Commodities and Energy Market
Data in Emerging Economies: Latin America
Part Two: Regulatory Developments in Power Markets
CME’s acquisition of GreenX, one of the world’s largest emission allowances exchanges, moves it closer to its main rival, ICE, in emission markets coverage. The CFTC rejection of the Nadex’s application for political event derivatives tied to outcomes of the 2012 presidential race was disappointing to many.

It is commonly understood that deregulation, bringing an open competition, results in an influx of market data. The concerns are usually associated with the breadth of data: where to find the additional storage for constantly multiplying data points, tools needed to analyze trends, and how to integrate with enterprise business processes to derive best results. Those are not the concerns and questions we asked ourselves when we looked at the deregulated markets in Latin America.
The main news of the month is the CME’s acquisition of GreenX. CME had already owned a share of the “green exchange”; however, with this move, CME bought out its partners in GreenX, including Constellation Energy, Credit Suisse, Evolution Markets, Goldman Sachs, ICAP Energy, J.P. Ventures Energy Corporation, Morgan Stanley, RNK Capital, Spectron, TFS Energy, Tudor Investment Corporation and Vitol SA. GreenX has been dealing emission reduction products developed for Europe (European Union Allowances or EUAs), UN Certified Emissions Reduction Units (CERs), US Regional Greenhouse Gas Initiative carbon allowances (RGGI), US emissions allowances (SO2 and NOx), Californian Carbon Allowances (CCAs), and Cross-State Air Pollution Rule (CSAPR) Contracts. GreenX is considered to be the second largest carbon exchange in the world, following the Chicago Climate Exchange, operated by Intercontinental Exchange. Two rivals, CME and ICE, continue their quest for market dominance.

Other news, which was rather disappointing to some market participants, was the CFTC rejection of the Nadex’s application for political event derivatives tied to outcomes of the 2012 presidential race and whether the Democrats or Republicans will control the U.S. House of Representatives and Senate. Setting aside arguments about whether such contracts are of a purely speculative nature, the trades of similar contracts will continue in international venues, but not on U.S. exchanges. Contracts on the U.S. presidential election are being traded on Intrade, an Ireland-based exchange that offers a wide set of bets on political events in UK, US, France and Mexico.

An interesting set of products was introduced by the Nodal Exchange and LCH.Clearnet. New power contracts incorporate only charges for energy plus congestion, which effectively eliminates a loss component from the total price, LMP. This new derivative allows market participants to assess a critical element of the PJM market, congestion, which can and quite frequently has a significant impact on the total LMP.

Other updates and news are not as sensational. CME continues to launch more derivatives built on Brent crude. This time these are Brent-DME Oman spreads. CME also introduced products for Western Canadian oil as the importance of the Alberta crude is growing on the international markets.

Environmental products sustained their popularity with exchanges and data providers last month. Renewable compliance markets are now covered by Platts through several assessments developed specifically for RECs in California, Connecticut, Maryland, Massachusetts, New Jersey, Ohio, Pennsylvania, and Texas, as well as assessments for solar markets and voluntary markets. A new trading platform designed for the New Zealand carbon compliance market was launched by OM Financial. GreenX, despite a change of ownership, does not lose its focus and continues to develop new products; this time, new products were ERU futures and options. In addition, Bangladesh, Canada, Ghana, Mexico, Sweden and the United States launched a new global initiative to fight global climate change. How it is going to differ from all other global initiatives and programs, and whether it is something to rival the Kyoto Protocol by Canada and the US, is yet to be discovered.

Olga Gorstenko
CME Lists Midwest ISO Michigan Hub Electricity Futures

Effective March 25, 2012, NYMEX launched two Midwest ISO Michigan Hub swap futures contracts for trade date March 26, 2012. The trading venues are NYMEX Trading Floor and CME ClearPort. The contracts are listed with, and subject to, the rules and regulations of NYMEX.

ICE Announces Launch of New Power Contracts

On April 3, 2012, Intercontinental Exchange announced the launch of new cleared OTC contracts for North American power markets. The new contracts are available for the trade effective April 30, 2012, and subject to regulatory review. The new contracts are:

New contracts will be a valuable addition to the existing ones in the MISO region. As shown in the graphs below, CME has already been trading 5 MW Peak Calendar-Month Day-Ahead Swap Futures for MISO Indiana trading hub.

