The McGraw-Hill Companies

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By email to commodities@c-ebs.org

August 1, 2008

PLATTS' RESPONSE TO CONSULTATION PAPER ON CESR'S/CEBS' TECHNICAL ADVICE TO THE EUROPEAN COMMISSION ON THE REVIEW OF COMMODITIES BUSINESS

Attachment 1: Platts' Response to CESR/ERGEG Call for Evidence on Record Keeping, Transparency, Supply Contracts and Derivatives for Electricity and Gas Attachment 2: Comparison of Commodity Markets

Dear Sirs,

Platts, the energy and commodities information division of The McGraw-Hill Companies, is pleased to have the opportunity to contribute to the review of the treatment of commodities business under MiFID. Enclosed is Platts' response to the consultation paper on CESR's/CEBS' technical advice to the European Commission, issued on May 15, 2008. It includes comments on specific questions posed in your paper and a comparison of various commodity markets covered by Platts. It focuses mainly on the issues of transparency and over-the-counter markets, which is where Platts' main area of expertise lies.

The consultation paper goes beyond the discussion of regulatory treatment of firms that provide investment services relating to commodities derivatives into a discussion of transparency and includes comments on levels of transparency in OTC trade and whether there is evidence of market failure in commodities markets. We would therefore like to draw your attention to Platts' response to a call for evidence on record keeping, transparency, supply contracts and derivatives for electricity and gas, issued jointly by CESR and ERGEG on February 18, 2008. We believe comments contained in this response are also relevant to the present discussion and indeed CESR and CEBS refer to the work of CESR and ERGEG in this consultation paper.

Platts' market experts are active in gathering and publishing news and market intelligence for the oil, natural gas, electricity, petrochemical, metals, coal, nuclear power, shipping and emissions markets. Each of these markets is different. Each has its own routes to market, its own types of traded product, and its own price drivers. Each has a different degree of liquidity, maturity and transparency.

Platts agrees with most of the findings of CESR's and CEBS' consultation paper on their technical advice to the European Commission regarding the review of commodities business. We appreciate the deliberation with which all parties are approaching the issue of market functioning, transparency and regulation of the commodities business, taking time to consult stakeholders. However, we would still advocate caution to ensure that any future regulation takes account of the specificities of each market and does not damage liquidity.

If you have any questions regarding this submission, please do not hesitate to contact Mike Davis, Platts' Global Director, Risk Management on +44 (0) 20 7176 6118 or Vera Blei, Editorial Director, European Power on +44 (0) 20 7176 6119.

Best regards

Dan Tanz Vice President, News & Pricing Larry Foster Global Editorial Director, Power

PLATTS' RESPONSE TO CONSULTATION PAPER ON CESR'S/CEBS' TECHNICAL ADVICE TO THE EUROPEAN COMMISSION ON THE REVIEW OF COMMODITIES BUSINESS

About Platts

Platts, a division of The McGraw-Hill Companies, is a leading global provider of energy and metals information. With nearly a century of business experience, Platts serves customers across more than 150 countries. From 15 major offices worldwide, Platts serves the oil, natural gas, electricity, petrochemical, metals, coal, nuclear power, shipping and emissions markets.

Platts' real-time news, pricing, analytical services, and conferences help markets operate with transparency and efficiency. Traders, risk managers, analysts, and industry executives depend upon Platts to help them make better trading and investment decisions.

Founded in 1888, The McGraw-Hill Companies (NYSE: MHP) is a leading global information services provider meeting worldwide needs in the financial services, education and business information markets through leading brands such as Standard & Poor's, McGraw-Hill Education, BusinessWeek and J.D. Power and Associates.

The Corporation has more than 280 offices in 40 countries. Sales in 2007 were \$6.8 billion. Additional information is available at <u>www.mcgraw-hill.com</u>.

Responses to specific questions posed in the consultation paper

1) In practice, what proportion and/or amount of *OTC commodity derivative* transactions are financial instruments falling within the *MiFID* and what proportion are spot? (A breakdown in terms of the underlying would be helpful.)

Answer to Question 1:

MiFID lists the following as financial instruments falling within its scope:

(1) Transferable securities;

- (2) Money-market instruments;
- (3) Units in collective investment undertakings;

(4) Options, futures, swaps, forward rate agreements and any other derivative contracts relating to securities, currencies, interest rates or yields, or other derivatives instruments, financial indices or financial measures which may be settled physically or in cash;
(5) Options, futures, swaps, forward rate agreements and any other derivative contracts relating to commodities that must be settled in cash or may be settled in cash at the option of one of the parties (otherwise than by reason of a default or other termination event);
(6) Options, futures, swaps, and any other derivative contracts relating to commodities that can be physically settled provided that they are traded on a regulated market and/or an MTF;

(7) Options, futures, swaps, forwards and any other derivative contracts relating to commodities, that can be physically settled not otherwise mentioned in C.6 and not being for commercial purposes, which have the characteristics of other derivative financial instruments, having regard to whether, inter alia, they are cleared and settled through recognized clearing houses or are subject to regular margin calls;

- (8) Derivative instruments for the transfer of credit risk;
- (9) Financial contracts for differences;

(10) Options, futures, swaps, forward rate agreements and any other derivative contracts relating to climatic variables, freight rates, emission allowances or inflation rates or other official economic statistics that must be settled in cash or may be settled in cash at the option of one of the parties (otherwise than by reason of a default or other termination event), as well as any other derivative contracts relating to assets, rights, obligations, indices and measures not otherwise mentioned in this Section, which have the characteristics of other derivative financial instruments, having regard to whether, inter alia, they are traded on a regulated market or an MTF, are cleared and settled through recognized clearing houses or are subject to regular margin calls.

Platts understands the MiFID definition of spot to mean "short-term trade for delivery within the next couple of days.", but generally with a seven-day maximum delivery horizon.

According to these definitions, it would appear that a significant proportion of over-thecounter trade in the markets covered by Platts would in theory fall under the scope of MiFID. However, it is impossible to judge exactly what that proportion might be as no definitive information on the size of the OTC market exists. BIS data may give an indication of volumes but it is lacking in some detail, with limited granularity by instrument or by commodity breakout, for example between energy and agricultural or metal commodities (with the exception of gold).

Platts notes that a significant proportion of spot physical volume in commodity instruments (in oil especially) would not fall under *either* of these descriptive heads in Question 1 as so defined, as tenors with a "delivery" of less than seven days represent a small proportion of those which Platts would consider to be within the universe of "spot" physical instruments. In pipeline-delivered gas markets or electricity markets the gap between the two stated categories is much less marked.

