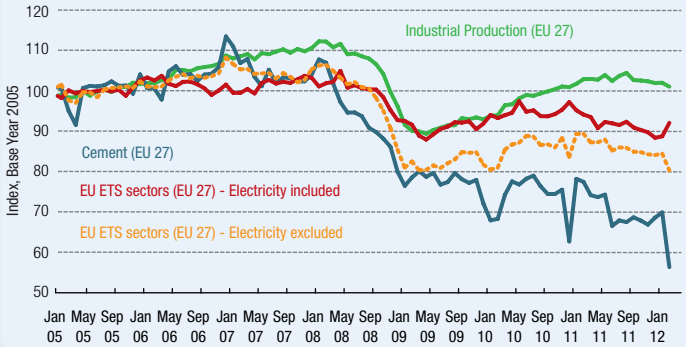


Source: CDC Climat Research, from IEA data

Production indices (Index base year 2005)

EU 27	Feb. 12	Last month (pts)	Year-on-Year (pts)
Indust. Prod (excl. construction)	101.0	–1.0	–1.8
EU ETS sectors production*	92.1	3.3	0.5
Electricity, gas and heating	98.2	7.3	3.9
Cement	56.4	–13.5	–14.6
Metallurgy	92.0	0.0	–3.2
Oil refinery	106.0	–2.3	–0.2

** Index weighted by EU ETS sectors's weight in average total allocation over 2008-2012*



Source: CDC Climat Research from Eurostat data

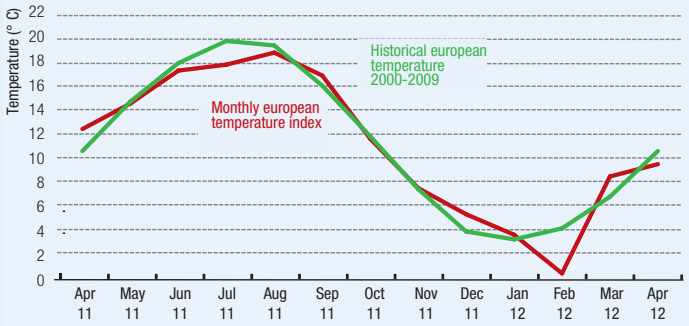
The monthly change in our EU ETS industrial output index for February 2012 (+3.3 pts) remained higher than the change for manufacturing output overall (–1 pt). If we exclude electricity generation, our output index would have seen a steep fall of 8.4 pts. The cement production sector saw the steepest fall (–13.5 pts) in February. The economic backdrop remained uncertain in April, as Spain's rating was lowered and the outlook for growth turned negative. Confidence indices in the euro zone declined again, falling from –7.1 pts to –7.7 pts, particularly in Italy and France, while the PMI (Purchasing Managers Index) fell by 2 pts to 45.9, its lowest level since July 2009. While most economies in the euro zone entered into recession, Poland's forecast GDP growth for 2012 stood at 2.7%. In January 2012, gross electricity generation for the EU-21 decreased by 2.2%, while electricity generation from renewable sources was up 40% compared with January 2011.

Temperature impact

European temperature index (°C)

- Average of the MetNext Weather indices for 18 European countries, weighted according to the emission allowances allocated to each country.

	Mar. 12	Apr. 12
Monthly average (°C)	8.5	9.5
Monthly average (°C) 2000-2009	6.8	10.6
Monthly minimum (°C)	4.0	6.2
Monthly maximum (°C)	12.0	15.2

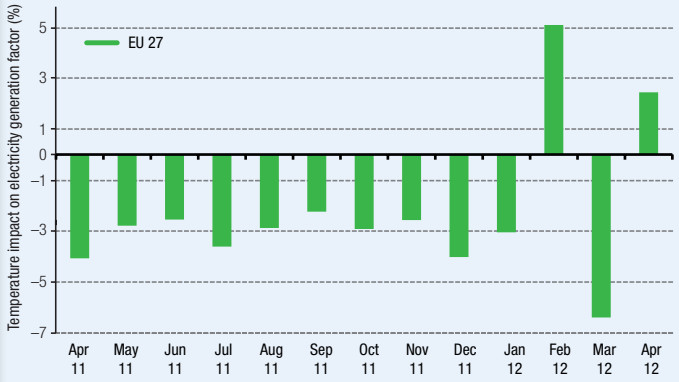


Source: Metnext Weather

Temperature impact on electricity generation factor (%)

- The impact factor, which is calculated on the basis of a statistical electricity generation model, expresses the temperature impact in relation to average weather patterns for the 10 years between 2000 and 2009.