<table>
<thead>
<tr>
<th>ICE Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDO</td>
<td>MISO Indiana Hub RT Peak Daily Swap (Lookback)</td>
</tr>
<tr>
<td>IDO</td>
<td>MISO Indiana Hub RT Peak Daily Options (Lookback)</td>
</tr>
<tr>
<td>DDO</td>
<td>PJM AD Hub RT Peak Daily Swap (Lookback)</td>
</tr>
<tr>
<td>DDO</td>
<td>PJM AD Hub RT Peak Daily Options (Lookback)</td>
</tr>
<tr>
<td>EDP</td>
<td>NePOOL MH DA Peak Daily Options</td>
</tr>
<tr>
<td>ENO</td>
<td>ERCOT N 345kV Swap (Lookback)</td>
</tr>
<tr>
<td>ENO</td>
<td>ERCOT N 345kV Option (Lookback)</td>
</tr>
<tr>
<td>CME</td>
<td>PJM MH RT LMP Off Peak Monthly Min</td>
</tr>
<tr>
<td>NEM</td>
<td>NePOOL MH Day-Ahead LMP Peak Monthly Min</td>
</tr>
<tr>
<td>NOM</td>
<td>NePOOL MH Day-Ahead LMP Off Peak Monthly Min</td>
</tr>
<tr>
<td>SDP</td>
<td>SP-15 EZ Gen Hub DA LMP Peak Daily Option</td>
</tr>
<tr>
<td>MPD</td>
<td>Mid-C DA Peak Daily Option</td>
</tr>
</tbody>
</table>

The new contracts reference Platts US Marketscan. ICE Future Power contracts for aforementioned locations have been traded on ICE platform (see two examples below).
Argus Provides Forward Price Assessments for Bulgaria and Greece

On March 29, 2012, Argus reported that it had become the first publisher to provide forward price assessments for wholesale electricity in Bulgaria and Greece. As shown in the graph below, Argus has been providing near-month base load power contracts for the European countries with open power sector for a long time. While Bulgaria is moving towards market liberalization as the region’s biggest power exporter in southeast Europe, Greece is opening its power sector to private investors under the terms of its financial bailout.

The new assessments are for physical month-ahead base-load power, published on a weekly basis each Thursday in the daily Argus European Electricity report.

Genscape Launches Free Access to REMIT Energy Data

On February 7, 2012, Genscape launched its new Power RT REMIT Data Portal which collects and delivers public energy data to all market participants through a web portal. Genscape’s portal helps market participants view public data in a single place, making insight and analysis easier and faster by offering increased transparency. For instance, Genscape’s European map provides energy market details like: fuel type, capacity, unit size, and ownership for generating power plants. Additionally, those who register will gain access to Genscape’s Energy Market Mapping software, which aggregates European REMIT data in real-time as it posts. Registrants can view time series graphs, look at day-over-day change rates, and assess unit trips with Genscape quality control for the past twenty-four hours up to ninety days to get a trend perspective.


On March 29, 2012, Nodal Exchange, LLC and LCH.Clearnet Limited (LCH.Clearnet) introduced power contracts for energy plus congestion for over 50 locations in PJM. These contracts settle against the Day Ahead Energy plus Congestion prices published by PJM. These contracts will be available for current month plus 48 months forward.

Paul Cusenza, Chief Executive Officer of Nodal Exchange, commented that new contracts are “effectively Financial Transmission Rights equivalent contracts, with the key advantage that there is no underfunding or capacity constraint in our cleared environment.”

NYSE Euronext and Bloomberg NEF Join to Launch New Clean Energy Indexes

Effective April 4, 2012, NYSE Euronext and Bloomberg New Energy Finance (BNEF) jointly launched three new clean energy stock indexes for solar energy, wind power and energy smart technologies (EST). The new indexes present an opportunity for investors to track quoted companies most involved in the shift to low-carbon energy by weighting each company’s economic exposure to its sector. Each index is based on a basket of between 70 and 200 companies, quoted on different stock markets around the world, with a minimum threshold exposure to the relevant renewable energy or energy smart technology sectors.