The UK's Financial Services Authority publishes annual estimates of trade in electricity, natural gas, coal and emissions in the UK and Europe, based on a survey of brokers. This trade tends to be for physical delivery, with a large proportion conducted via exchanges or electronic platforms operated by brokers such as Spectron, ICAP, GFI, Prebon, TFS and Global Coal. No reliable data exists on the amount of trade in non-standard products, physical or financial, that takes place in these markets on a bilateral (counterparty to counterparty) basis.

Between August 2006 and July 2007, according to the FSA, the share of electronic trade compared with voice-brokered trade was as follows: UK gas 84% electronic, 16% voice-

brokered trade; Continental European gas 59% electronic trade, 41% voice-brokered trade; UK power 67% electronic, 33% voice-brokered trade; Continental European power 71% electronic, 29% voice-brokered; coal 35% electronic, 65% voice-brokered; emissions 49% electronic, 51% voice brokered. Much of the trade in electricity, natural gas and emissions would have been cleared. According to the FSA and to figures released by exchanges, the trends towards clearing OTC trades are increasing.

Also according to the FSA, the volume of purely financial trade (swaps and options) is very small in these markets. Only in the UK natural gas market did it find any significant amount of financial trade; for European natural gas, European power and UK power financial trade accounted for less than 1% of total trade between August 2006 and July 2007.

In the oil market especially, and to a lesser extent in gas markets, it is worth noting that the MiFID definition of spot excludes a large proportion of physical wholesale trade. Physical crude and product cargoes may trade 30 days out, while the standard loading period is 10-25 days out. These are generally considered spot trades, although they do not comply with the MiFID definition of spot. Even in the barge market, where smaller, prompter volumes change hands, standard loading dates tend to be 5-15 days out. Trade in products loading before that window is considered unusual, and does not generally form part of Platts' assessment processes for "spot" energy commodities.

By contrast, forward OTC trade in the oil market may be in non-standard, customized products. These may lead to physical delivery, but would more commonly be financially settled. It would seem that this trade would also fall under the scope of MiFID according to current definitions. Platts wonders whether it is indeed the intention to regulate this kind of trade under MiFID.

Rough estimates of financial versus physical and exchange/online versus over-thecounter volumes are contained in the attachment Comparison of Commodity Markets. Platts believes it would be inadvisable to extend the scope of MiFID in its current form, without amending definitions to take account of the specificities of various commodities markets.

3) What informational advantages persist in commodity derivatives markets, and in particular to what extent do those also active in the underlying physical market have informational advantages?

Answer to Question 3:

Platts has long supported increased transparency in the physical and financial markets it covers. Platts' business is largely built around providing price and fundamental market information, particularly in traditionally opaque markets where that information is harder to come by. That information is supplied on a commercial basis to anyone who wishes to subscribe. It includes benchmark prices (assessments and indices), market commentaries, market analysis, exchange prices, information on production and consumption,

information on scheduled and unscheduled outages, weather data and market-related news stories. Platts is by no means the only company in this business.

Each of the markets Platts covers has slightly different market drivers, although a number also affect one another in price terms to a greater or lesser extent. Electricity and gas markets tend to be strongly influenced by fundamental market data (plant outages, field outages, weather) in the short term and by other energy prices, foreign exchange rates and emissions prices in the long term. Oil markets can be more headline driven. Emissions markets react to policy decisions, energy prices, etc.

Companies active in a given market will tend to have access to more price information than companies not active in that market. They are better placed to judge up-to-theminute trades, bids and offers that might affect that market and related markets. They also have a greater need for that information. They may also glean an idea of other traders' positions that could be relevant to future price developments. But they may not always all have equal access to the information that moves prices, particularly in markets driven by fundamental market data, which may not be widely available.

The question of informational advantages for those active in both underlying physical markets and related derivatives markets depends also on the relative effect of various fundamental factors on shorter-term spot or longer-term forward or derivative prices. In markets or nearby time periods where physical trade or physical fundamentals have a high correlation with forward or derivative prices the informational advantages would of course be greater.

A commodity derivatives trader who is also active in the underlying physical market may have informational advantages over a commodity derivatives trader not active in the underlying physical market. If the informational advantages are sufficient, that trader would generally choose to become active in the physical market, subject to the operational and infrastructural complexities that physical market participation requires. A commodity derivatives trader with physical assets may have greater informational advantages, which is why some financial players choose to acquire physical assets, albeit often small ones, in certain markets. Again, this would be a commercial decision.

4) Do information asymmetries in commodity derivatives markets lead to mis-selling concerns, or to other concerns about potential client detriment?

Answer to Question 4: Not to Platts' knowledge.

5) Do you have any transparency-related concerns relating to the trading of nonelectricity and gas derivatives? If so, in which markets and why?

Answer to Question 5:

The term "transparency" covers a broad range of information. It includes transactions concluded by market participants and fundamental information on supply and demand.

Platts believes that fundamental supply and demand market data is vital to a full understanding of commodity prices, particularly for electricity and natural gas, and is a key component of market transparency.

In its Sector Inquiry, the results of which were published in January 2007, the European Commission found that competition in electricity and natural gas markets was not functioning well because of 1) market concentration/market power, 2) vertical foreclosure, 3) a lack of market integration, 4) a lack of transparency. This lack of transparency referred largely to fundamental supply and demand market data rather than to transactional information, however. In fact, due to the large proportion of electronic trade in electricity and gas, there is a relatively high degree of transactional transparency in these markets.

In most other commodity markets covered by Platts, with the exception of US electricity and gas, it is probably fair to say that there is less transparency of fundamental supply and demand market data than there is in the European electricity and gas markets. However, as suggested in the consultation paper, there do not appear to be particular concerns arising from current relative levels of transparency.

The degree of transparency on transactional data is different depending on the market. In the oil market, for example, there is considerable transparency with regard to what is traded on spot physical markets, up to and including counterparty names. There is also considerable transparency in terms of price and volume in exchange-based derivatives trade. There is less transparency in OTC derivatives trade, which often covers bilateral, bespoke contracts aligned to particular physical index prices. In the coal market, there is some degree of transparency at least in terms of price and volume for steam coal, but much less information for coking coal.

Platts exists to bring greater transparency to energy and commodity markets. Platts has long advocated the goal of increased transparency in commodities markets both in the US and in Europe. In recent years Platts has taken a number of steps to enhance the reliability of voluntary price reporting and to increase information available to the marketplace on its price surveys. Platts continues to examine ways to provide still more transparency in its price reporting, which places a particular emphasis on the more "opaque" over-thecounter markets.

6) Do you have evidence of informational asymmetries in commodity derivatives markets in relation to market abuse?

Answer to Question 6: No.

12) Do you believe that for non-electricity and gas derivatives contracts, the transaction reporting requirements in the MiFID support market regulation? If so, can you explain why you think they do?

