

Top Ten Energy Market IT Related Developments, 2006

The commodity markets, and energy in particular, continue to undergo significant developments in market infrastructure. Below are ten energy IT related market trends with special emphasis on Independent Software Vendors (ISVs). This is a summary of an extensive report related to global market developments and the ISV community. By **PAUL MAHADY**, President, MAS.

1. Energy Emerges as a Bona Fide Asset Class

The Enron era was one where the energy merchant model was perceived as a viable business model. Institutions which were asset light were perceived as viable energy merchants. This business model became challenged for a number of reasons - besides the particular difficulties of Enron and the California energy market rigging. Asset based energy conglomerates and experienced energy trading firms like Morgan Stanley have stronger global sourcing and risk skills as participants. The critical difference in the current energy boom cycle of the last few years is that energy and the broader commodities have emerged as an asset class for investors - from retail to institutional to alternative investment vehicles. This has exacerbated the underlying demand/supply gaps and given a bullish bias to the market.

In retail investments, Exchange Traded Funds (ETFs) have been created for institutional and individual investors to trade - with the advantages of being exchange listed. ETFs have physicals behind the financial instrument which has created real demand in the market for underlying commodities. Hedge funds have entered the market as well beyond the traditional commodity fund managers.

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2. Convergence of Exchange & OTC Markets Execution & Clearing

The convergence of exchange traded and OTC markets has continued, if not accelerated, in the last few years - and will continue. The challenge to this convergence has been different transaction platforms and different clearing between exchange listed contracts and OTC traded contracts. Electronic trading of OTC contracts has evolved with both interdealer broker (IDB) platforms and players such as the IntercontinentalExchange (ICE) which acquired the International Petroleum Exchange in London (now ICE Futures).

IDBs are involved in both exchange traded contracts, IDB quoted and bank quoted OTC contracts, with services for the full trade cycle including confirmations and settlements. In North America, exchanges are

clearing OTC contracts while in Europe, IDBs and banks are involved in clearing - Spectron and BHF Bank being examples.

This convergence means that cross asset class (oil, gas, power, coal, etc.) and multi instrument (cash versus derivatives) processing will be incorporated into enterprise trading and transaction processing platforms.

3. Expanded Liquidity Pool Electronic Platforms & Connectivity

Trading platforms providing connectivity to exchanges, IDB platforms, and OTC electronic platforms have been extending into energy and commodities. The next stage of development will be correspondent platforms providing electronic execution from top tier energy market makers to their client base - whether other smaller utilities and industrials or hedge funds.

4. STP in Energy Trading Improving Significantly From ISV Developments & Industry Initiatives

The combined renewal of energy trading volumes since the summer of 2004 and price volatility in broad ranges has created significant operational risk from transaction errors and fraud. There have been at least a dozen publicised significant commodities and energy trader fraud situations which have created significant reputational risk for major financial institutions and energy firms. This risk will continue as long as disparate front and back office systems persist, limiting Straight Through Processing (STP). However, there are major industry initiatives addressing this lack of STP, including exchanges, IDBs and market participants such as EFET's eCM for trader-to-trader electronic counterparty matching.

Many ISV exchange, and IDB developments are facilitating STP such as:

- Automated interface of trading execution platforms transaction with transaction processing systems.
- Integrated transaction processing solutions development across energy asset classes.
- Integration of trading systems and logistics as ETRM vendors incorporate logistics and scheduling capabilities.
- Integration of IDB back office with clearing systems for confirmation matching.

5. Increased Utility Demand for Analytics Especially Forecasting & Optimisation

High prices for all energy products and the anticipation that higher prices will remain is focusing utilities on portfolio optimisation. The take-up of energy analytics, forecasting, and portfolio optimisation tools has increased and will continue globally for a number of years. The market will be served by different ISVs by tier and, to a lesser extent, region. In the top tier, some 'best of breed' orientation will persist because most energy trading and risk management (ETRM) vendors are weak in analytics with regards to portfolio optimisation. This is due to most being oriented to energy trading rather than an asset liability management orientation. In the middle tier vendors such as Global Energy Decisions in North America, Viz Risk Management and others in Europe will progress with increased demand. The top tier energy conglomerates from BP, E.ON, RWE, Statoil, and Vattenfall (to mention a few) will be successful in extending trading and/or risk management services to middle and bottom tier market participants.

6. Energy Trading & Risk Management Systems Demand Will Decelerate in Top Tier While Demand in Middle Tier Continues

ETRM systems demand will shift from a de novo market to replacement market. There will be a few de novo hedge funds in commodities, though most are established who will procure ETRM systems. The remaining de novo demand is most likely to be from financial institutions expanding trading and corporate risk management services into the asset class. There will also be additional demand from new trading desks for coal, CO₂, and other products. Most of this demand will be addressed from additional modules from existing ETRM vendors.

