

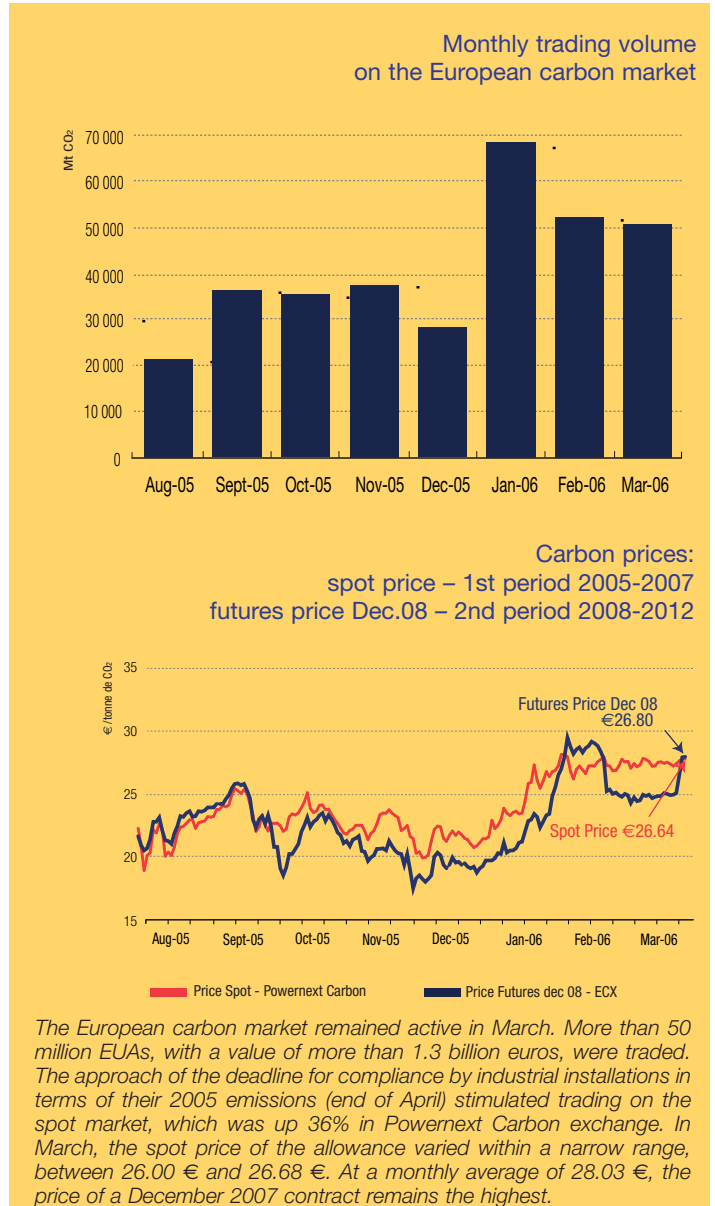
Coal becomes less attractive

Most traders approach the carbon market from the point of view of energy, either to cover their European Unit Allowances (EUA) positions when they purchase natural gas or coal, or because they are also active in the energy market. In this context, certain indicators specific to the price of energy and electricity are monitored closely. As an efficient economic entity, an operator will decide to run one power plant rather than another if it can thereby maximize its result in a given price context.

The indicators used for this maximization in the electric power sector are called « spreads ». They express, in €/MWh, the difference between the selling price of electric power at peak consumption and the price of the fuel used to generate that electric power as a function of the output of the power plant in question. If it burns natural gas, the appropriate indicator is the « spark spread », and if it burns coal, the indicator is called the « dark spread ». Because the spread expresses the gross margin associated with the operation of a power plant, the operator will choose to operate the plant using the fuel that guarantees it the higher spread.

Under the European Union emission trading scheme, the electric power plant operators, who are the largest emitters of CO₂ in Europe, must include a carbon factor in their calculations of the spreads. The price of EUA represents the marginal cost associated with the allowance that must be purchased on the market when one MWh of electricity is generated. The power producers then add the price of the CO₂ allowance to calculate the « clean spreads », which take into consideration the price of the EUA multiplied by the quantity of CO₂ emitted per MWh generated.

