

Commodity Markets at a Glance

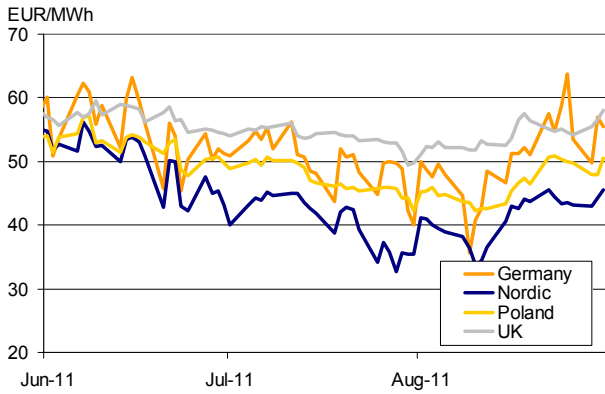
August 2011

Market Letter by Vattenfall Energy Trading

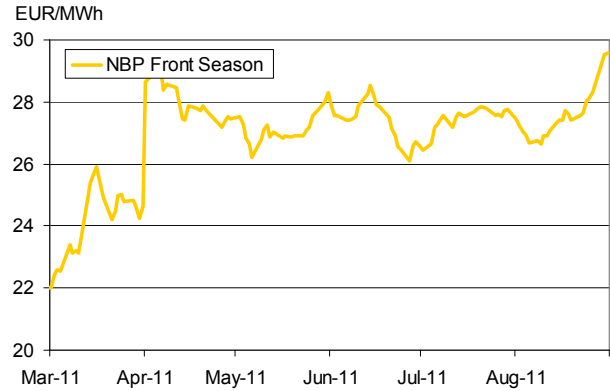
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European Power

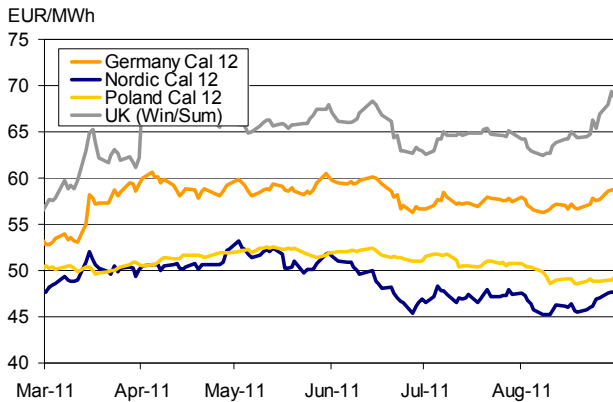
Spot markets: Rising prices amid tighter supply



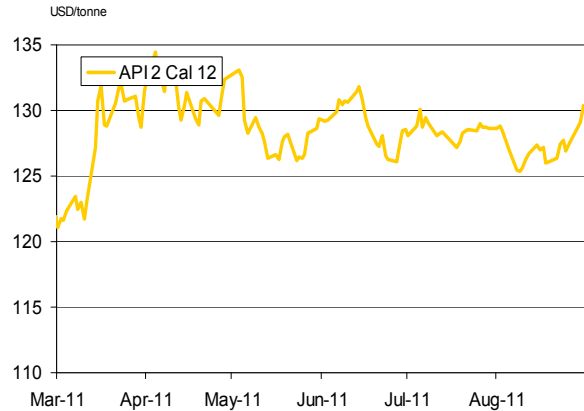
Gas Trading: Picking up amid supply fears



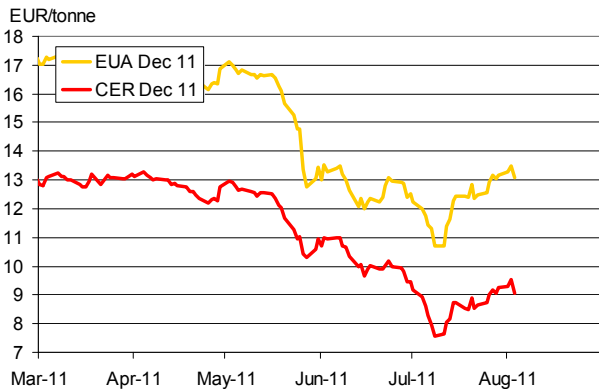
Power derivative markets: Gaining momentum