Answer to Question 12:

Platts agrees with the findings of CESR and CEBS with regard to the application of transaction reporting requirements under MiFID, both as far as electricity and gas trade is concerned and as far as other commodities are concerned.

The benefits and disadvantages of enforced trade reporting as an additional measure to improve market functioning must be carefully weighed. A distinction should also be drawn between transaction reporting to regulators for the purpose of market monitoring and transaction reporting to improve market transparency.

There is little doubt that opaque markets tend to be less efficient and greater transparency will generally lead to greater liquidity and market integrity. However, some potential new market entrants may balk at the prospect of having to reveal all transactional data to national regulatory authorities and may be deterred by the prospect of having those trades made public, at least in a timely fashion, close to the time of execution of that trade. New entrants and smaller market players may be concerned that revealing their trades might play into the hands of the largest and widest-established market participants.

It is important to strike the right balance between ensuring market participants have fair and equal access to information that affects prices and recognizing that companies from a competitive standpoint will desire to keep some of their activities confidential. US legislators and regulators have recognized these concerns and opted for an initial step of voluntary transparency measures. Platts encourages CESR and CEBS, as well as the European Commission, to take that approach as well.

17) Do you believe there is a potential for regulatory arbitrage? If so, can you provide evidence?

Answer to Question 17:

As pointed out in CESR's/CEBS' consultation paper, there have already been examples of companies relocating to countries outside the European Union, perhaps to avoid increased regulatory costs and inconvenience. As long as EU legislation is applicable based on where the company is located rather than where it trades there will be a potential for regulatory arbitrage.

A number of large trading houses have established trading entities in Switzerland or other comparable locations, and they might be joined by other companies if regulation and related costs were considered to have become onerous. This could potentially create a competitive imbalance between adjacent jurisdictions.

Where legislation is applicable based on where trade is carried out, there may also be a potential for regulatory arbitrage, particularly with regard to non-commercial trade in derivatives. For instance, ICE Futures Europe's listing of a cash-settled WTI crude oil contract raised concerns in the US. There have been calls in the US subsequently to regulate trade at the trading screen level for this reason.

Similarly, there are concerns that EUA and CER contracts now offered by NYMEX might attract liquidity away from EU-based emissions exchanges as traders seek to avoid regulation. Closer to home, one of Europe's largest electricity exchanges, Nord Pool, is based outside the European Union. Unlike on many other European electricity exchanges, a large proportion of forward trade via Nord Pool is financial.

Attachment 1

The McGraw-Hill Companies

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March 18, 2008

PLATTS RESPONSE TO CALL FOR EVIDENCE ON RECORD KEEPING, TRANSPARENCY, SUPPLY CONTRACTS AND DERIVATIVES FOR ELECTRICITY AND GAS

Attachments: Platts Methodology for European Power, Platts Methodology for European Gas, Platts Methodology for North American Natural Gas, Platts Methodology for European Oil Products, *Platts' European Power Daily*, *Platts' European Gas Daily*, *Platts' Gas Daily*, *Platts' European Marketscan*.

Dear Sir,

Platts, the energy and commodities information division of the McGraw-Hill Companies, is pleased to have the opportunity to contribute to the discussion on improving transparency in European power and natural gas markets. Enclosed is Platts' response to the call for evidence on record keeping, transparency, supply contracts and derivatives for electricity and gas, issued jointly by CESR and ERGEG on February 18, 2008. It includes an overview and answers to specific questions. In its response, Platts also outlines some different approaches to transparency we have taken in the various markets we observe so as to give a flavour of the different options open to regulators.

Platts has long advocated the goal of increased price transparency in natural gas and electricity markets both in the US and in Europe. In recent years Platts has taken a number of steps to enhance the reliability of voluntary price reporting and to increase information available to the marketplace on its price surveys. Platts continues to examine ways to provide still more transparency in its price reporting.

Platts appreciates the deliberation with which the Commission and regulators are approaching the issue of transparency of market data, taking time to consult stakeholders and care to ensure that future regulation does not slow the development of liquidity in Europe's power and gas markets. Platts encourages market-driven solutions that provide industry participants with choices and do

not pre-determine winners and losers. However, without the proper regulatory framework in place, those market solutions may not develop.

If you have any questions regarding this submission, please do not hesitate to contact Sharon Levrez, Platts' director, European Power Product Development, on +32 2 733 77 94 or email <u>sharon_levrez@platts.com</u>.

Best regards

Dan Tanz Vice President, News & Pricing Larry Foster Global Editorial Director, Power

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Overview

A starting point for the present discussions on improving transparency in traded electricity and natural gas markets in Europe is the findings of the Sector Inquiry carried out by the European Commission's directorates for Transport and Energy and for Competition. That Sector Inquiry found in January 2007 that competition in electricity and natural gas markets was not functioning well because of 1) market concentration/market power, 2) vertical foreclosure, 3) a lack of market integration, 4) a lack of transparency.

Platts believes structural problems are impeding the development of the European electricity and natural gas markets. There is an imbalance between buyers and sellers. National markets and even the European market tend to be dominated by a handful of major players. There is a lack of market integration between member states and no common market design. Moreover, there is a varying degree of transparency in fundamental supply and demand data (plant outages, field outages, available transmission capacity, gas storage etc.) Measures that address these issues first will surely go a long way towards creating more liquid wholesale electricity and natural gas markets in which there is greater consumer confidence and more competitive prices. Platts believes that elements of the Third Energy Package, including unbundling requirements, will help lay the groundwork needed for these markets to flourish.

Transparency rules, too, will play a vital role in market development. However, the benefits and disadvantages of enforced trade reporting as an additional measure to improve market functioning must be carefully weighed. There is little doubt that opaque markets are generally inefficient and greater transparency will generally lead to greater liquidity and market integrity. However, potential new market entrants may be put off by the prospect of having to reveal all transactional data to national regulatory authorities and would almost certainly be deterred by the prospect of having those trades made public, at least in a timely fashion. New entrants and smaller market players may rightfully be concerned that revealing their trades would give the dominant market participants a strong tool to further consolidate their position.

It is important to strike the right balance between ensuring market participants have fair and equal access to information that affects prices and recognizing that companies from a competitive standpoint will desire to keep some of their activities confidential. US legislators and regulators have recognized these concerns and opted for an initial step of voluntary transparency measures. Platts encourages CESR and ERGEG to take that approach as well.