This spread makes it easier to understand the movements involving the supply and demand of EUA. When the clean dark spread (coal) is higher than the clean spark spread (natural gas), it is economically more attractive for electric power producers to operate coal-fired power plants, which increases both emissions and demand for the corresponding allowances. Provided that substitutions are technically possible, this economic mechanism will encourage electric power producers to make arbitrages until the two clean spreads are equal. Since last summer, the sharp increase in natural gas prices has caused a major difference between the spreads that has not been totally offset by the price of CO₂. This suggests that there are limits to potential technical substitutions.



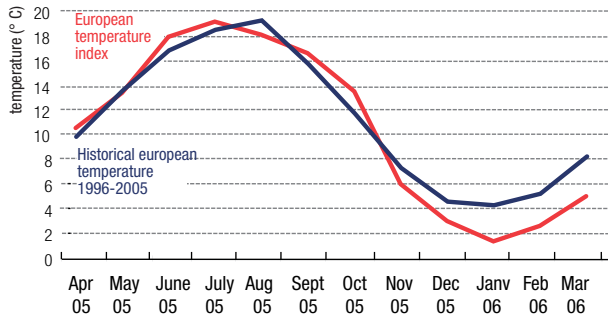
The decline in the price of natural gas in March and the rise in the price of coal have led to equilibrium between the clean spreads. According to our calculations, this equilibrium price was in the range of 29.50 €/tCO₂ in March, which is close to the average price observed. In this new context, institutional factors will take on increased importance in the next few months as two major deadlines approach. Industrial installations must be in compliance in terms of their 2005 emissions by the end of April, a process that will have an impact on the demand on the spot market for allowances that will be used to achieve compliance before the end of the month. The allocation process for 2008-2012 allowances is also scheduled to be completed next July, which should provide more detailed information on the rules to be applied during this second period of the European market.

European temperature index (°C)

Average of Powernext Weather indices* – France, Germany, UK and Spain – weighted by the allowances allocated to each country.

	Feb	March
Monthly average (°C) - 2006	3.3	5.6
Monthly average (°C) - 1996-2005	5.9	8.2
Monthly maximum (°C) - 2006	0.4	1.3
Monthly minimum (°C) - 2006	6.9	13.5

Source : Climate Task Force of Caisse des Dépôts

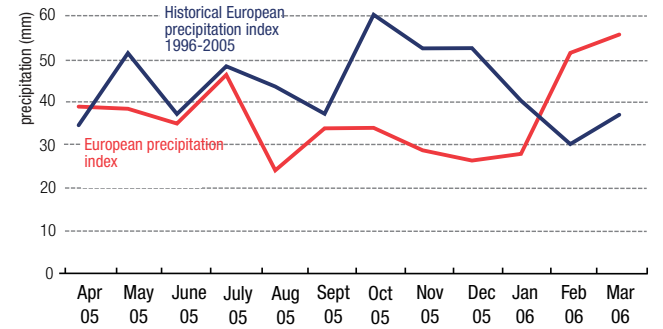


European precipitation index (mm)

Average of precipitation indices for Paris, Berlin, London and Madrid, weighted by the hydroelectric share in each country's electric power mix.

	Feb	March
Monthly precipitation - 2006	51	56
Monthly precipitation - 1996-2005	31	38
Cumulative over 12 months	424	447
Cumulative over 12 months 1996-2005	529	528

Source : Climate Task Force of Caisse des Dépôts



With the continuation of the exceptionally cold winter, the European temperature index remained below seasonal normals in March. Compared to the ten-year average, temperatures were significantly below normal in Germany and the United Kingdom. In France, the average temperature for the month of March was 1.5°C below the ten-year average. On the other hand, Spain has benefited from milder temperatures. In March, for the second consecutive month, the precipitation index remained above the ten-year average. This precipitation increased reservoir levels, although they are still low on account of the cumulative rainfall deficit from the past two winters. In March, the levels of Spanish reservoirs rose to 50% of capacity for the first time in 8 months.

