

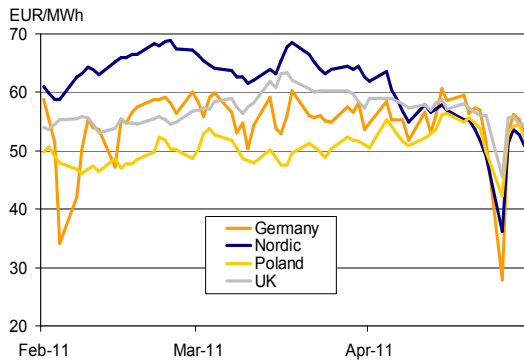
Commodity Markets at a Glance

April 2011

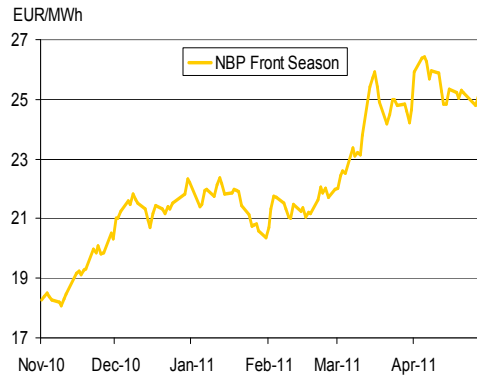
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Market Letter from Vattenfall Energy Trading

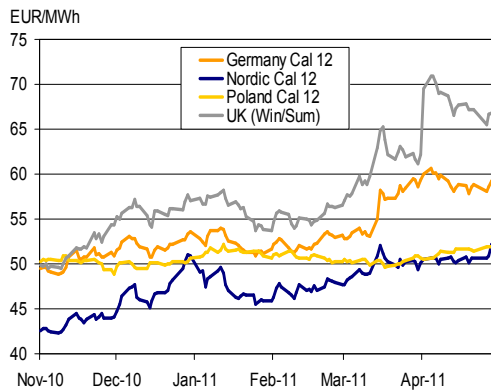
European Power Spot markets: Warm April



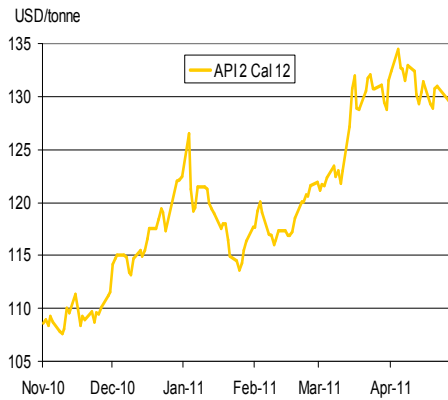
Gas Trading: Record LNG supply and low demand



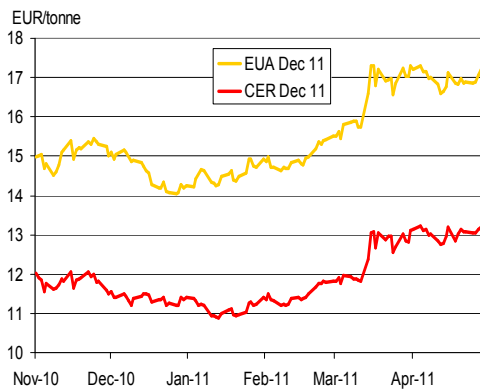
Power derivative markets: Low volatility



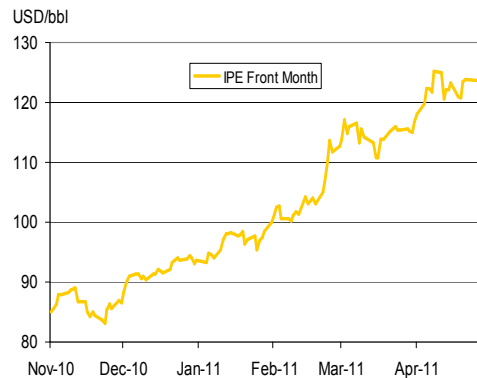
Coal Trading: Chinese demand



CO2 Trading: Sideways channel



Oil Trading: Middle East unrest prevails



Sources: EPEX Spot, EEX Power Derivatives, Nord Pool, PolPX, Vattenfall Energy Trading

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1. EUROPEAN POWER

Spot markets: Warm April

Spot prices on European energy markets decreased during April on the back of Easter holidays and warm weather. The average Nordic system price lost 10.37 EUR/MWh compared to the previous month. The UK followed with a 3.71 euro and the German spot with a 2.89 euro downward move. On average, the Polish spot was the only market to increase by 1.90 EUR/MWh month- on-month.