The solar index covers the entire value chain from polysilicon makers to photovoltaic project developers. The wind index encompasses everything from turbine component makers to wind farm builders and operators. The EST index includes everything from battery makers to suppliers of demand response systems for the electricity network. The new indexes are designed to complement the three regional clean energy indexes launched in December by NYSE Euronext and BNEF. For more information, see the December issue of ZE DataWatch here.
BRIX Launches 50% Incentive BRIX Index

Effective March 16, 2012, BRIX launched 50% Incentive BRIX Index, which refers to contracts from sources that have a 50% discount price in the Tariff on the Use of Distribution Systems, traded at a fixed price for delivery to the Southeast/Center-West Brazilian submarket in the current month. The index is calculated on a daily basis and shows the value of the price charged in the contracts traded on the BRIX platform among the Free Contract Environment agents, on the spot market. The calculation methodology for the BRIX Indexes consists of a weighted average of the transactions daily traded on the platform with maturity in the current month, with the Southeast/Center-West submarket that shows the highest liquidity among the negotiations carried out. The BRIX indexes are disclosed on a daily basis in R$ per MWh.

NEW

COMPLIMENTARY LUNCH & LEARN

Boston, Massachusetts | June 19, 2012

Please mark your calendars for Tuesday, June 19 to join ZE PowerGroup and our partners for a complimentary Lunch and Learn focusing on Data Management Trends and Challenges for Eastern Energy and Commodities Markets. The event will be held from 11:00 a.m. to 4:00 p.m. (EDT). This is an opportunity for you to network with industry experts and market participants as you learn more about the evolving trends in the energy and commodities industry. We also invite you to join us after the workshop for a networking hour and the Boston Red Sox baseball game versus the Florida Marlins.

Venue:
McCormick & Schmick’s
34 Columbus Avenue
Boston, MA
617.482.3999

Agenda  Register
CME: CSX and PRB Coal Option on Quarterly Futures Strip Contracts

Effective April 29, 2012, NYMEX lists two new European style coal option contracts, pending relevant CFTC regulatory review periods. The trading venues are Open Outcry trading on the NYMEX trading floor and CME ClearPort. The contracts are listed with, and subject to, the rules and regulations of NYMEX.

<table>
<thead>
<tr>
<th>CME Code</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>CPF</td>
<td>CSX Coal (Platts OTC Broker Index) Option on Quarterly Futures Strip</td>
</tr>
<tr>
<td>RPF</td>
<td>Powder River Basin Coal (Platts OTC Broker Index) Option on Quarterly Futures Strip</td>
</tr>
</tbody>
</table>

For contract specifications please click here.

CME Launches Western Canadian Select Crude Oil Option

In addition to the existing oil option contracts (Light Sweet Oil Option is shown in the graph below), Western Canadian Select Crude Oil Option contract was listed by NYMEX and is available for trading starting April 15, 2012. The trading venues are CME ClearPort and NYMEX Trading Floor. This contract is listed with, and subject to, the rules and regulations of NYMEX.

<table>
<thead>
<tr>
<th>CME Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>WCO</td>
<td>Western Canadian Select (WCS) Crude Oil Option</td>
</tr>
</tbody>
</table>

For contract specifications please click here.

CME Lists New Freight Swap Futures

Effective April 1, 2012, NYMEX launched Freight Route TC6 (Baltic) Swap Futures contract for trade date April 2, 2012. The trading venues are CME ClearPort and Open Outcry. This contract is listed with, and subject to, the rules and regulations of NYMEX.

<table>
<thead>
<tr>
<th>CME Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TC6</td>
<td>Freight Route TC6 (Baltic) Swap Futures</td>
</tr>
</tbody>
</table>

For TC6 contract specifications please click here.

CME Launches New Inter-Exchange Spreads

Effective April 1, 2012, CME launched NYMEX Brent 25-Day (Platts) – DME Oman Crude Oil Futures Spreads for trading electronically on the CME Globex. The inter-exchange spreads will be disseminated on MDP channel 201.

<table>
<thead>
<tr>
<th>CME Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BZ-OQB</td>
<td>NYMEX Brent 25-Day (Platts) v DME Oman Crude Oil Inter-Exchange Spread</td>
</tr>
<tr>
<td>BZ-ZGD</td>
<td>NYMEX Brent 25-Day (Platts) v DMultan Crude Oil Financial Inter-Exchange Spread</td>
</tr>
</tbody>
</table>

ICE Announces Launch of New Energy Contracts

Effective April 30, 2012, Intercontinental Exchange launched new cleared OTC contracts for crude and refined petroleum products and North American natural gas. The new contracts reference Platts Asia-Pacific/Arab Gulf, US, and European Marktscan, and are subject to regulatory review. The new contracts are:

Global Oil and Refined Petroleum Products
- Singapore Mogas 92 Unleaded (Platts) Swap (SMT)
- Singapore Mogas 95 Unleaded (Platts) Swap (SMF)
- Singapore Mogas 97 Unleaded (Platts) Swap (SMS)
- 180 cst Singapore Average Price Option (SZS)
- 180 cst Singapore Fuel Swap Mini (100MT) (SZZ)
- 380 cst Singapore Fuel Swap Mini (100MT) (SYY)
- 3.5% FOB RDAM Barges Swap Average Price Option (BAR)
- Ethanol Swap - Chicago (ETC)
- Ethanol Swap - New York (ETN)
- Heating Oil Average Price Option (HOF)
- RBOB Gasoline Average Price Option (RBS)

North American Natural Gas
- Columbia Gulf, Mainline Index Swap (CGI)
- Columbia Gulf, Mainline Swing Swap (CGR)
- Tennessee Zone 0 Swing Swap (TZR)

Refined Petroleum Options on Futures
- Heating Oil American-Style Option (O)
- RBOB Gasoline American-Style Option (N)

ICE Launches New Heating Oil and RBOB Gasoline Option Contracts

On April 3, 2012, ICE announced its plan for launching Heating Oil American-Style Option and RBOB Gasoline American-Style Option contracts for trade date April 30, 2012, subject to regulatory approval. The new contracts are the Equity-style American options, which would be the equivalent of ICE Futures Europe Heating Oil and RBOB Gasoline Futures contracts. The Contract will be cleared by ICE Clear Europe.

<table>
<thead>
<tr>
<th>ICE Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>UHD</td>
<td>ICE Heating Oil American-Style Options</td>
</tr>
<tr>
<td>UHR</td>
<td>ICE RBOB Gasoline American-Style Options</td>
</tr>
</tbody>
</table>

*Graph created with ZEMA
Freight Investor Services Launches New Bunker Swap Service

Effective March 7, 2012, Freight Investor Services (FIS) launched the Fuel Oil Single Swap, which includes three fuel oil contracts: Singapore 380 centistokes (CST), Singapore 180 CST and Rotterdam 3.5% sulfur barges FOB. The swaps consist of a single tonne, cash-settled swap contract based on the Platts daily assessment price of the main index and are tradable up to four years forward.

The new FIS offering should attract players from across the bunker sector, including suppliers, traders and banks. In addition, it facilitates easier access to the market for smaller players, such as ship owners, who need to manage their fuel cost risk for small fleets or individual vessels.

The new service reflects escalating bunker prices at a time of historically low freight rates. For example, the price of Singapore 380 CST bunkers is $40/t higher than at the start of 2012, resulting in higher fuel costs. John Banaszkiewicz, FIS Managing Director noted, “With some of the lowest freight rates of the past 20 years across all the shipping sectors, including dry bulk, tanker and container markets, and some of the highest bunker prices on record, fuel oil can account for as much as 70% of vessel running costs. This needs to be traded and managed. FIS is delighted to offer this innovative broking service where size does not matter. Any counterparty, whatever their size, can trade as many or as few bunker swaps as they want. Added to this, the three bunker swaps will be available in real-time, with live prices posted on FIS’ free multi-commodity trading screen, making them even simpler and easier to trade.”

Bentek Launches Cell Model Database for Natural Gas in the U.S.

On March 20, 2012, Bentek launched Cell Model database in order to provide new visibility into the dynamics of natural gas in the U.S. The new tool divides the country into eight regions, or “cells”, and covers daily regional balance of natural gas supply (production, net pipeline imports, LNG imports), demand (residential/commercial, power, industrial), storage, as well as balanced inflows / outflows to adjacent regions, and historical price and weather data in the U.S. Additionally, Cell Model allows drilling down to underlying flows on specific pipelines, which, in turn, allows region-by-region, fundamental analysis of the U.S. natural gas market.

Moreover, BENTEK launched a new Market Alert, Dissecting Natural Gas Supply & Demand, which draws on historical and current data from the Cell Model database to evaluate the market implications of natural gas production, flow, demand and price dynamics.