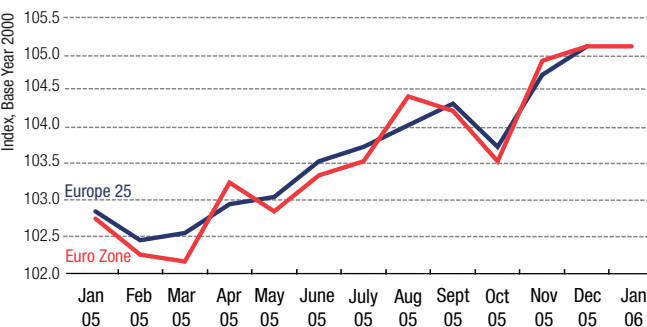
* The Powernext Weather indexes are defined on the basis of average temperatures, weighted by the population of the representative regions that make up each country

European industry production index

Index of production of all industries, excluding construction (Base Year 2000)

	January index 2006	Monthly variation (%)	Variation/12 months (%)
Europe 25	105.1	+ 0.0	+ 2.4
Euro zone	105.1	+ 0.0	+ 2.5

Source : Eurostat

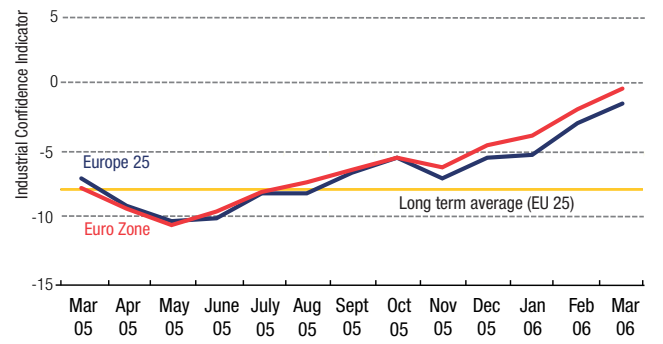


Opinion of Business Leaders

Industrial Confidence Indicator
Balance of responses (difference from the long-term average)

	Feb 2006	March 2006
Europe 25	- 3	- 2
Euro zone	- 2	- 1

Source : Eurostat



Tendances carbone is now publishing two summary indicators of industrial activity: the observed production index, which is a sort of rear-view mirror, and an industrial confidence index that measures the expectations of business leaders. These two indexes confirm a recovery of industrial activity based on the growth of new orders (respectively +9.7% and +11.1% in the Euro Zone and in the EU 25 between January 2005 and January 2006). The industrial confidence index has reached its highest level since mid-2004. Within the EU 15, the greatest increases are in Germany, Italy and the United Kingdom (+2) and Spain (+3). In France, however, the social and political climate has had a somewhat depressing effect on the confidence expressed by industry leaders (-1). In Poland, the most recent large country to get its market mechanisms up and running, the strong increase in orders in January (+32.4) will inevitably have an effect on the supply of CO₂ allowances.

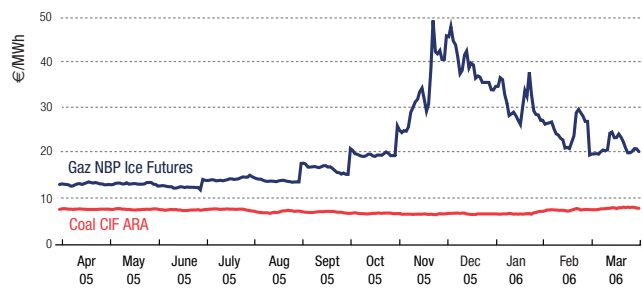
Energy prices

	Feb 2006	March 2006
Average closing price		
British natural gas NBP ICE Futures Month Ahead	84.84 €/BTU	73.17 €/BTU
Amsterdam coal CIF ARA Month Ahead	50.79 €/t	53.54 €/t
Powernext Futures™ month ahead	Base	68.76 €/MWh
	Pointe	93.48 €/MWh
Difference between the price of electricity and the price of natural gas used in the power plant corrected for the price of CO ₂ : clean spark spread	Feb 2006	33.68 €/MWh
	March 2006	20.54 €/MWh
Difference between the price of electricity and the price of coal used in the power plant, corrected for the price of CO ₂ : clean dark spread	Feb 2006	44.02 €/MWh
	March 2006	22.47 €/MWh
Price of the CO ₂ quota that establishes equilibrium between the prices of coal and natural gas	41.00 €	29.50 €