Platts has considerable experience in assessing prices and analysing market development in a number of commodities, including oil, electricity, natural gas, coal, emissions, metals, petrochemicals and shipping in Europe, the US and Asia. No two markets are the same. The degree of liquidity and transparency varies greatly from market to market and the solutions that have been found to improve the market's functioning are also quite diverse. In some markets there is a higher portion of exchange or other online trade; in others trade is mostly done over the counter either bilaterally or using a broker. Some markets see hundreds, even thousands of fixed price deals a day; others see only a handful a week. In some markets the details of trades that form part of the price setting process are known to all, up to and including counterparties. In other markets trades are mostly private and confidential, often with an index-related price, and only the price and volume may be known.

Platts exists to bring greater transparency to opaque markets. Platts has long advocated greater transparency in all the markets it covers, including European electricity and natural gas. In answering the questions below, Platts has outlined some of the approaches it uses in various markets and the kinds of information it makes available on a commercial basis. We have also commented generally on the information available currently in Europe's electricity and natural gas markets and the proposed measures to improve transparency of market data and have drawn upon our experiences in markets in other regions, notably the US. Platts has focused its comments on questions pertaining to transparency, the topic where it has the most expertise.

Responses to specific questions

Question 11. What guidelines and arrangements do energy regulators propose for the making available of aggregate market data by them under paragraph 3 of Article 22f/24f?

Response to Question 11. The issue of how to make public market data is perhaps the most sensitive. New market entrants may be put off by the prospect of having to reveal all their trades to national regulatory authorities and would almost certainly be deterred by the prospect of having those trades made public. There would be concerns that publication of trade data could enable dominant market participants to further consolidate their position. Therefore, it is important to strike the right balance between ensuring all market participants have access to the information they need to allow that market to function efficiently and recognizing that companies will desire from a competitive standpoint to keep some of their activities confidential.

In market transparency provisions of the Energy Policy Act of 2005, the US Congress recognized this dilemma. Congress directed the US Federal Energy Regulatory Commission to facilitate market transparency in gas and electricity markets. It specified, though, that in determining the amount of information to be made available, FERC must "seek to ensure that consumers and competitive markets are protected from the adverse effects of potential collusion or other anticompetitive behaviors that can be facilitated by untimely public disclosure of transaction-specific information."

In an April 2007 proposed rule (RM07-10) to implement the EPAct provisions, FERC acknowledged Congress' concerns about possible anticompetitive impacts of publishing transaction-level data and also noted that the Department of Justice "echoed this caution, stating that the Commission 'may be able to achieve the benefits of transparency while limiting its potential harm by aggregating, masking, and lagging the release of such information.' "In its final rule, Order 704, issued 26 December 2007, FERC required buyers and sellers to report aggregate volumes of relevant transactions on an annual basis, thus avoiding anticompetitive concerns by aggregating volumes, masking delivery points and delaying the release. The Commission determined that mandatory reporting to the government of transactional data would not be imposed at this time. Platts was an active participant in the FERC proceeding and supports the Commission's findings.

Platts would also like to note that the term "market data" covers a broad range of information. It includes transactions concluded by market participants and fundamental information on supply and demand. Platts believes that fundamental supply and demand market data is vital to a full understanding of electricity and natural gas prices and is a key component of market transparency. Platts welcomes, therefore, that national regulatory authorities and the European Commission and regulatory authorities are working towards improving transparency on both types of information. In US gas and electricity markets, FERC is taking the same approach, determining that physical flow data is critical to understanding market functioning. The experience in the UK is instructive; although some parties initially objected to the near-real-time publication of gas flow data by National Grid, the system in place since 2006 has demonstrated the value of fundamental supply and demand data in explaining price movements.

Platts believes that such sensitive market data is best handled by a recognized information provider with experience of analysing market data. That company should be wholly independent, with no vested interest in the market. In calling on FERC to facilitate price transparency, Congress instructed that the Commission "shall consider the degree of price transparency provided by existing price publishers and providers of trade processing services, and shall rely on such publishers and services to the maximum extent possible." In Order 704, the Commission established only the annual reporting requirement for aggregate data and pointed out that "commercial trade publishers are the most significant source of market price information in US wholesale natural gas markets."

In terms of the kind of transactional market data that would be of benefit to market participants, information on total volume traded, share of trade of top five market participants, high price, low price, simple average and weighted average price, as well as deviation from the mean, would all be relevant. Share of exchange trade, other online trade and pure over-the-counter trade would also be useful.

With regard to market fundamental data, there are a variety of categories which are necessary in the formulation of an informed market position and confident market entry. These fundamental supply and demand categories not only influence trade strategy, but also dictate asset portfolio movements, production decisions, geographic focus, asset and infrastructure development requirements, and long-term market strategy. The availability of indicators such as fuel consumption, production, plant efficiencies, segmented actual and forecast demand, available pipeline capacities, actual and forecast gas flows, fuel reserves, and hourly emissions are all highly conducive to competitive and accessible markets.¹

Compulsory FERC and Energy Information Administration reporting of the indicators listed above, on a facility level and at a fairly high frequency, has fostered an undeniably

¹ US Market information sources cited: Power: FERC forms 1, 423, 714, 906 report monthly or annual statistics by facility on fuel cost, fuel quality, plant operation, wholesale transactions and counterparties, retail sales, forecast and actual load by planning area, marginal costs, generator inventories and historical outages; EIA forms 411, 423, 759,860, 861, 900, 906, 920 report monthly or annual statistics on power plant operations, generation, consumption, production costs, sales by customer type, historical/projected sales and capacity purchases, proposed infrastructure investment, historical/projected interstate power flows, power wheeling between utilities, fuel utilization, and historical/projected supply and demand by planning area; EPA (CEMS-Continuous Emissions Monitoring Service): Provides hourly emissions figures and operational data; Gas: For interstate pipelines-FERC Orders 636, 637, FERC form 2, and the FERC Operational Capacity Report provide available pipeline capacity, daily release of contracted pipeline capacity, index of contracted pipeline capacity and customers, scheduled and actual flows at receipt and delivery points, company financials, and weekly regional storage figures.

competitive industry in the US. This is evident in the proliferation of active investorowned utilities (IOUs- >220) and independent power producers (IPPs- >1,900) in the US market. Platts information confirms that the comparable figures for the EU 27 plus Norway, Iceland, and Switzerland are less than 50 and 1,200, respectively.

The aggregator and publisher of market data would need to consider carefully the conditions surrounding each trade. While most electricity and natural gas are fairly standard products and European electricity and natural gas trades are done to standard contracts, usually those designed by European Federation of Energy Traders, many have special conditions regarding, for example, volume, location, timing, and/or payment terms. The aggregator and publisher of the market data would also need to consider whether trades formed part of a spread, be it a location spread, time spread or other, as here the difference in prices is more important than the outright prices put on each leg of the spread.