Key features of the new Cell Model database include:
• U.S. divided into eight different balanced “cells” for daily region-by-region natural gas analysis
• Models supply, demand and storage fundamentals in each U.S. region
• Regional inflows and outflows by pipeline, including flows to adjacent cells
• Balanced regionally and nationally to historical EIA storage data
• Interactive graphs and charts

Platts Proposes New NY Harbor Fuel Oil Assessments

Effective May 1, 2012, Platts starts publishing assessments for No. 6, 1% sulfur fuel oil basis FOB New York Harbor, and RMG 380 fuel oil basis FOB New York Harbor. The assessments will reflect a minimum volume of 25,000 barrels. Specifications for the new 1% assessment will adhere to Platts' existing USAC No. 6 1% sulfur specification. Also, the specification for the new RMG 380 assessment will conform to Platts’ existing US Gulf Coast RMG 380 basis. The assessments will be published on Platts Global Alert page 44, in US Marketscan, Oilgram Price Report, and Platts Market Data.

Platts to Launch Low Sulfur Americas Bunker Assessments

On April 5, 2012, Platts introduced low sulfur bunker fuel assessments for 180 CST and 380 CST bunker fuel for assessed US and Canadian ports, reflecting bunker fuel containing a maximum of 1% sulfur. The new assessments are set to be launched on June 1, 2012, in advance of the US and Canada Emissions Control Area, which is scheduled to take effect on August 1. The Americas Bunker assessments will be launched for Charleston, Houston, Los Angeles, Montreal, New Orleans, Norfolk, New York, Philadelphia, Portland, San Francisco, Savannah, Seattle and Vancouver. These assessments will be published on Platts Global Alert pages 978, 982 and 993, as well as in Platts Bunkerwire.

Fluxys and APX-ENDEX to Develop New Zeebrugge Trading Point

On February 07, 2012, Belgian gas transmission system operator Fluxys and energy exchange APX-ENDEX announced their cooperation in developing the new Zeebrugge Trading Point (ZTP) by the end of 2012. Such cooperation between an exchange and a gas transmission system operator would provide market participants with access to additional tools and markets. APX-ENDEX will provide the screen-based trading solution on ZTP while offering products that accommodate the needs of both grid users and Fluxys as transmission system operator. This move adheres to the European market based balancing approach where grid users are able to buy or sell gas on the APX-ENDEX market for the new ZTP to balance their gas flows in and out of the network. If the overall balance of the network needs to be restored, Fluxys, as a TSO, will be active on the APX-ENDEX. This partnership is an important step towards the creation of a liquid short-term market in Belgium while exposing Fluxys to larger market participants. Only time can tell whether APX-ENDEX can help ZTP to foster to its full potential by providing the right trading solutions and market exposure or not.

Platts Delists Buckeye, Laurel P-CBOB, CBOB

Effective March 30, 2012, Platts stopped publishing assessments for the Buckeye Premium CBOB (317) and CBOB (318) winter grade (13.5 RVP) supplemental assessments. Winter grade Premium CBOB and CBOB are no longer accepted for shipment on the Buckeye systems. Platts continued publishing assessments for the New York Harbor barge Premium CBOB and CBOB markets until April 13, 2012.

CME Changes E-mini Energy Futures Match Algorithm

On April 16, 2012, CME changed the match algorithm for the following E-mini energy futures to FIFO (F) from NYMEX FIFO with LMM (N):

<table>
<thead>
<tr>
<th>CME Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>QM</td>
<td>E-mini Crude Oil futures</td>
</tr>
<tr>
<td>QG</td>
<td>E-mini Natural Gas futures</td>
</tr>
<tr>
<td>QU</td>
<td>E-mini RBOB Gasoline Financial Futures</td>
</tr>
<tr>
<td>QH</td>
<td>E-mini Heating Oil Financial futures</td>
</tr>
</tbody>
</table>

The matching behavior of the algorithm for QM, QG, QU, and QH, which is NYMEX FIFO with LMM (N), will not change with this launch since no LMMs have been assigned to these markets since January 2012. For more information on descriptions of each algorithm currently in use on CME Globex, click here.
CME: December vs. December Wheat Calendar Spread Option

Effective April 1, 2012, CME lists the December vs. December Wheat futures calendar spread option for trade date April 2, 2012. The trading venues are Open Outcry trading on the NYMEX trading floor and electronically via CME Globex.

<table>
<thead>
<tr>
<th>CME Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CWZ</td>
<td>Dec vs. Dec Wheat CSO</td>
</tr>
</tbody>
</table>

For contract specifications please click here.