There will be replacement opportunities for aging or orphan systems. An example of this will be aging Zainet (SunGard Energy acquisition of Caminus) and KWI (Global Energy Decisions acquisition) systems, though SunGard will hope to migrate their client base and Global Energy Decisions will work to do the same (to a lesser extent) with KWI installs. Viz Risk Management and others have already replaced a number of KWI installs especially in the Nord Pool community.

OpenLink Financial continues with a number of deals but significantly, Triple Point has won major financial institutions such as Lehman and UBS while already having Morgan Stanley and the largest hedge fund. Also significantly, Allegro Development has won a number of deals globally and has more than two dozen projects underway.

7. Portfolio Management Services from Top tier Utilities Will Continue to address Middle Tier Utilities & Industrial Companies with Energy Exposure

Application Service Providers (ASPs) have been relatively successful. The top tier energy conglomerates are providing client risk management services and transaction processing. This is especially prevalent in Europe and will expand with energy price increases and supply constraints. The energy marketplace in the middle tier cannot,

and will not, spend on procurement, deployment, and maintenance of energy trading and risk management systems. Instead, the middle tier participants will look to energy and financial institutions to provide services including portfolio management software.

In North America there are a number of ASPs more oriented to FAS 133 and IAS 39 in Europe. These include Inssinc which have been successful. SunGard is focusing on hedge funds with Kiodes. Triple Point has a very good ASP which services municipalities but does not aggressively market this offering. Global Energy Decisions' multiple acquisitions may emerge to offer an ASP as well as software procured solutions.

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In the financial segment, prime brokers and fund administrators will continue to serve many of the hedge funds participants in the commodities and energy complex.

8. Limited Hedge Fund Entity Expansion in Energy Trading but Volume Expansion by 200 Hedge Funds Worldwide

With more than 8,000 hedge funds with significant assets under management looking for additional asset class and trading opportunities, it is understandable to see their expansion over last two years into the energy sector. The convergence of physicals and financials, plus the ease of trading and clearing versus five years ago, has facilitated market entry. Given the global heterogeneous nature of energy trading from different logistics, it is likely that there will be some hedge fund fragmentation with major regional hedge funds focusing on local markets.

Hedge funds will be serviced more by market participants and clearing organisations and have less direct access than in foreign exchange, fixed income and equity markets. It is likely that no more than 5%, (with 10% unlikely) of hedge funds will participate in this market, especially given alternative equity energy plays. The vast majority of hedge funds will most likely undertake macro trades in derivatives and not more sophisticated cross complex trades.

9. Financial Institution Participation Continues as Market Infrastructures Mature

Financial institutions are the fastest growing participants in the energy marketplace and this is evidenced by software procurement by major international investment and commercial banks. With low interest rates for some time and lower foreign exchange volatility (especially in Europe), commodities and energy risk is a major challenge for utilities, industrial companies, transportation companies, and municipalities – and a major proprietary trading and risk servicing opportunity for financial institutions. Financial institutions are also critical to hedge fund access to market as well as ETF creation.

10. Expansion of New Products Continues with Emissions & Weather Derivatives

New trading desks in weather derivatives, emissions and coal trading are being announced by trading firms and IDBs. Coal products are expanding in terms of derivatives and with high oil and gas prices, physical coal and derivatives will continue to expand. Emissions trading will grow again when there is additional regulatory standardisation.

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Energy IT (ISV) Companies Developments

In the last few years there have been significant energy independent software vendor developments such as capital raises, equity buy-backs, start-ups, mergers and divestments which have significant implications for the procurement and deployment of energy business intelligence and decisions. The market has moved from new supplier creation in the post dot.com and Enron environment, to net contraction. Only a few new and interesting companies have been created and grown, mostly from acquisitions such as **Global Energy Decisions**, which initially based the company formation on the **Henwood** acquisition.

Energy Analytics

In energy analytics, **FEA** has been amalgamated into **Barra**, which was subsequently bought by Morgan Stanley's **MSCI** unit. In North America, **ZE Power** in analytics and data management continues to remain private and grow, along with many European energy analytics and forecasting companies such as **Delta**. **Kalahari** has expanded as well into the energy sector with an analytics deployment platform.