[EUR/MWh]	Germany	Nordic	Poland	UK
Current month av	51.58	53.84	51.73	55.72
Last month av	54.47	64.22	49.83	59.43
Difference	-2.89	-10.37	1.90	-3.71

Continental Europe

German Day-ahead Base opened at 54.69 EUR/MWh and reached a high of 60.69 EUR/MWh in the middle of the month. The spot prices were supported by poor power plant availability due to the moratorium for nuclear power plants in Germany and extremely low precipitation. Water levels in the Alps were significantly lower than in previous years. However, the effect was neutralised by strong energy production from solar and wind plants, as well as imports from neighbouring countries. Temperatures were, at 14°C, about 2°C above average for April. Spot prices fell over the Easter weekend and closed at 52.63 EUR/MWh at the end of the month. The daily traded average volume at EPEX Spot fell by 2 GWh to 608 GWh.

In France, temperatures were also 2°C higher than normal. Nuclear availability remained high and spot prices remained at a moderate level. France, normally a net importer from Germany, exported an average of 300 MWh to Germany during peak hours. The Benelux market was characterised by stable clearings for most of the month, around 54 EUR/MWh baseload per week on average. Prices went down during the last weekend in April on the back of the Easter holidays and bearish fundamentals coming from healthy wind and high solar production. Overall availability in France, Belgium and Holland was high in April, which compensated for the lower nuclear

output in Germany. Holland continued to be a net importer of power over the month, even if it began to export more to Germany at the end of the month. On average, APX for April delivered at 53.20 EUR/MWh baseload and 59.44 EUR/MWh peakload.

Nordic

The Nordic system price came down during April, with weather 4°C warmer than normal. Precipitation during April was close to normal, but the load was much lower than average due to the warm weather. The yearly maintenance period started and in Sweden three reactors went offline. In Finland all reactors were running, as the maintenance period there starts in May. Oskarshamn 3 did not manage to reach the new output at 1400 MW, and the reactor has been running at 1260 MW. The hydrological balance improved with little more than 1 TWh. Inflows started close to normal levels but increased as the first week of April was extremely wet. Precipitation outcomes in Norway and Sweden were at normal levels of approximately 9 TWh. Swedish reservoirs stood at 23% of maximum by the end of week 13, which is 2% above normal at this time of the year. Norwegian reservoirs stood at 26% of maximum, which is 9% lower than normal. In both Sweden and Norway, inflows were much higher than normal during April. The warmth led to snow melting earlier than normal and reservoir fillings increased on 11 TWh higher inflows than normal. On the other hand natural storage, snow- and soil-water storage, showed a huge deficit in both Sweden and Norway at the end of April.

Poland

In Poland, it was rather warm, with an average temperature of 11°C, almost 2°C above normal. Despite milder weather, domestic demand increased by 4% year-on-year. Maintenance levels in April 2011 were rather high. However, the fall in supply was, at only 1% year-on-year, not significant. The decisive fundamental factor influencing energy prices were strong energy exports to neighbouring countries. Poland exported on average 530 MWh more (3% of domestic demand) to the Czech Republic and Germany in April than in the previous year. The average price for baseload on PPX amounted to

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51.73 EUR/MWh, representing a 14% increase year-on-year. The price increase was triggered by higher energy exports, higher domestic demand and lower supply. The Polish spot price was slightly lower than the spot in Sweden (-2.11 EUR/MWh) and the Czech Republic (-0.66 EUR/MWh), but slightly higher than in Germany (by 0.15 EUR). High export and maintenance figures in peak hours resulted in 11 price spikes on the balancing market, compared to 8 last month. The average balancing market outcome was higher than the outcome in both the previous month (by 6%) and the previous year (by 4%).

UK

The UK Day-ahead Base opened at 55.51 EUR/MWh. With continuing heavy LNG deliveries into the UK of circa 100 mcm per day, the spot struggled to perform. Furthermore, good availability in the UK and warm temperatures gave no scope for the upside on the spot. Towards the end of the month slight structural changes, specifically a tightening of the Continental Power system, pushed UK prices down. The UK Day-ahead Base closed at 54.07 EUR/MWh.

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Derivative markets: Low volatility

After the uptrend in March, prices developed heterogeneously on the power term markets. German and UK term prices fell slightly, while the Nordic and the Polish prices traded up.

Continental Europe

After an upward trend in March, prices for the German Cal 12 made a short excursion above the 60-euro level at the beginning of April. After that, prices on the futures market returned to normal and levelled out in a channel between 57.80 and 60 EUR/MWh. After record highs in daily traded volume of almost 5 GWh for certain days in March, the volume decreased to an average of 1 GWh in the last week of April.