CME: May vs. November Soybean Calendar Spread Option

On April 2, 2012, options on the May vs. November Soybean Futures Calendar Spread were listed for trading on the CME Globex platform and Open Outcry. In addition, a new synthetic future was launched for the options on May vs. November Soybean Futures Calendar Spread. The new synthetic future has S7C as the underlying contract.

<table>
<thead>
<tr>
<th>CME Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC7</td>
<td>May-Nov Soybean Calendar Spread Option CSO</td>
</tr>
</tbody>
</table>

For details click here.

JSE Introduces Kansas Hard Red Winter Wheat Futures

On March 19, 2012, the Johannesburg Stock Exchange (JSE) announced its plans to introduce a new foreign-referenced wheat futures contract for trading date March 28, 2012. The cash-settled futures contract, which is based on hard red winter wheat, will use the Kansas City Board of Trade’s benchmark settlement prices. Since hard red winter wheat is similar in type and milling quality to South African-produced wheat, local market participants can consider this alternative product for price risk management purposes depending on their needs. Additionally, wheat futures provide an alternative for South Africans to hedge or gain exposure based on expectations of directional price, spread movement or volatility in wheat, as well as evaluate both current and future market for wheat.

<table>
<thead>
<tr>
<th>CME Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GBC</td>
<td>Cleared OTC London Gold Forwards (cash margin)</td>
</tr>
</tbody>
</table>

For details click here.

Xetra Launches Source Physical Gold ETC


ETF name: Source Physical Gold P-ETC

Asset class: precious metals

Benchmark: London Gold PM Fixing

The Source Physical Gold P-ETC is an exchange-traded bond. The ETC is backed by the physical deposit of gold bars at J.P. Morgan Chase in London.

CME Lists Cleared OTC London Gold Forwards

On April 2, 2012, NYMEX started listing a Cleared OTC London Gold Forward (cash margin) contract for submission for clearing through CME ClearPort. This contract remains as a forward contract within the clearing environment while requiring physical delivery at the original transaction price. The clearing service is provided by the London Bullion Market Association (LBMA). Cleared OTC Gold Forward (cash margin) contracts are available for any market standard delivery date as defined by the LBMA.

The contract is listed with NYMEX, and subject to the rules and regulations of NYMEX and COMEX.

ZE Sponsors Triple Point Technology’s Global User Conference in Barcelona

ZE is pleased to announce its sponsorship of Focal Point 2012. The event will consist of a series of client-driven development sessions, round tables, user case studies and networking activities. Industry leaders from CTRM, Finance, Shipping, Technology and Integration, and Mining will be participating. ZE’s President and CEO, Dr. Zak El-Ramly, and ZE’s Manager of Business Development, Bruce Colquhoun, invite you to join them at the ZE exhibit. This is an opportunity to learn how ZE’s enterprise data management solution, ZEMA, can automate your business processes to reduce time, cost, errors and resource dependency.

To arrange a meeting, contact Bruce Colquhoun at bruce.c@ze.com. We look forward to seeing you in Barcelona!

Dr. Zak El-Ramly, President and CEO of ZE PowerGroup

Dr. El-Ramly started ZE PowerGroup in 1995 to help support clients in the deregulating energy markets. Zak spent over twenty years at the local utility, BC Hydro, in various departments and roles, including forecasting, demand side management, and rates and policy development. Before Zak ended his tenure with the utility, he was co-founder and VP of Marketing of Powerex, the marketing arm of BC Hydro. Now, as President and CEO of ZE, Zak uses his expertise in competitive energy markets to execute a variety of client projects, including asset evaluation and acquisition, strategic planning, trade and risk management, commodity price forecasting, regulatory support and intervention. Zak’s vision and ambition is the driving force behind the success ZE enjoys today.
OM Financial Starts New CO2 Trading Platform for New Zealand

Effective March 30, 2012, OM Financial (OMF) launched a platform CommTrade that allows traders to buy and sell carbon permits eligible for use under New Zealand Emissions Trading Scheme (NZ ETS). The NZ ETS was created to regulate emissions of the six Kyoto gases in all sectors of the economy by 2015; however, the full implementation can be delayed due to other developed countries not establishing similar regulations.

CommTrade allows businesses to post bids or offers, execute trades or let OMF execute trades on their behalf.

Bids and offers for government-issued New Zealand Units (NZUs), U.N.-regulated Certified Emissions Reductions (CERs) and Emission Reduction Units (ERUs) are available here.