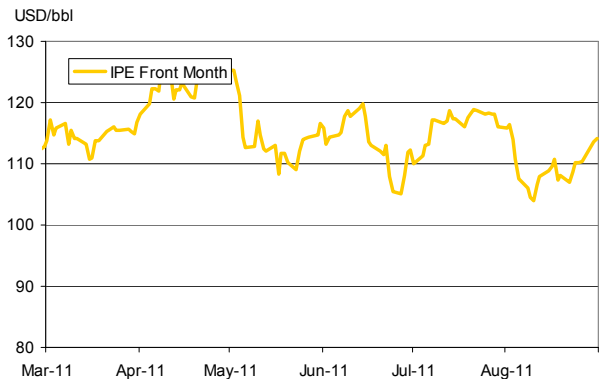
Coal Trading: Volatile prices



CO₂ Trading: EUAs rise on gas news



Oil Trading: Missing clear direction



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1. EUROPEAN POWER

Spot markets: Rising prices amid tighter supply

After a two-month decrease, most European spot prices recovered in August. The UK market gained 0.20 EUR/MWh and Nordic prices rose by 1.36 EUR/MWh. The German spot market saw the biggest increase amid decreasing imports from France. Day-ahead base added more than 2.00 EUR/MWh. Only Polish prices lost, on average by 1.29 EUR/MWh.

[EUR/MWh]	Germany	Nordic	Poland	UK
Current month av	48.57	40.14	45.65	53.35
Last month av	46.40	38.78	46.94	53.15
Difference	2.17	1.36	-1.29	0.20

Continental Europe

German day-ahead base gained throughout August. After opening at 49.89 EUR/MWh, the contract rose by more than 5 Euros to close at 55.50 EUR/MWh on 31 August. After the continuous three-month decline amid abundant supply and low demand, day-ahead base rebounded to pre-Fukushima levels. Exports from France were lower than in July as French capacities were limited by several revisions and outages. Moreover, also some German plants were offline. On the renewables side, both wind and solar production were lower than in July. Wind turbines produced an average of 3.700 MW per hour and solar panels produced 5.700 MW in peak hours. The average rainfall equalled about 5.7 TW per hour, which is 10 TW below last month's and last year's value. Temperatures in Germany ranged around 20°C, which is at a five-year average.

French day-ahead base prices remained at a moderate level as demand was rather low. August is traditionally the holiday month and also the temperatures ranged at a normal level without many peaks inducing demand for air conditioning. The French day-ahead base was delivered at 41.03 EUR/MWh.

Dutch base load prices delivered at 48.69 EUR/MWh on the back of a tighter system during the second half

of the month as there was much export to Germany, French outages and increasing gas and CO₂ prices. The month ended in a very bullish note on the back of low wind production and higher demand towards the end of holiday period. Peaks cleared on the 70-Euro level for the first time since May.

Nordic

Increasing demand resulted in increasing Nordic spot prices during August. Base gained more than 4 Euros to close at 45.46 EUR/MWh at the end of August. The month was 0.8 degrees warmer than normal. Nuclear power plants in Sweden ran at around 64% and in Finland at 90%. Despite the revisions, the price increase was kept at a relatively moderate level as the hydrological balance improved with almost 6 TWh in August. Precipitation above normal in the beginning and the end of the month resulted in above-normal inflows. The precipitation outcomes in Norway and Sweden were approximately 23 TWh during August, which is approximately 6 TWh more than normal. Swedish reservoirs stood at 84.4 % of maximum by the end of week 34 which is 2.4 % above normal at this time of the year. Norwegian reservoirs stood at 78.3 % of maximum, which is 3.2 % lower than normal.