After the bullish month of March, the Dutch Cal 12 contract started the month on a bearish note, losing 2 EUR/MWh in the first ten days of the month on the back of weaker fuel prices and disappointing clearings on the spot. For the rest of the month Cal 12 traded sideways, oscillating around 58 EUR/MWh until the end of April. The Dutch versus German spread on the Cal 12 remained weak overall, still trading negative at around -0.50 EUR on the back of a tight German market.

Nordic

Most contracts increased during the month, despite the lower spot and the strengthening of the hydrological balance. The first week in April most contracts traded down on wet forecasts and high amounts of precipitation. Both the Quarter 3/2011 and Cal 12 contract traded at a monthly low on 7 April. The Cal 12 contract fell from 50.55 EUR/MWh to 49.40 on 7 April and closed at 52.35 EUR/MWh (+€1.8) on a monthly high. On 31 April the Nordic Quarter 3/2011 closed at 56.30 EUR/MWh, 1.64 euro higher than on 1 April.

Poland

Liquidity on the Polish term market was healthy, with 912 MW of May 2011, 365 MW of Quarter 3/2011, 605 MW of Quarter 4/2011 and 970 MW of Cal 12 traded in April. Front-end products were strongly correlated with the spot market. The bullish spot

resulted in a 7% increase in the front month base and a 5% increase in the front quarter base contracts prices. May 2011 reached the price of 53.59 EUR/MWh, Quarter 3/2011 51.94 EUR/MWh. Cal 12 increased by 2.9% to 51.94 EUR/MWh at the end of the month. Generally, volatility in term prices was lower than in the previous month, as the influence of other European energy markets and commodities was not as strong as in March. The average EUR/PLN exchange rate fell from 4.02 PLN per EUR in March 2011 to 3.97 PLN per EUR in April 2011. Growth in term prices was influenced by the strengthening of the Polish currency.

UK

The term showed a reduction in volatility, with prices generally trending down. This development was supported by a general lack of news coming out of the Middle East and from the stricken reactors in Japan. Considerable premium had been built into the energy complex with the possibility that Japan might take LNG at some point, which would have potentially increased gas prices on the NBP. With these expectations not materialising, and the lack of any further fall-out coming from the Middle East, there was limited upside as oil started to drift down. Winter 2011 base started the month at 69.28 and ended it at 67 EUR/MWh. Peaks followed suit, trading down from 77.85 to 76.05 EUR/MWh.

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2. CO₂ TRADING: Sideways channel

Data for European emissions in 2010 was released in April.

Prices for European Union Allowances (EUA) opened at 17.21 EUR/tonne and closed at 17.14 EUR/tonne. The carbon market remained in a sideways channel between 16.59 and 17.31 EUR/tonne throughout the whole month. The verified emissions data for 2010 were within expectations: the amount of CO₂ emitted in Europe increased by 3% year-on-year, with the biggest pickup coming from industrial activity. The market did not take any direction from these figures. The EUA future contracts trading volume on the European Climate Exchange is around average for this year, but off from the March volume.

Prices for Certified Emission Reductions (CER) largely followed the EUA development. CER use increased in 2010 as installations offloaded more due to the 2012 deadline and unclear qualitative restrictions. The spread between EUAs and CERs remained at a similar level as in March, with an average of 3.92 EUR/tonne.

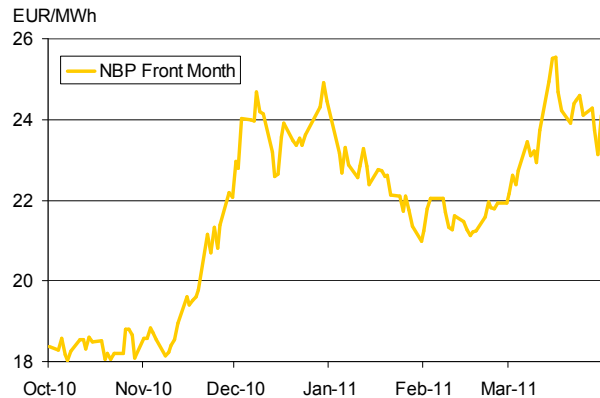
3. GAS TRADING: Record LNG supply and low demand

NBP gas prices fell throughout April on the front and back-end of the curve.

The NBP May contract opened on 1 April at a high of 24.66 EUR/MWh, grinding consistently down to 21.20 EUR/MWh on 26 April. Subsequently the contract gained 62 cents and settled at 21.84 EUR/MWh. In line with this, the prompt market gradually lost value. The NBP Within Day contract traded in a 17.31 EUR/MWh to 26.40 EUR/MWh range, since storage injections have been close to maximum, being unable to take advantage of price differentials. Demand did not exceed the seasonal norm and was supported by high Interconnector exports as well as strong storage injections. Grid performance was mixed; however, the increasing LNG supply paired with lower demand on the back of warm weather and the UK bank holidays softened prices.