GreenX to Launch ERU Futures and Options Contracts

Effective April 29, 2012, GreenX lists the Emission Reduction Unit Futures and Options contracts for trade date April 30, 2012. The trading venues are CME ClearPort and electronically via CME Globex. These contracts are listed with, and subject to, the rules and regulations of GreenX.

<table>
<thead>
<tr>
<th>CME Code</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>REU</td>
<td>Emission Reduction Unit (ERU) Futures</td>
</tr>
<tr>
<td>ERO</td>
<td>Emission Reduction Unit (ERU) Options</td>
</tr>
</tbody>
</table>

Platts Launches US REC Assessments


REC assessments for renewable compliance markets:
- California Tradable REC (Bucket 3)
- Connecticut Class I REC
- Maryland Tier I REC
- Massachusetts Class I REC
- New Jersey Tier I REC
- Ohio In-State REC
- Pennsylvania Tier I REC
- Texas REC

REC assessments for solar markets:
- Maryland In-State Solar REC
- Massachusetts Solar REC
- New Jersey Solar REC
- Ohio In-State Solar REC
- Pennsylvania Solar REC

The assessments for bundled compliance markets:
- California Bundled REC (Bucket 1)
- California Bundled REC (Bucket 2)

The assessments for voluntary markets:
- Voluntary REC-National,
- Any Technology and Voluntary REC-National, Wind.

All REC assessments are published on weekly basis.

AccuWeather Introduces a 25-Day Weather Forecast

Effective April 4, 2012, AccuWeather launched a 25-day weather forecast available on its website. The tool includes high and low temperatures, chance and amount of precipitation, wind speed and direction, thunderstorm probability, cloud coverage and UV index, sun and moon rise and set times, historical high and low temperature information for each day, including the normals, records, and actual readings from the previous year, as well as AccuWeather RealFeel high and low temperatures.

The AccuWeather also offers hour-by-hour, seven-day, ten-day, and fifteen-day (see the graph below) forecasts. The AccuWeather 25-Day Forecast is available for 2.7 million locations worldwide and can be found on www.AccuWeather.com and on the mobile website, http://m.accuweather.com.

Global Climate and Clean Air Initiative Launched

On February 16, 2012, Bangladesh, Canada, Ghana, Mexico, Sweden and the United States launched a new global initiative aimed at making rapid progress on countering climate change and improving air quality with the support of the UN Environment Program in Washington, DC. The Coalition aims to drive the development of national action plans and the adoption of policy priorities; mobilize public and private funds for action; build capacity among developing countries; raise awareness of carbon; foster regional and international cooperation; and improve scientific understanding of the pollutant impacts and mitigation options. It is estimated that emissions from short-lived climate pollutants such as methane, black carbon (soot), and tropospheric ozone, will contribute about half of the climate warming from current anthropogenic emissions over the next couple of decades. Consequently, water cycle, crop yields, air quality and human health would be affected negatively.

Peter Kent, Canada’s Environment Minister, reemphasized that the alliance was formed to reduce emissions, help counter climate change, and work towards delivering a global solution to this global problem. The US pledged US$12 million to the Coalition while other members committed an additional US$15 million to support the cause. The first official meeting of the Coalition takes place in Stockholm, Sweden, from April 23-24, 2012.

*Graph created with ZEMA
ICE Lists Russell 1000 Mini Index Options Serial Months

On April 5, 2012, ICE announced its plan to list serial option contract months for the Russell 1000 Mini Index options contract for trade date April 23, 2012, on the ICE electronic platform. Although quarterly option months are already available for trading, the new serial month is listed for trading on the platform on the business day following the expiration of the nearby serial. For instance, the May 2012 and July 2012 serial months are available on the platform on April 23, 2012.

For all Russell Index option contracts specifications click here

ISE to List Options on ISE Max SPY Index

On March 13, 2012, the International Securities Exchange (ISE) announced that it had filed for approval with the Securities and Exchange Commission (SEC) to list options on the ISE Max SPY Index, a new proprietary index that represents ten times the value of the SPDR® S&P500® ETF Trust (SPY).

With average daily volume of 2 million contracts on a year-to-date basis, options on SPY are the most actively traded contract in the industry. ISE’s president and CEO, Gary Katz, claimed that options on the ISE Max SPY index are great alternatives for institutional traders who are seeking exposure to the SPY, but they prefer to trade an index option which has a higher notional value and settles in cash instead of the traditional ETF option that settles in shares. Additionally, ISE plans to offer competitive fees for options on the ISE Max SPY which are aligned with other index options products. The product and associated fees are subject to regulatory review.