Platts has considerable experience in handling sensitive market data in various commodities markets. Platts' experts gather market data from principals through phone surveys, by email and by instant messenger. They use this data to produce benchmark assessments and indices for the oil, gas, electricity, coal, uranium, petrochemicals and metals markets and to provide related market analysis. Platts' approach relies on basic principles – independence, impartiality, precision and accuracy, compliance review – but varies by market in recognition of the specific features of each market. A few examples are given below. Platts would be happy to give a more detailed view should it be required.

Example 1: In the US spot gas market, transactional data is gathered from a central contact point in the mid- or back-office (a segment of the reporting entity that does not have a commercial interest in the reported prices). The reporting entity must certify that it is making a good-faith effort to report completely and accurately and will have staff assigned to respond to questions concerning data submittals. The entity is also obligated to make reasonable efforts to inform Platts in the case of any errors or omissions.

The following transactional level information on fixed-price, physical deals is requested: trade date, flow date(s), point of delivery, price, volume, source, counterparty, intermediary (broker or trading platform), special terms, time of trade. Platts also requests that companies indicate whether a trade is financial or forms part of a spread.

This information is used to produce volume-weighted indices for the day-ahead and monthly bidweek markets, as well as ranges for high and low prices, volume traded and number of transactions. Prices are published in several ways, ranging from a daily data feed to a biweekly newsletter. Platts' prices are available to any party who subscribes to the publication or news service in which those prices are published.

Companies reporting gas and electricity prices to Platts must comply with a FERC Policy Statement issued in 2003 outlining best practices. For instance, companies may not "cherry-pick" transactions but rather must report all deals done at all locations.

Companies that follow the Policy Statement guidelines in turn are granted a "safe harbour" that FERC will not prosecute any inadvertent errors in reporting.

Following irregularities in price reporting practices by trading desks early in this decade and the subsequent near collapse of the energy merchant sector, Platts' US gas price surveys have rebuilt to strong levels. Platts collects around 4,000 individual transactions in both its daily and monthly gas price surveys.

A more detailed description of the editorial process used to calculate Platts' US natural gas assessments is given in the attached document Platts Methodology for North American Gas.

Example 2: In the European oil product market Platts operates a market-on-close "window" assessment, drawing on trades, bids and offers in the run-up to 16.30 London time. The assessment represents the transactable value at 16.30 precisely.

Platts considers transactions, bid/offer levels and market indications that are reflective of typical conditions and originating from sources deemed reliable. Details of bids/offers and deals for European oil products, including counterparty names, are provided on the electronic screen service *Platts' Global Alert* page PGA005, offering considerable transparency in the price-setting process. Bids and offers must in principle be open to any reputable and creditworthy counterparty. Platts' assessments and a list of the deals concluded within the window are published in *Platts' European Marketscan*, which is available to any company wishing to subscribe.

Because of the variety of grades of oil products available, Platts bases its assessments on strict product specifications. A detailed explanation of Platts' assessment methodology and specifications considered is given in the attached document, Platts Methodology for European Oil Products.

Example 3: In the Polish power market, Platts gathers transactional data from market participants on a monthly basis. Information on trade date, flow dates, location, timing, price, volume, whether the trade was a buy or a sell, intermediary (broker or online trading platform) and counterparty are requested.

This information is used to calculate monthly assessments for the next three months, next quarter and next year in the form of a high-low range. The assessments are weighted towards trade at the end of the month, where volumes are normally greatest.

Information on total volume traded in megawatts and megawatt hours, number of transactions and number of reporting companies is also provided along with the assessments. This gives market participants an indication both of the size of the market and of the robustness of Platts' assessments. This information is available to all subscribers to *Platts' European Power Daily, Power in Europe* and *Energy in East Europe*.

For more information on the methodology used to calculate Platts Polish power assessments and the information provided, see the attached document Platts Methodology for European Power.

Example 4: In the UK gas market Platts' market specialists gather data on daily trades from key market participants. This data is used to calculate an assessment of the price of spot and forward gas at 4.30pm London time. Day-ahead and month-ahead trades concluded between 8am and 4.30pm are also used to calculate a daily volume-weighted average index, which is published along with the volume of trade and number of trades included in the index. In addition, reported trades are published on page 615 of *Platts' European Power Alert* as soon as possible after they are received.

Platts is not able to gather information on all trades concluded on any given day, although this would be our preference. Platts market specialists do aim to gather a representative portion of the market and to give market participants as much additional information as possible on the state of the market on any given day.

Platts only accepts data from a reliable person within the reporting company and would prefer to receive trades from the back or middle office. The following information is requested: delivery period, location, price, volume, timing of trade, whether the trade was a buy or a sell, intermediary (broker or online trading platform) and counterparty. Platts excludes from its indices trades that are deemed outside the normal bid/offer range, that involve unusually small or large volumes, that are concluded outside of normal business hours or that are not confirmed by at least one counterparty involved in the trade.

A detailed description of Platts' methodology and specifications for European gas is contained in the attached document, Platts Methodology for European Gas.

Question 14. Is there a difference in transparency requirements for spot trading compared to future and forward trading? If so why?

Response to Question 14. There is a considerable difference between spot trading and forward/futures trading in electricity and gas, particularly regarding trade via an exchange and trade done over the counter (see below). Generally, liquidity and price volatility are much greater in the spot market. Exchanges use both continuous trade and an auction model for day-ahead electricity trade.

It should be borne in mind that market participants often use the spot market (day-ahead and intraday) for fine-tuning of positions and to cover unforeseen shortages and surpluses, for example arising from a field outage or plant restart. Forward and futures trade is used to hedge risks and cover expected sales and purchasing needs.

Price drivers in the spot market are very different from those in the forward market and are much more focused on immediate supply and demand. For example, expected and unexpected production outages, weather conditions and transmission constraints would

all have a significant impact on short-term prices. Therefore, transparency of fundamental data is vital to the spot market.

In the forward market, electricity prices react more to feedstock prices such as those for coal and gas, emissions prices, planned production outages and foreign exchange rates. Gas prices are highly dependent on movements in oil prices, due to the contractual link between oil and gas in continental Europe. Forward prices for electricity, coal and emissions may also have an impact, as might US gas prices and news of planned pipeline and storage outages.

Question 15. Is there a difference in transparency requirements for exchange trading compared to OTC trading? If so why?

Response to Question 15. Trading participants use the day-ahead market to optimize the procurement and sale of gas and electricity in the short term. Transactions can take place on exchanges as well as in the over-the-counter market. Exchanges provide standard contracts and real-time trade visibility in addition to a varying degree of information and transparency of underlying market fundamentals. For the over-the-counter market independent information providers provide transparency on transactions through the use of market surveys. Information on transactions, bids and offers, market fundamentals and daily price assessments are published real-time and in daily market reports available to all market participants via subscription service. Several brokers operate electronic platforms that offer real-time transparency on trade.