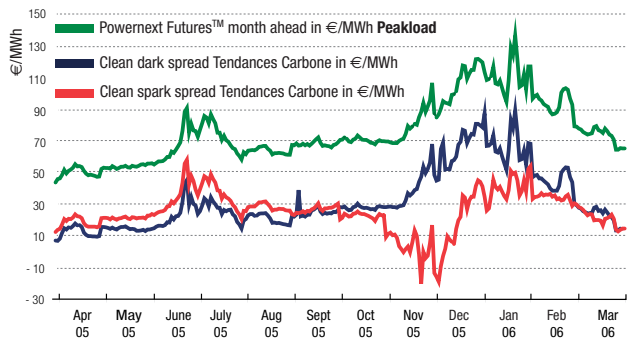
Source: Reuters, Powernext, Climate Task Force of Caisse des Dépôts

The difference between the reference prices for energy decreased in March. The price of natural gas continued to fall (-15%) as a result of agreements between European operators and projections of milder temperatures. The price of coal was up slightly by almost 6%. The operating profit of electric power producers was hit hard by a sharp drop (-22%) in the price of electricity and a relatively stable allowance price of 27 €. The clean spark spread calculated by Tendances carbone also dropped by half to slightly over 22 €/MWh. The difference between the spreads, which was more than 10 €/MWh in February, dropped to less than 2 €/MWh in March, and the price of CO₂ that makes the switch from coal to natural gas attractive dropped from over 40 € to less than 30 € in one month.

Primary energy prices



Price of electricity and price difference between electricity and primary energy prices

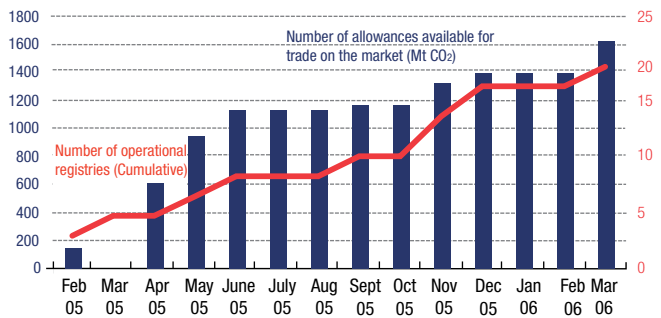


European Union: National Allocation Plans, National Registries and CO₂ Allowances

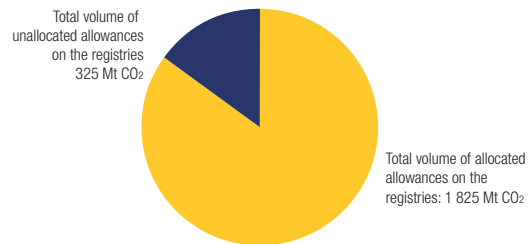
	March 1 st 2006	April 1 st 2006
Number of countries that have a National Allocation Plan validated by the European Commission	25	25
Number of countries that have finalized the allocation of allowances to industrial facilities	23	24
Number of countries that have an operational national registry	18	20
Number of 2005 allowances corresponding to the operational registries (MtCO ₂)	1 592	1 825
Total volume of organized trades of CO ₂ allowances and over-the-counter trades since 1 January 2005 (Mt CO ₂)	382	432

Source: European Commission, Point Carbon

Trend of the volume of EUAs placed on the European market and the number of operational registries in March 2006



CO₂ allowances on the European market in March 2006



Italy and Hungary, which represent 10% and 1% respectively of the EUAs, connected their registries to the European system in March and distributed allowances to the operators' accounts. The settlement of allowances for the 2005 emissions is supposed to take place not later than April 30, although five countries (Poland, Luxembourg, Greece, Malta and Cyprus) still did not have operational registries as of the end of March. Poland, the second-largest beneficiary of allowances in Europe with more than 11% of the allocated EUA, has still not reached an agreement with the Commission on the list of installations. Poland therefore has one month left to have its National Allocation Plan validated, set up its registry, distribute the EUA to the operators' accounts and verify the 2005 emissions returns of the 1,088 installations that are participating in the emission trading system. If the Polish installations, which are potentially large net sellers, cannot be brought into compliance in time, the market could experience some rough going in April.