	Mar. 12	Apr. 12
EU 27	–6.4	2.4



Source: Metnext Weather

In April, Europe experienced temperatures that were 1.1°C below their ten-year trend. This trend was observed in most European countries, and especially in Norway (–2.9°C), Portugal (–1.9°C), Finland (–1.6°C), and France (–1.5°C). Only Slovakia and Slovenia saw temperatures that were in line with the average (+0.1°C). According to the MetNext weather and economy model, the impact of the temperatures recorded in April was to increase gross European electricity generation by 2.4% compared with normal temperature conditions (with increases of 9.5% in the Netherlands, 6.5% in France, and 2.7% in Italy). The level of rainfall recorded in Oslo remained stable, while the level recorded in Madrid was slightly below the 10-year trend. The fill ratio for hydraulic reservoirs in the Nordic Region therefore increased, while we witnessed a rise in the fill shortfall for Spanish reservoirs compared with their average 10-year level: This is the same situation as the one we saw in the same period in 2008.

Institutional environment

EUA supply

	2008	2009	2010	2011
Total free allocations (Mt)	**1,958.5**	**1,974.0**	**1,998.3**	**2,001.4**
Combustion	1,256.7	1,266.4	1,286.7	1,289.2
Oil refining	154.2	154.3	158.8	157.1
Coking plants	22.5	22.5	22.8	22.7
Metal ores	21.9	22.0	22.0	22.1
Steel production	185.0	184.9	185.2	185.7
Cement	211.9	214.8	215.2	214.8
Glass	25.2	25.6	25.8	26.3
Ceramic products	18.8	19.2	19.3	18.6
Paper	39.0	39.9	40.7	40.6
Other activities	23.2	24.5	21.8	24.2
Total allocations auctioned (Mt)	**44.4**	**78.4**	**92.1**	**93.1**

Sources: CITL, UK Debt Management Office, EEX

CER and ERU supply

	Apr. 12	Last month change
Number of CDM projects	**10,067**	**+320**
of which - registered	4,044	+82
with - CER issued	1,534	+43
Cumulative volume of CER issued (Mt)	919	+24
CER available until May 2013 - CDC Climat Research estimate (Mt)	1,271	0
Number of JI projects	578	+9
of which - registered	344	+17
Cumulative volume of ERU issued (Mt)	143.5	+13
via - Track 1	126.8	+13
via - Track 2	16.6	+1

** CDC Climat Research's model: http://www.cdcclimat.com/The-risks-of-CDM-projects-how-did-only-30-of-expected-credits-come-through,900.html?lang=fr*

Sources: CDC Climat Research, UNEP Risoe

2011 Compliance: EU ETS installations surrendered 254.7 million international credits in 2011, an increase of 86% compared with 2010. **Phase 3:** the EIB has begun selling NER 300 allowances on the ICE and EEX exchange platforms. During an informal session of the Energy Council on the 19th of April, Poland continues to oppose any reforms of the ETS. Further, the Energy Ministers have equally refused to debate the possibility of an eventual freeze of a quantity of quotas, estimating that the subject is not related to the Energy Efficiency Directive, but rather to the ETS itself. The Energy Ministers reaffirmed their total opposition to using the energy efficiency directive to set binding targets as required by the European Parliament. The European Commission has committed itself to preset as soon as possible to Member States draft measures to raise the carbon price, in particular via a revised schedule for the auction of Phase III allowances. By late 2012, DG Clima will present this proposal in the annual report on the ETS, originally scheduled for 2013.