In addition to spot trade, regulated futures exchanges provide the marketplace for the trade of futures contracts, standardized contracts to buy and sell a certain underlying instrument at a certain date in the future, at a specified price. The exchange's clearinghouse acts as the central counterparty on all contracts and sets the margin requirements. Futures contracts are marked to market every day to a daily spot price with the same agreed-upon delivery price and underlying asset, eliminating the credit risk by forcing the holder to update daily to the price of an equivalent forward purchased that day.

Futures traders are traditionally in one of two groups: hedgers, who have an interest in the underlying commodity and are seeking to hedge out the risk of price changes; and speculators, who seek to make a profit by predicting market moves and buying a commodity on paper for which they have no practical use.

Futures contracts ensure their liquidity by being highly standardized, whereas some forward contracts are unique, giving flexibility and the opportunity to customize contractual agreements in line with counterparty requirements. In the case of physical delivery, the forward contract specifies to whom to make the delivery. The counterparty on a futures contract is chosen by the clearinghouse. More mature energy markets show that both marketplaces and types of contracts can co-exist and complement each other providing a rounded set of tools and instruments to the market for physical supply, hedging and risk management. As in the spot market, futures exchanges provide standardized contracts and real-time trade visibility to the entire marketplace. For the over-the-counter forward market, independent information providers survey the market and bring transparency to off-exchange transactions by publishing information on actual trades, bid/offer spreads and daily price assessments. This information is available to all market participants via subscription service. Several brokers operate electronic platforms that offer real-time transparency on forward trade.

Question 16. What information, other than required by law or regulation, is made public by energy traders, brokers, information services or exchanges?

Response to Question 16. Platts offers an independent information service to the energy and related markets. Our business provides news and market information on a commercial basis and is not subject to regulation.

Platts aims to provide information to subscribers that will help them make better business decisions, with a strong emphasis on market information. Information published by Platts includes benchmark prices (assessments and indices), market commentaries, market analysis, exchange prices, information on production and consumption, information on scheduled and unscheduled outages, weather data and market-related news stories. Price and market information is available in real-time, electronic format, daily, weekly and monthly publications, and in database form. Various Platts publications also publish "trackers" of planned and existing infrastructure projects in Europe and beyond.

In the European electricity market, Platts offers a comprehensive analytical database tool called European Powervision. It includes a database of Platts' assessments, exchange prices and volumes, cross-border capacity availabilities and prices, production data, flow data and reservoir levels. It also offers a database of existing and planned infrastructure assets by owner, capacity, generation type etc. Platts is one of the few commercial suppliers of data to the European Commission's new Energy Market Observatory System. In the US, Platts Energy Advantage has been used by FERC to monitor the US electricity and natural gas markets.

In terms of the other information available to market participants, the following exchanges publish hourly volumes and prices, as well as a daily average price and volume: APX (UK, Netherlands), Belpex (Belgium), Borzen (Slovenia), EEX (Germany, Austria), EXAA (Austria), IPEX (Italy), Nord Pool (Denmark, Finland, Germany, Norway, Sweden), Omel (Spain, Portugal), Polish Power Exchange, Powernext (France), Prague Power Exchange, Opcom (Romania).

The following exchanges offer continuous trade in forward products, including information on current bid, current offer, volume of bid, volume of offer, last traded price, total traded volume and, usually, open interest: EEX (Germany, France), Endex (Netherlands, Belgium), ICE (UK), Nord Pool (Denmark, Finland, Norway, Sweden),

Powernext (France). EEX and Nord Pool also offer information on planned and unplanned production outages.

The following brokers offer continuous electronic trade in spot and forward products, including information on current bid, current offer, volume of bid, volume of offer, last traded price, and volume traded: GFI Group, ICAP Energy, Spectron Group, Tradition Financial Services, Tullett Prebon Energy. These companies also offer daily reports and historical data, including information on individual trades.

Finally, in addition to Platts the following companies provide benchmark prices and analysis: Argus Media, Bloomberg, Dow Jones, Heren Energy, the London Electricity Brokers' Association, Montel, Prospex and various other consultants. Other organizations such as Energy System Analysis and Planning, Genscape, Montel and VGB PowerTech provide fundamental supply and demand data for the European electricity market.

Question 17. Is access to information on traded volumes equal for all parties active in that market?

Response to Question 17. All Platts products and services are available on a subscription basis to any market participant or interested party. A list of prices can be found at Platts' website, <u>www.platts.com</u>.

With regard to volume information, Platts would note that it is very difficult to give an accurate figure for the total volume of trade conducted in each market. While the share of electronic trade for European power and gas is large compared with other markets Platts covers, a large portion of trade is still conducted over-the-counter and many of these trades are confidential and/or non-standard. Where possible Platts tries to give an indication of the volume of standard trade reported to its market specialists. However, Platts cannot give an indication of total volumes traded for many European electricity and gas markets, nor do we believe can any information provider at this point in time.

Likewise, measurement of overall market size is one of the main objectives of FERC's new rule, Order 704. As the Commission pointed out in its proposed rule, "As noted by the price index developer Platts, the question of what is the total size of the traded market has 'hung over the gas market for years.' Without the most basic of volumetric information, the Commission has been hampered in its oversight and its ability to assess the adequacy of price-forming transactions."

According to the UK Financial Services Authority's latest annual market report for the period from August 2006 to July 2007, the following volumes were traded: UK gas 437,042 million therms, Continental European gas 37,871 million therms, UK power 984,811 GWh, Continental European power 6,336,909 GWh. The share of electronic trade compared with voice-brokered trade, according to the FSA, is: UK gas 84% electronic, 16% voice-brokered trade; Continental European gas 59% electronic trade, 41% voice-brokered trade; UK power 67% electronic, 33% voice-brokered trade; Continental European power 71% electronic, 29% voice-brokered. Platts has calculated

that roughly the following percentages of trade were in exchange-traded futures: UK gas 7.68%, Continental European gas less than 1%, UK power 1.04%, Continental European power 32.5%. The FSA figures do not include pure bilateral trades (i.e. counterparty to counterparty).

In general there is greater transparency regarding prices and volumes traded on exchanges and other online trading platforms than in the voice-brokered market (but not necessarily greater transparency on what forms those prices). Many exchanges, but by no means all, provide this information free of charge to any interested party. Others offer it as a paid service. Some brokers also offer this information.

Question 18. If not, is unequal access to or general lack of information on trading causing distortion of competition?