Dashboard

CO2 Markets

			Oct - 05	Nov - 05	Dec - 05	Jan - 06	Feb - 06	March - 06	
Spot market (Powernext carbon)	Average closing price in €	Low price traded	21.35	19.70	19.80	21.77	25.25	26.00	
		Average price traded	22.68	21.59	21.11	23.92	26.19	26.37	
		High price traded	24.00	23.20	22.40	26.23	26.97	26.68	
	Volume in t	Daily average	13 550	36 500	64 810	89 364	84 350	100 304	
		Total monthly	271 000	730 000	1 361 000	1 966 000	1 687 000	2 307 000	
Futures market (ECX)	Dec 2006	Average closing price in €	Low price traded	21.35	19.70	20.35	22.30	26.15	26.70
			Average price traded	22.56	21.57	21.66	24.70	26.88	27.07
			High price traded	23.65	23.10	22.80	27.10	27.95	27.50
	Dec 2007	Average closing price in €	Low price traded	21.40	19.90	20.55	22.75	27.15	27.60
			Average price traded	22.63	21.65	22.07	25.34	27.80	28.03
			High price traded	23.80	23.15	22.90	27.90	28.85	28.45
	Dec 2008	Average closing price in €	Low price traded	20.55	18.05	18.25	19.70	24.20	23.55
			Average price traded	21.75	19.61	19.24	21.58	26.60	24.33
			High price traded	22.85	20.90	20.10	24.65	28.15	26.80
	Volume in t	Daily average	954 619	876 364	615 400	1 618 619	1 331 900	970 913	
		Total monthly	20 047 000	18 735 000	12 308 000	33 991 000	26 638 000	22 331 000	
	Total european market volume in t (Point carbon)			35 019 000	37 093 000	27 900 000	67 851 000	51 598 000	50 167 000

Source : Powernext Carbon, ECX, Point Carbon

Climate

> Temperatures (°C)	Apr-05	May-05	June-05	July-05	Aug-05	Sept-05	Oct-05	Nov-05	Dec-05	Jan-06	Feb-06	Mar-06
Germany - monthly average	10.3	13.7	17.4	19.3	16.9	16.3	12.1	5.0	1.4	-1.6	0.6	2.6
Germany - difference monthly and decennial average	0.9	-0.3	0.3	0.9	-2.3	1.5	1.8	-0.1	-0.3	-2.7	-2.1	-3.1
Spain - monthly average	15.6	19.4	24.0	25.2	24.7	21.6	18.5	12.2	9.1	8.4	9.2	13.4
Spain - difference monthly and decennial average	0.7	1.4	1.5	1.0	0.0	-0.1	0.5	-0.7	-1.3	-1.6	-1.5	0.1
France - monthly average	11.5	15.2	20.1	20.9	19.3	18.0	15.7	7.3	3.4	3.4	3.8	7.4
France - difference monthly and decennial average	0.5	-0.1	1.3	0.8	-1.6	0.9	2.3	-0.6	-1.9	-1.5	-2.0	-1.5
UK - monthly average	9.2	11.6	15.9	17.0	16.5	15.6	12.6	6.1	4.5	4.4	4.0	4.9
UK - difference monthly and decennial average	0.2	-0.5	0.9	0.2	-0.9	0.8	1.4	-1.4	-0.6	-0.6	-1.6	-2.3