Poland

The Polish spot market continued its rather bearish trend amid continuously mild weather, healthy supply and limited export. On average, day-ahead base was traded at 45.65 EUR/MWh, which is about 2.7% lower than in the previous month and the same month last year. Prices were especially low in the first half of August, when they ranged between 40-45 EUR/MWh.

Temperatures were almost 1.0 degree higher than normal, reaching a medium of 17.5°C. However, they were not high enough to increase demand, for example for air conditioning. The maintenance level was low and even sank below last month's value. As a result, supply increased by 11.53% compared to August 2010 and by 0.67% month-on-month.

Until mid-August export to the Czech Republic, Slovakia and Germany was limited due to maintenance on the interconnector between Poland

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and Slovakia. Afterwards, full capacity on the link was available and Poland exported an average of 761 MW, or 4.6% of domestic demand, to the Czech Republic, Slovakia and Germany. Export was 730 MW more than last year and 330 MW more than in the previous month. Low prices in Scandinavia resulted in an average energy import of 206 MW from Sweden.

The average balancing market outcome was 5.6% higher than in July as some unexpected outages in the last week of August 2011 resulted in multiple price spikes.

UK

UK day-ahead base opened at 51.02 EUR/MWh. With low demand and high LNG flows into Europe, gas prices failed to hold the previous strength. This put pressure on the UK power prices as dark spreads are already high and gas is the marginal fuel. Prices continued to slip well into the month but from the middle of August they firmed on the back of news concerning an outage of LNG cargoes. This put upward pressure on the UK peak and base followed. Day-ahead base ended the month at 57.97 EUR/MWh.

Derivative markets: Gaining momentum

Long-term prices gained momentum towards the end of the holiday season, supported by stronger fundamental data.

Continental Europe

The German Cal 12 gained momentum in August, after rather slack trading without impetus in the previous month. Cal 12 traded slightly below the 57-EUR/MWh-mark in the beginning of the month and closed at 58.68 EUR/MWh on 31 August. The contract was supported by stronger fundamental data, especially CO₂, coal and gas. The latter was lifted significantly amid announcements of maintenance at Qatargas. This information also had a significant impact on the Quarter 4/2011. It traded at a low of 59.25 EUR/MWh on 8 August and reached its high at 66.00 EUR/MWh on 31 August. This was the highest quote since end of May. However, despite the recent increase, long-term contracts were still considered as rather “trendless”. The trading volume picked up following the end of summer holidays in many federal states. It increased by about 300 MW to reach 1,200 MW per day.

On the Dutch market, the Cal 12 contract went down in the first half of the month. It touched 56.00 EUR/MWh, its lowest level since June. However, strengthening fuel prices pushed up long-term products so that the contract reached 58.50 EUR/MWh on 31 August.

Nordic

The Nordic long-term contracts followed a rollercoaster ride in August. After decreasing in the beginning of the month and recovering in the middle following drier weather, they fell again to end more or less unchanged. The Cal 12 contract opened at 47.60 EUR/MWh on 1 August and closed at the same level on 31 August. The Nordic Quarter 4/2011 closed at 51.20 EUR/MWh, up one Euro from the beginning of the month.

Poland

In August, the Cal 12 contract traded rather sideways, opening at 50.76 EUR/MWh and closing at

49.30 EUR/MWh, which is exactly its monthly average. However, considering the contracts is Polish Zloty, Cal 12 increased by 0.3% to reach 203.50 PLN at the end of the month. Those differences were caused by the exchange rate between EUR and PLN. It increased from 3.99 PLN per EUR in July 2011 to 4.13 PLN per EUR in August 2011.

The same happened to the monthly and quarterly contracts. September 2011 gained 2.4% in PLN and lost 0.9% in EUR, closing at 49.97 EUR/MWh. Quarter 4/2011 gained 1.2% in PLN and fell 2.0% in EUR to close at 50.15 EUR/MWh.