Response to Question 18. Due to the comparatively high level of electronic trade in Europe's electricity markets there is already a considerable amount of transparency on prices and volumes traded in these markets compared with some other markets Platts assesses. In the natural gas market, the same is true at the small number of more mature trading hubs such as the UK's NBP, Belgium's Zeebrugge, and the Dutch TTF and somewhat less transparency at newer hubs such as France's PEG Nord, Germany's EGT and Italy's PSV. As other hubs develop in other regions transparency will increase.

More important, perhaps, is the lack of fundamental supply and demand data in many European gas markets. As noted previously, this information is of key importance to prices. One area specific to trade where Platts has identified a lack of information is in counterparties. If information on counterparties were more readily available, even in aggregated form, it might foster greater confidence in these markets. However, there is resistance among electricity and gas traders to revealing counterparties.

Question 19. In light of the findings in the Commission Sector Inquiry on energy and the subsequent study of the electricity wholesale markets, please consider:

- a) whether, pending the outcome of the legislative process in respect of the proposed Directives amending Directives 2003/54/EC and 2003/55/EC, greater EU-wide pre- and/or post-trade transparency rules for electricity and gas supply contracts (physical and spot trading) and electricity and gas derivatives would contribute to a more efficient wholesale price formation process and efficient and secure energy markets;
- b) whether such transparency arrangements could be expected to effectively mitigate the concerns identified in the Sector Inquiry above;

Response to Questions 19a and 19b. The Sector Inquiry found that there was a failure in European natural gas and electricity markets that was mainly due to structural problems, i.e., continued dominance of a few large market players, vertical foreclosure and a lack of transparency on fundamental supply and demand data. Improving transactional

transparency would not address these problems. Platts believes the various elements of the Third Energy Package, including on unbundling, the Agency for Coordination of Energy Regulators and transparency of fundamental supply and demand data are better suited to deal with these problems. Requirements on record-keeping should address any additional concerns, as long as national regulatory authorities are well placed to demand access to those records and to analyse them effectively in the case of complaint or suspected wrongdoing.

c) whether uniform EU-wide pre- and post-trade transparency could have other benefits

Response to Question 19c. In Platts' opinion, uniform EU-wide pre- and post-trade transparency rules would be preferable to different approaches in the different EU member states. However, Platts reiterates that transparency objectives could be met through guidelines or principles that permit market-developed voluntary solutions rather than government-imposed mandates.

d) whether additional transparency in trading could have negative effects on these markets, for example could liquidity in these markets be expected to decrease? Is there a risk that trading could shift to third countries to escape regulation?

Response to Question 19d. A requirement on all market participants to report all trades and to have those trades made public could have a negative effect on liquidity. New market entrants may be put off by the prospect of having to reveal all their trades to regulatory authorities and would almost certainly be deterred by the prospect of having those trades made public. There would be concerns that publication of trade data could enable dominant market participants to further consolidate their position. Therefore, it is important to strike the right balance between ensuring all market participants have access to the information they need to allow that market to function efficiently and recognizing that companies will desire to keep some of their activities confidential.

Given the regional and even national nature of electricity and gas markets it is difficult to envisage a scenario in which a large portion of trading of physical commodities could shift to third countries to escape regulation. Buyers of gas might be tempted to trade more at source in countries such as Russia, Algeria, Libya, etc. However, they would have to weigh up the benefits of avoiding regulation against the lack of transparency in these markets and at times the sellers' reluctance to conclude fixed-price deals. In financial markets, traders might decide to focus on commodities other than electricity and gas, or to trade in other regions, or to trade on other platforms, which could ultimately affect liquidity. For instance, ICE Futures Europe's listing of a cash-settled WTI crude oil contract raised concerns in the US. Similarly, there are concerns that new EUA and CER contracts offered by NYMEX might attract liquidity away from EU-based emissions exchanges as traders seek to avoid regulation. e) If you believe that there are risks arising from additional pre- and post-trade transparency requirements, how do you believe that these risks can be mitigated (e.g. aggregation, delay in publication, anonymity)?

Response to Question 19e. Platts does not believe there is a single answer on how best to mitigate risks of anticompetitive effects from immediate publication of all transaction-level data. In highly liquid markets, aggregation may be needed simply to boil down a mass of data to manageable size. In some instances, immediate publication of transactional information on an anonymous basis followed by delayed publication of parties identities, may meet the objectives of transparency. In all markets, price data must be published as soon as possible after trading ends to be useful.

Question 21. What timelines or delays should be built into the implementation of any of the above recommendations?

Response to Question 21. The above recommendations, if implemented, would require a considerable lead time to allow companies and regulators to prepare for the additional workload they will face. Platts would suggest a lead time of not less than one year.

Attachment 2

	EU Electricity	EU Gas	Emissions
Nature of market	National/Regional	National/Regional	Regional
What is traded?	Spot and forward trade, mostly for physical delivery.	Spot and forward trade, mostly for physical delivery.	Spot and forward trade in European Emissions Allowances, Certified Emissions Reductions.
Where is it traded?	Spot exchanges: APX, Borzen, EEX, EXXA, IPEX, Nord Pool, Omel, Opcom, Polpx, Powernext, PEX. Forward/futures exchanges: EEX, Endex, ICE, Nord Pool, Omip, Powernext. Brokers screens. OTC.	Exchanges: APX, ICE, EEX, Nord Pool Gas. Brokers screens. OTC.	Exchanges: ECX, NYMEX, EEX, Bluenext, Nord Pool, Climex, EXAA. Brokers screens. OTC.
Who are the main market players?	Utilities, large end-users, banks.	Producers (BP, Shell, Statoil), utilities, banks, traders.	Utilities, Banks, Energy and mining companies.
What is liquidity like?	Varies according to market. UK, Germany, Scandinavia v liquid. Mid-level liquidity in France, Netherlands, Spain, Italy, Czech Republic. Low liquidity in most new member states, Belgium, etc.	Varies according to market. UK liquidity high. Mid- level liquidity in Belgium, Netherlands, France, Spain, Italy. Little to no liquidity in other member states.	Fairly high liquidity in EUAs (247 million metric tons in 2006 or 1.11 million metric tons/day. Slightly less liquidity in CERs but growing (807,000 metric tons/day in February).
What degree of transparency is there?	Considerable transparency of price and volume where exchange or online platform is used. No transparency on counterparties. Little transparency of fundamental data in many markets but growing.	Considerable transparency of price and volume where exchange or online platform is used. No transparency on counterparties. Little transparency of fundamental data in many markets but growing.	Considerable transparency of price and volume where exchange or online platform is used. Little or no transparency on counterparties.
What is the approximate share of OTC versus exchange trade?	Approx one third of trade is done via an exchange. The rest is OTC. Approx 60-70% of al trade is electronic.	Approx 7.5% of UK gas and 1% of continental gas is traded via an exchange. The rest is OTC. Approx 84% of all UK trade is electronic, whereas only 60% of continental gas trade is electronic.	Approx 50% of all trade is electronic. A large portion of this is done via exchanges.
Which benchmarks are used?	Exchange settlement prices, Published prices such as Platts, Dow Jones indices.	Many contracts are linked to oil. Some use published prices (Heren, Argus, Platts). Dow Jones Indices. Exchange settlement prices.	Exchange settlement prices (ECX, EEX etc). Published prices such as those produced by Point Carbon, LEBA.
Who regulates the market?	Energy and financial regulators.	Energy and financial regulators.	Financial regulators.