Source : Powernext Weather

> Precipitations (mm)	Apr-05	May-05	June-05	July-05	Aug-05	Sept-05	Oct-05	Nov-05	Dec-05	Jan-06	Feb-06	Mar-06
Berlin - monthly precipitation	12.1	78.0	29.0	142.9	57.1	55.0	35.0	21.8	49.5	20.4	43.8	43.8
Berlin - difference monthly and decennial precipitation	-18.2	28.2	-20.9	80.0	-3.3	9.5	-16.1	-15.3	9.6	-22.6	-1.3	-4.6
Madrid - monthly precipitation	16.3	5.9	13.1	0.0	0.4	4.3	64.4	45.1	10.2	37.4	35.0	45.8
Madrid - difference monthly and decennial precipitation	-25.4	-37.8	-1.3	-10.1	-11.9	-18.3	19.3	-5.1	-34.9	5.6	8.2	15.6
Paris - monthly precipitation	59.4	42.4	48.0	35.8	23.2	39.9	17.8	25.2	25.8	28.8	62.2	68.8
Paris - difference monthly and decennial precipitation	27.0	-13.5	6.0	-26.0	-28.5	-1.4	-50.4	-31.8	-34.0	-14.3	34.8	28.0
London - monthly precipitation	30.4	19.2	31.6	40.6	48.4	46.8	70.8	29.8	45.4	16.4	40.4	37.0
London - difference monthly and decennial precipitation	-20.6	-24.6	-27.7	5.1	-2.5	3.0	-2.8	-38.7	-8.4	-32.4	1.9	2.2

Source : WeatherOnline UK

Economic activity

	Apr-05	May-05	June-05	July-05	Aug-05	Sept-05	Oct-05	Nov-05	Dec-05	Jan-06	Feb-06	Mar-06
Total industry production index (excluding construction and seasonally adjusted), base = 2000												
Europe 25	102.9	103.0	103.5	103.7	104.0	104.3	103.7	104.7	105.1	105.1	-	-
Euro zone	103.2	102.8	103.3	103.5	104.4	104.2	103.5	104.9	105.1	105.1	-	-
Industry confidence indicator												
Europe 25	-9	-10	-10	-8	-8	-7	-6	-7	-6	-6	-3	-2
Euro zone	-10	-11	-10	-8	-8	-7	-6	-7	-5	-4	-2	-1

Source : Eurostat

Energy prices

	Apr-05	May-05	June-05	July-05	Aug-05	Sept-05	Oct-05	Nov-05	Dec-05	Jan-06	Feb-06	Mar-06	
Natural gas, NBP ICE Futures, 1 st maturity date, in €/BTU	43.92	44.16	41.86	47.60	47.09	56.43	67.48	116.62	133.00	103.97	84.84	73.17	
Coal CIF ARA, 1 st maturity date, in €/tonne	51.95	51.77	50.76	51.78	47.77	47.14	45.16	43.86	44.42	45.29	50.79	53.54	
Powernext Futures™ month ahead, in €/MWh	Base	38.78	40.54	45.42	51.63	46.82	48.88	51.89	56.40	72.00	74.94	68.76	54.83
	Peak	49.07	52.84	65.42	72.51	62.67	67.06	69.25	79.50	103.72	109.56	93.48	72.73
Difference in prices of electricity and of natural gas used, corrected for the price of CO ₂ : clean spark spread in €/MWh	17.73	20.92	33.55	36.01	27.43	26.09	21.88	3.20	18.33	39.97	33.68	20.54	
Difference in prices of electricity and of coal used in the plant, corrected for the price of CO ₂ : clean dark spread in €/MWh	12.02	14.29	23.12	25.75	20.46	25.03	27.40	38.83	65.11	66.41	44.02	22.41	
Brent crude oil, 1 st maturity, in \$/baril	53,35	49.62	55.42	57.91	63.62	63.80	59.50	56.23	57.23	63.86	61.14	63.03	

Source : Reuters, Powernext, Caisse des Dépôts



Caisse des dépôts et consignations
56, rue de Lille – 75007 Paris
Publication manager: Christian de Perthuis
ISSN No.: Pending

Caisse des Dépôts – Climate Task Force
Contact : Emilie Alberola, 33 (0) 1 58 50 41 76
emilie.alberola@caissedesdepots.fr
56, rue de Lille – 75356 Paris 07 SP

Powernext SA
Contact : Audrey Mahuet, 33 (0) 1 73 03 96 05
a.mahuet@powernext.fr
25, rue Louis le Grand – 75002 Paris



This monthly newsletter was drafted by the Climate Task Force of Caisse des Dépôts. The opinions and analysis herein do not bind Powernext SA.