Liquidity on the term market was healthy, with 953 MW traded for September 2011, 735 MW for Quarter 4/2011 and 1005 MW of Cal 12.

UK

The UK curve market showed immense volatility on the back of very volatile spot prices and thin liquidity. Only some suppliers traded any longer-term volumes. With bid-offer spreads widening and limited liquidity, traders were rather risk-averse. The Winter 2011 started the month at 64.17 EUR/MWh and ended at 68.58 EUR/MWh.

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2. CO₂ TRADING: EUAs rise on gas news

CO₂-prices followed the upward trend in oil and gas markets.

After declining since mid May, European Union Allowances (EUA) picked up in August. The December 2011 contract opened at 12.02 EUR/tonne on 1 August and closed at 13.10 EUR/tonne on 31 August. However, the first days in August had not indicated this upward trend. The contract even traded close to the 10 EUR/tonne-mark but was raised again by increased buying interest. As there were no CO₂-specific fundamental changes, the contract followed the general trend in the oil and gas markets for the rest of the month. Its high at 13.50 EUR/tonne was reached on 30 August when the news from a revision at a Qatar LNG terminal agitated the market.

3. GAS TRADING: Picking up amid supply fears

NBP gas prices went up on the back of high exports and fears of tight supply in winter.

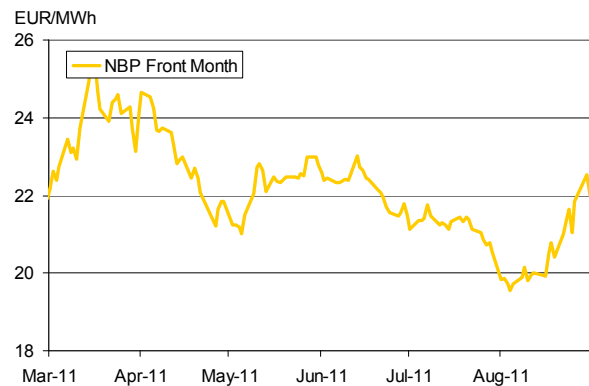
The gas market was strong in August – both on the prompt and the longer-term contracts. This was a result of increased demand and a stronger Brent oil market, but also a result of LNG supply fears for this Winter. LNG supply already fell towards the end of August, dropping from 70 to 50 mcm/d. Thus, the UK system was short for the majority of August. As a result, medium-range storage facilities needed to fill the supply gap on several occasions. However, the situation eased a little amid cooler weather. The NBP front season gained 2.15 EUR/MWh to close at 29.59 EUR/MWh at the end of August. The front month gained likewise, closing at 22.00 EUR/MWh on 31 August.

Flows through the Interconnector between the UK and Europe have been high during the second half of August, boosted by increased German demand. Europe I between Germany and Norway was shut for maintenance. Continental demand is continuously high. As long-term prices are much higher than the prompt, countries such as Germany are importing UK

gas to store it. This will continue to put pressure on the Interconnector.

Another boost to prices was provided by news from Qatargas, who announced that they will perform maintenance on their three newest and largest production lines from mid-September to mid-November.

NBP Front Month in EUR/MWh



Source: Vattenfall Energy Trading

4. COAL TRADING: Volatile prices

The coal market was volatile in August as boosting and softening influences took turns.

Amid a lack of fundamental, coal-related changes, prices in the coal market sought direction from the oil and equities markets during August. Thus, prices fell at the start of the month as equity markets gave back all their year-to-date gains amid increasing woes about the global economy. However, it did not follow the 10% loss of both the Standard & Poor's 500 index and Brent Crude quotations. The Cal 12 API2 contract only lost 3 USD to trade at 128 USD/tonne. Afterwards, coal prices saw successive week-on-week gains on the back of a surge in natural gas prices. The contract closed at 130.32 USD/tonne on 31 August.