The rather decoupled Winter 2011 contract traded up in the first week of April, mirroring the oil market and subsequently sold off with it. While oil recovered over the second half of April, the NBP Winter 2011 contract traded down, ultimately driven by the weakening prompt.

NBP Front Month in EUR/MWh



Source: Vattenfall Energy Trading

4. COAL TRADING: Chinese demand

Asia hopes revive while the European coal market turns static.

After several eventful months in a row, the only hope for the European coal market came from China. The coal stocks in the ARA (Amsterdam/Rotterdam/Antwerp) region fell to very low levels (compared to historical levels) with Rotterdam dry-bulk terminal at 2.5 million tonnes and Amsterdam at 1.3 million tonnes. On the supply side, the main regions, Colombia and Russia, had no issues related to coal supply and the overall fundamental situation in Europe showed no signs of life and rather a weakening trend. On the other hand, domestic prices in China continued rising and coupling with decreasing stocks within the main ports and utilities after the demand for coal surged on the back of renewed power demand. Therefore, prices within the Pacific basin started to firm, and the arbitrage with Australian prices was only 5 US dollars away from Chinese prices. Large quantities of Indonesian and low grade Australian coal found a home in China, which gave more support for the FOB

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Richards bay prices. Overall the API2 prices increased by around 2 USD/tonne on the Cal 12, closing the month at around 131 USD/tonne. The API4 followed the same path, with Cal 12 increasing by around 2.54 USD/tonne and closing the month at 126.75 USD/tonne. Newcastle coal took a hit at the beginning of the month with lower than expected Japanese demand, but found some support by the end from the renewed Chinese interest, and finished the month trading at 130.9 USD/tonne.

5. OIL TRADING: Middle East unrest prevails

Many oil investors kept long positions throughout April.

Oil moved higher throughout April from 116.72 to 125 USD/bbl, where it created a double top. From there the market ebbed and flowed, with rather high intraday volatility. There were a lot of global events in April that moved markets. The continuous unrest in the Middle East, notably Libya, but also Syria and Yemen, supported prices while the elections in Nigeria discouraged oil sales. Continued low interest rates in the United States and a rate hike in Europe weakened the US dollar considerably, lifting commodity prices in general. Within the oil market, gasoline was the favourite buy, due to low refinery runs and healthy exports to South America. US Gasoline demand was disappointing, however, and with pump prices of over 4 USD/gallon, further demand destruction is predicted for the near future, and this could dampen overall sentiment. This demand destruction was the major reason for Goldman Sachs to advise their customers to sell length in oil, and they predicted Brent to fall towards 105 USD/bbl. Obviously this created a rather fierce sell-off in the mid of April but in the meantime most dips have been bought and 120 USD/bbl has proven to be a good buying opportunity. Contrary to what

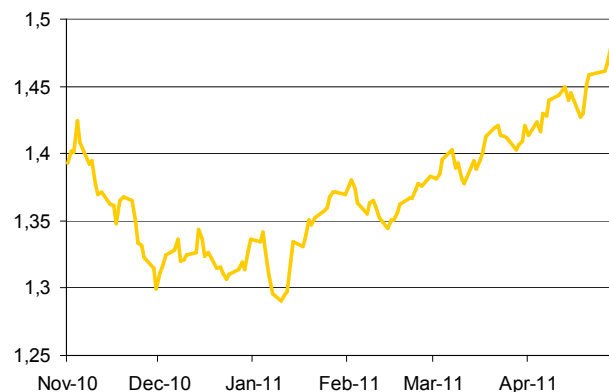
Goldman Sachs advised, Morgan Stanley and Merrill Lynch had more bullish views, seeing 140 USD/bbl sooner than 105. Within this volatile environment, oil investors kept almost record long positions throughout April, often seen as a contra indicator. When they start to sell, a move down may be very violent.

6. FX TRADING: Weakening dollar

The EUR/USD exchange rate dipped mid-month, but recovered thereafter.

Standard & Poor's downgraded the outlook for the United States to negative, saying there is a risk that U.S. policymakers may not reach an agreement on how to address the country's long-term fiscal pressures. Moreover, deepening fears about Japan's nuclear crisis, as well as the ongoing Middle Eastern tensions, continue to put pressure on the dollar. The European Central Bank decided to raise its benchmark interest rate to 1.25% from 1% in April. And traders have bid up the common currency even more since. Mid-month, the EUR/USD exchange rate dropped from 1.44 to 1.42 EUR/USD. By the end of the month, the exchange rate recovered to 1.49 EUR/USD.

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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