	US Electricity	US Gas	Oil
Nature of market	National/Regional	National/Regional	Global market with regional influences on price.
What is traded?	Spot and forward trade, physical delivery and financial.	Spot and forward trade, physical delivery and financial.	Spot and forward trade, physical delivery and financial. Financial trade much larger than physical.
Where is it traded?	Exchanges and online platforms: NYMEX, ICE.	Exchanges and online platforms: NYMEX, ICE, Natural Gas Exchange, OTC.	Exchanges: ICE, NYMEX, SIMEX etc. Online platforms. OTC.
Who are the main market players?	Utilities, distributors, large end-users, banks.	Producers (BP, Shell, ExxonMobil), utilities, distributors, banks, traders.	Producers (BP, Shell, ExxonMobil), utilities, traders, distributors, large end-users, banks.
What is liquidity like?	High. Platts sees up to 400 deals per day at the most liquid hubs, 20-50 at most other smaller hubs.	High. Platts collects around 4,000 individual transactions in both its daily and monthly gas price surveys.	Liquidity on crude and product barges tends to be quite high. Platts physical crude window sees <2 M b/day of trade. ICE Brent futures averages 285 M b/day. OTC trade is three or four times greater. Liquidity on physical product cargoes is much lower. Liquidity in the swaps market is also quite high but volumes are difficult to estimate.
What degree of transparency is there?	Considerable transparency of price and volume particularly in ISO market and where online platform is used. Also considerable transparency of fundamental market data.	Considerable transparency of price and volume, particularly where online platform is used. Also considerable transparency of fundamental market data.	Considerable transparency of price, volume, counterparty in spot physical market, particularly barges. Transparency of price and volume in listed forward and financial markets but no transparency on counterparties. Transparency in OTC forward markets is moderate but rising.
What is the approximate share of OTC versus exchange trade?	NA	NA	Difficult to say and differs according to product. Exchange trade is mostly financial and in standard specs. Physical trade tends to be OTC and non- standard.
Which benchmarks are used?	ISO settlement prices.	Published prices such as Platts daily and monthly indices. NYMEX settlement prices.	Platts, Argus, Nymex, ICE Brent.
Who regulates the market?	CFTC and FERC.	CFTC and FERC.	Financial regulators.

	Steam Coal	Coking Coal	Petchems
Nature of market	Global	Global	Global market with regional influences on price.
What is traded?	Physically delivered cargoes. API2, API4 and Newcastle swaps.	Physical trade on spot and contractual basis, but mostly contractual.	Spot and forward trade, physical delivery and financial. Financial trade in infancy.
Where is it traded?	globalCOAL trading platform. OTC/Bilateral trade. Most trade basis Amsterdam-Rotterdam-Antwerp, Newcastle and Richards Bay. globalCOAL has just announced a tie-up with ICE to launch coal futures in 2008.	отс	Physical trades globally. No effective Exchange trades - sporadic plastic trade on the LME, Shanghai Futures, and planned in Dubai Mercantile Exchange. But plastic exchange trades have not been successful.
Who are the main market players?	Large utilities, coal producers, traders, banks.	Producers, traders, steel makers, coke producers Little bank or broker involvement.	Main oil majors (Exxon, BP, Shell, Total, Repsol, etc) Main petchem producers such as Dow, SABIC, LyondellBasell, Ineos, Borealis, BASF, Polimeri etc. Main consumers such as Solvay, Arkema, plastic converters etc)
What is liquidity like?	Approx 1.3 billion metric tons of swaps traded in 2006. Of this API2 accounts for about 66% followed by API4 (30%). Physical market is much smaller (3-5 times). Some weeks there is no physical trade, others Platts hears of 4-5 deals.	Difficult to assess given lack of transparency.	High liquidity for aromatics and polymers. Olefins trading on pipeline, but not very liquid.
What degree of transparency is there?	Transparency of price and volume where trading platform is used. Limited transparency in OTC market. Physical deals can rarely be fully confirmed.	Verv limited. Almost no information is public.	High transparency in aromatics, gasoline components; marginal transparency in olefins; opaque in polymers
What is the approximate share of OTC versus exchange trade?	According to FSA about 30-35% is via an electronic platform. A portion of this would be via globalCOAL and the rest brokers' screens. globalCOAL is used more in Asia than in Europe. About 99% of financial trade is thought to be OTC	100% OTC.	NA
Which benchmarks are used?	All Publishers Index (API) made up of average assessments from Argus Media and McCloskey Group. globalCOAL settlement prices. FSA regulates globalCOAL and some individual	No official benchmark.	Platts, ICIS, CMAI, other basket of publications for European polymers
Who regulates the market?	players.	No independent regulator.	Unregulated

	Base Metals	Steel
Nature of market	Global market with regional influences on price.	Global market with regional influences on price.
What is traded?	Spot and forward trade, physical delivery and financial.	Physical product. Some derivative trade in the US but not in Europe.
Where is it traded?	Exchanges: LME, NYMEX/COMEX, TOCOM, Shanghai Futures Exchange. OTC	Mostly counterparty-counterparty basis. No exchange at present but LME planning to introduce EU steel contract this month.
Who are the main market players?	Producers, traders, major financial institutions (banks, hedge funds, CTAs)	Big steel producers and consumers.
What is liquidity like?	High liquidity on the exchanges. LME in 2006 achieved volumes of 87 million lots (lots range in size from 6mt to 25 mt), equivalent to \$8,100 billion annually and between \$35.45 billion on an average business day.	Difficult to assess
	between \$35-43 billion on an average business day.	
What degree of transparency is there?	Considerable transparency of price and volume where exchange or online platform is used. No transparency on counterparties. OTC markets relatively opaque.	Limited but improving. Some published prices including Platts daily assessments.
What is the approximate share of OTC versus exchange trade?	Difficult to say and differs according to product. Exchange trade is mostly financial and in standard specs. Physical trade tends to be OTC and non- standard.	100% OTC.
Which benchmarks are used?	Exchange settlement prices. Some published indices for specific products, geographical locations such as Platts Midwest Aluminium Transaction price.	NA
Who regulates the market?	exchange trade.	NA