European demand drifted in August with physical prompt prices trading 2 USD/tonne below the API2 swaps - in July this discount was only 75 cents. However, the end of August saw improvement in this situation and especially the front-end contract found support from utility hedging. Indian and Chinese

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demand for South African coal worsened as the monsoon reduced Indian demand and ample supply and cheaper coal from Indonesia influenced China's decision not to import higher priced South African coal. As a result, implied freight (the differential between API2 and API4 prices) widened further.

5. OIL TRADING: Missing clear direction

The oil market was nervous with macroeconomic data pushing prices down while demand lifted quotations.

Oil trading saw a hectic and volatile month. At the end of July, traders were keen on taking risks amid the resolutions on the US debt ceiling. However, the downgrade of the US to AA⁺ by Standard & Poor's halted this confidence and the barrel fell from 120.40 USD/bbl to just over 99.00 USD/bbl within one week. Additionally, there were more and more signs of stalling world economic growth. From there on, the market moved up slowly, mainly on the back of oil fundamentals such as higher refinery margins, a lack of sweet crude in North-Western Europe and backwardation in all European oil products. Furthermore, the hurricane season is relatively active so far. The market closed around 114 USD/bbl.

6. FX TRADING: Continuing sideways

The EUR/USD exchange rate is unchanged following continuously weak macro-economic data.

The EUR/USD exchange rate dropped a little at the beginning of the month and recovered to continue

trading in the same sideways channel as the months before. It opened at 1,441 in the beginning of August and closed at 1,445.

The fundamental influences remained unchanged from the previous months. Standard & Poor's downgraded the US and gave a negative outlook. The US Federal Reserve System said they will keep rates low until mid 2013, thus acknowledging much weaker economic growth and a deteriorating labour market.

In Europe, the economic crisis continued. Markets were afraid that France might lose its AAA rating, which sent financial equities down. Therefore, Italy, France, Belgium and Spain banned short selling for a two-week period. The European Central Bank stepped in by buying bonds, tightening Italian and Spanish spreads over Germany.

Exchange Rate EUR/USD



Source: Vattenfall Energy Trading

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ABBREVIATIONS

API2	All Publications Index at the Amsterdam-Rotterdam-Antwerp Range
API4	All Publications Index for South African free on board (FOB) coal
ARA	Amsterdam-Rotterdam-Antwerp, major coal-importing ports in north-west Europe
C4	Voyage freight rate between Richards Bay and ARA
CCGT	Combined cycle gas turbine
CDM	Clean Development Mechanism
CHP	Combined heat and power plant
CER	Certified Emission Reduction, resulting from an emission-reducing project in developing countries that has been certified
Dark spread	Spread between the fuel and power price for a generator
ECX	European Climate Exchange
EEX	European Energy Exchange, Leipzig
EPEX Spot	European Power Exchange, German-French spot exchange, Paris
ETS	European Union Emissions Trading System
EUA	European Union Allowance Unit
FOB	Free on board: a shipping term which indicates that the supplier pays the shipping costs from the point of manufacture to a specified destination
IMF	International Monetary Fund
IPE	International Petroleum Exchange, London
IUK	Interconnector UK – gas pipeline connecting the UK and Europe
LNG	Liquefied natural gas
MCM/D	Million cubic metres per day
NBP	National Balancing Point, gas hub in Great Britain
NCG	NetConnect Germany – German gas market area
N ₂ O project	CDM project to reduce nitrous oxide (N ₂ O)
OECD	Organisation for Economic Co-operation and Development
OPEC	Organization of the Petroleum Exporting Countries
OTC	Over-the-counter trading
PPX	Polish Power Exchange, Towarowa Gielda Energii S.A.
Spark spread	Difference between the price of electricity sold by a producer and the price of the used fuel
TSO	Transmission system operator
TTF	Title Transfer Facility: virtual gas trading hub in the Netherlands
UNFCCC	United Nations Framework Convention on Climate Change

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