Data Management

In data management, **FAME**, a struggling Warburg Pincus investment was finally sold to **SunGard** as was **Kiodex**, another Warburg Pincus investment. Kiodex bet their future initially on Enron platform success and NYMEX initiatives, both of which did not materialise. SunGard has successfully integrated Kiodex and repositioned it more for ASP and hedge fund offerings. A new energy analytics firm, **QuantRisk** with a development centre in Montreal, is emerging. Another regional decision-based analytics company **Bentek** is providing competitive intelligence in US natural gas supply/demand from 95 pipelines and storage facilities and has developed 10 financials institutions and 10 hedge funds as clients, besides major energy firms. In Europe, **Montel Power News** is one of the most successful analytics vendors with online services. CO₂ analytics is an expanding area and **Point Carbon** is expanding their policy coverage of EU ETS, CDM/JI and Kyoto/International and implica-

tions for trading in CO₂ emissions, caps, emissions-to-cap, CDM supply and weather instruments.

Trade Execution

In trade execution, most of the trading platforms, either stand-alone such as **Orc**, **GL Trade**, and **Trading Technologies**, or platforms offered by exchanges have extended into listed commodities contracts. **Trayport** has expanded beyond the narrow positioning as an IDB platform to become more of an ecommerce or correspondent platform. It is import to stress that financial institutions from BHF in Germany to Lehman and UBS provide trading and clearing services for clients including hedge funds. A number of industry analysts are incorrectly forecasting hedge fund software procurement as a result of not understanding the alternative and substitute bank agency offering from trade execution to settlement.

Energy Trading & Risk Management

In energy trading and risk, two ETRM vendors are gone; **Vedaris** (formerly FSD) is no more and **KWI** has ostensibly left the top tier ETRM space with the Global Energy Decisions acquisition which will reposition the assets into their business model and strategy focused on utilities. In Scandinavia, **OMX** divested **POMAX** and other energy IT assets, (POMAX to a management buy-out named Navita). In North America, **RiskAdvisory** was sold to **SAS** Canada looking to expand energy business while multiple companies were rolled up into **Caminus** and then Caminus into **SunGard Energy**. **Siemens** acquired **New Energy Associates** and then **Woodlands**, a small struggling start-up. Most recently, **OpenLink Financial** undertook a recapitalisation of the company with **TA Associates**, which results in a change of control. Out of the US, **Rome**, with significant capital backing, is expanding into Europe with their credit risk and operational risk while **Raft** has been for sale.

In the middle tier of ETRM, **Viz Risk Management** raised capital and is driving up the value chain into the top tier replacing KWI installations. Viz also purchased **Orion Consulting**. **Dachs** has venture capital backing and is pushing into the middle tier with ePower and eRisk. **IRM** has venture capital backing as well out of Austria and has been strong in central and eastern Europe. **Soptim** is also offering portfolio management services. **Kom-Strom**, a subsidiary of Essent, is also providing portfolio management software along with consulting to second and third tier market participants. Some of these ISVs in the middle tier have foreign exchange and money market treasury capabilities while others are developing this functionality. Most are differentiated from top tier ETRM with more forecasting and portfolio optimisation capabilities.

Calypto and **FNX** in North America are entering into broader commodities energy trading and risk with some isolated but significant wins with major financial institutions. In Europe, successful capital markets vendors such as **Sophis** and **Murex**, the leading private capital markets vendor globally, are also extending into the ETRM market with more than 10 and 15 clients respec-

tively, utilising their systems for energy trading, though mostly for energy financials rather than physicals. 2006 and 2007 will likely see more acquisitions and investments in the ETRM sector.

Bundled Solutions

In analytics and data management along with transaction management, there are multiple top tier energy companies such as **RWE** and **Eon** in Europe, which provide portfolio management services to smaller utilities, industrial clients, and municipalities. This is a form of ASP with trade execution capability, which is a substitute to software procurement. This is analogous to asset liability management services from top tier commercial and investment banks to community banks and credit unions.

Bulk Commodities

In bulk commodities including oil, **Solarc** raised capital from Technology Crossover Ventures. In energy logistics and scheduling, a number of small vendors have been acquired, some into the Caminus public unit before Caminus was acquired by SunGard Data Systems. **Triple Point** has acquired a small logistics vendor in Texas, its third small acquisition, and executed with some success the repositioning of the company with an offshore devel-

opment centre and next generation offerings across multiple asset classes in commodities and energy. **Entero** and **TradeCapture** have been repositioning their solutions for broader use as well, with TradeCapture offering exchange connectivity.

Back Office Processing & Settlement

Back office processing in listed contracts is still significantly serviced by three main vendors, **SunGard Futures**, **Rolfe and Nolan** and **Ubitrade** as an alternative to in-house development or software procurement. Ubitrade was acquired by GL Trade and continues to grow and benefit from GL Trade global services and distribution. In settlement, the solutions have shifted more to being incorporated with bundled services from exchanges such as **NYMEX** and **ICE**, and IDBs such as **Spectron**, who are leveraging electronic confirmation matching to fully automate broker to trader execution ■

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