Carbon markets dashboard

Primary market - EUA auctions ($MtCO_2$)

Countries			Apr-11	May-11	Jun-11	Jul-11	Aug 11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12
United Kingdom	Price (€/t)				16.34	13.17		12.31	10.38	9.72	-	-	8.11	8.55	-
	Volume (Mt)				3.50	3.50		3.50	3.50	3.50	-	-	3.50	3.50	-
Germany	Price (€/t)	Spot	16.45	16.62	15.12	12.49	11.94	11.62	10.21	9.69	-	6.90	8.44	7.56	6.64
		Futures	16.92	16.69	15.55	12.63	12.41	11.67	10.35	(n.a.)	-	6.98	8.59	7.79	6.72
	Volume (Mt)	Spot	1.20	1.50	1.50	1.20	1.50	1.20	1.20	3.27	-	1.50	1.20	1.20	1.20
		Futures	2.28	2.28	2.85	2.28	2.45	2.28	2.28	(n.a.)	-	2.58	3.23	2.58	1.93
Others	Price (€/t)				12.70 *	12.13		11.34	10.37	8.55	7.13	7.36	-	7.34	6.93
	Volume (Mt)				1.10	2.95		1.75	4.00	3.93	0.85	1.85	-	1.85	1.03

*Sources: EEX, UK Debt Management Office, Athens Stock Exchange**

Primary market - CER and ERU issued ($MtCO_2$)

		Apr-11	May-11	Jun-11	Jul-11	Aug 11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12
Cumulative volume of CER issued UNEP-Risoe (Mt)		605	624	647	670	708	745	759	783	816	852	877	895	919
CER available until May 2013 - CDC Climat Research estimate (Mt)		1,130	1,150	1,150	1,175	1,225	1,250	1,300	1,325	1,268*	1,276*	1,276	1,271	1,271
Cumulative volume of ERU issued (Mt)	Track 1 (Mt)	27.9	28.3	32.2	36.9	43.3	50.3	76.9	95.5	96.8	106.2	106.5	114.2	126.8
	Track 2 (Mt)	8.5	8.6	9.1	9.6	10.0	10.0	10.2	10.2	11.6	12.7	12.7	16.0	16.6

Sources: UNEP-Risoe, CDC Climat Research

Secondary market - Prices (€/t) and volumes: EUA, CER, ERU ($ktCO_2$)

			Apr-11	May-11	Jun-11	Jul-11	Aug 11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12
Spot market (BlueNext)		Price EUA	16.27	16.50	15.18	12.58	12.18	11.70	10.30	9.40	7.40	6.90	8.50	7.60	6.94
		Volume EUA	5,464	2,538	4,111	4,498	6,109	4,551	3,003	2,499	2,718	1,908	3,821	3,206	3,383
		Price CER	13.08	12.75	11.71	9.99	8.66	8.39	7.40	6.60	4.81	3.90	4.50	4.20	3.87
		Volume CER	2,950	1,483	3,952	1,055	2,921	2,439	2,528	1,256	1,618	1,546	2,640	1,311	1,699
		Spread EUA-CER	3.19	3.74	3.47	2.59	3.52	3.31	2.90	2.80	2.59	3.00	4.00	3.40	3.07
		Price ERU	13.04	12.66	11.63	9.87	8.54	8.23	7.20	6.40	4.80	3.74	4.40	4.10	3.83
		Volume ERU	330	0	1	150	0	0	23	10	727	34	60	513	1,224
Futures Markets (ICE)	Dec.12	Price EUA	17.80	17.56	16.03	13.32	12.86	12.30	10.80	10.00	7.81	7.20	8.70	7.80	7.05
		Volume EUA	70,472	75,281	148,830	108,235	113,470	100,058	115,322	175,003	193,068	345,497	361,138	344,631	284,271
		Price CER	12.87	12.67	11.84	10.26	8.84	8.54	7.40	6.60	4.71	3.80	4.40	4.10	3.82
		Volume CER	15,872	24,143	43,733	30,800	63,087	36,361	55,588	64,442	60,857	64,537	93,161	69,182	57,749
		Spread EUA-CER	4.93	4.89	4.19	3.06	4.02	3.76	3.40	3.40	3.10	3.40	4.30	3.70	3.23
		Price ERU	12.77	12.57	11.74	10.16	8.66	8.30	7.20	6.50	4.57	3.60	4.20	3.90	6.65
		Volume ERU	0	525	1,750	250	3,350	3,260	200	2,625	2,446	2,070	1,142	2,962	1,955
	Dec.13	Price EUA	19.13	18.88	17.22	14.29	13.69	13.15	11.60	10.60	8.42	7.80	9.40	8.40	7.53
		Volume EUA	34,401	34,612	85,200	48,253	59,362	41,790	42,578	63,891	56,595	68,819	87,267	97,018	117,472
		Price CER	14.22	13.87	12.65	10.95	9.77	9.31	8.30	7.40	5.33	4.60	5.20	4.90	4.38
		Volume CER	1,324	5,790	11,906	3,720	25,427	11,936	17,109	64,442	11,176	12,329	17,595	12,558	10,353
		Spread EUA-CER	4.91	5.00	3.91	3.34	3.92	3.84	3.30	3.20	3.09	3.20	4.20	3.50	3.15
	Dec.14	Price EUA	20.26	20.03	18.25	15.19	14.49	13.92	12.27	10.86	8.95	8.31	10.20	9.06	8.11
		Volume EUA	2,088	6,067	11,778	11,983	19,288	11,405	7,742	23,539	14,738	24,633	17,532	33,838	36,978
		Price CER	14.51	14.15	12.88	11.12	10.10	9.59	8.56	7.41	5.61	4.84	5.40	5.05	4.62
		Volume CER	200	1,940	979	5,536	4,110	2,598	2,868	5,075	2,807	1,834	1,587	4,716	5,105
		Spread EUA-CER	5.75	5.88	5.36	4.07	4.39	4.33	3.72	3.45	3.34	3.47	4.80	4.01	3.49

Sources: BlueNext, ICE Future Europe

Emission-to-cap by EU ETS sector and country: difference between distributed allocations of allowances and verified emissions

	2008	2009	2010	2011*
Combustion	–255.7	–117.1	–128.1	–84.2
Oil refining	–1.8	7.3	14.5	14.7
Coking plants	1.5	6.8	2.9	3.2
Metal ores	4.3	11.0	8.8	9.0
Steel production	51.3	89.3	71.3	71.2
Cement	19.8	59.1	60.9	62.6
Glass	2.3	5.8	5.4	5.4
Ceramic products	4.7	9.2	10.0	9.5
Paper	6.4	10.7	10.0	10.8
Other activities	0.2	4.2	1.1	2.4
Total (Mt)	**–166.9**	**86.3**	**56.8**	**104.6**

Source: CITL

** On April 11th, the EC revised 2011 verified emission data for 10,666 installations. For the 306 missing installations concerned, we estimate that the variation in their emissions was proportional to their Eurostat output index, or to installations in the same sector and country, where this was possible.*

	2008	2009	2010	2011*
Germany (100%)	–84.5	–37.5	–54.5	–49.7
United Kingdom (100%)	–53.1	–18.1	–17.7	2.6
Italy (99%)	–9.5	23.4	8.5	4.9
Poland (99%)	–3.3	10.6	5.8	4.1
Spain (100%)	–10.3	12.8	28.8	18.0
France (76%)	5.1	17.4	23.4	25.6
Czech Republic (100%)	5.1	12.0	10.4	12.3
The Netherlands (100%)	–6.4	2.5	0.1	8.9
Romania (97%)	7.7	24.8	27.6	23.6
Others (90%)	–17.6	38.4	24.4	54.3
Total (97.7% in Mt)	**–166.9**	**86.3**	**56.8**	**104.6**

Source: CITL

** The % between brackets corresponds to the verified 2011 emissions published by the EC, while the rest is an estimate.*

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ISSN: 1953- 0439

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