ICE Announces OTC Foreign Exchange Clearing Service

On March 14, 2012, ICE introduced non-deliverable forward foreign exchange (FX) OTC contracts to its clearing services. ICE plans to start clearing Non-Deliverable Forward contracts for foreign exchange currencies including Brazilian Real, Korean Won, Chinese Yuan, Indian Rupee, Indonesian Rupiah, Chilean Peso and Russian Ruble, which is settled in U.S. Dollar. ICE will clear additional FX products in the future in accordance with regulatory developments and market demands. Thomas Farley, President, ICE Futures U.S., said: “ICE has worked extensively with market participants to develop a clearing service that is tailored specifically to the FX industry and preserves the most attractive characteristics of our market-leading clearing service for spot transactions while offering the added counterparty risk benefits provided by an OTC clearing service.”

The service is set to be launched for both client and clearing member trades in the second quarter of 2012, subject to regulatory reviews.

CME Launches a New Treasury Security Implied Intercommodity Spread

Effective April 15, 2012, CME launched a new 10-Year Treasury Note Future vs. 30-Year Treasury Bond Future implied intercommodity spread with a new 5:3 ratio. The currently traded 10-Year Treasury Note Future vs. 30-Year Treasury Bond Future implied intercommodity spread with the current 2:1 ratios continues to be available. The new product is launched on CME Globex platform.

<table>
<thead>
<tr>
<th>CME Globex (5:3)</th>
<th>CME Globex (2:1)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOB</td>
<td>NBY</td>
<td>10-Year Treasury Note Future vs. 30-Year Treasury Bond Future Implied Intercommodity Spread</td>
</tr>
</tbody>
</table>

For contract specifications please click here

CME Adds New S&P Real-time Index

Effective April 16, 2012, CME started publishing the new US Large Cap Alternator Index in USD. The new index is transmitted every 15 seconds.

<table>
<thead>
<tr>
<th>CME Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALTLCUT</td>
<td>US Large Cap Alternator Index</td>
</tr>
</tbody>
</table>

ICE, Interest Rates, Credit and Equity Indexes

Xetra Launches iShares Equity Indexes

On April 2, 2012, Deutsche Börse’s XTF commenced trading four new equity index ETFs issued by iShares. Three of them are built on the S&P Commodity Producers index series and represent the performance of companies operating in extraction, refining or transportation of gold, oil and gas, or the agricultural sector.

ETF name: iShares S&P Commodity Producers Gold
Asset class: commodity index ETF
Benchmark: S&P Commodity Producers Gold Index

ETF name: iShares S&P Commodity Producers Oil & Gas
Asset class: commodity index ETF
Benchmark: S&P Commodity Producers Oil & Gas Exploration & Production Index

ETF name: iShares S&P Commodity Producers Agribusiness
Asset class: commodity index ETF
Benchmark: S&P Commodity Producers Agribusiness Index

Tradition-ICAP Extends Vol-FIX Capabilities

Effective March 19, 2012, Tradition-ICAP added six new currency pairs to its daily Volatility Fixing (Vol-FIX) service, including GBPUSD, USDJPY, AUDUSD, EURJPY, EURGBP and USDCAD.

The service provides an independent and reliable market data reference point to help create a fully tradable asset class for trading volatility. It originally started with the most liquid tenors, such as EURUSD. Following a positive reaction from the market, the product was expanded in just over a month after the Vol-FIX was launched in February.

For more information on the product, see March issue of ZE DataWatch.
CME Lists S&P Case-Shiller Home Price Index Options

On April 2, 2012, CME listed new S&P Case Schiller Home Price Index options on CME Globex. These contacts are cash settled to a weighted composite index of U.S. housing prices, as well as to specific markets in 10 major U.S cities. Below is the list of the new options:

<table>
<thead>
<tr>
<th>CME Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOS</td>
<td>Boston Home Price Indices Options</td>
</tr>
<tr>
<td>CUS</td>
<td>Composite Home Price Indices Options</td>
</tr>
<tr>
<td>CHI</td>
<td>Chicago Home Price Indices Options</td>
</tr>
<tr>
<td>DEN</td>
<td>Denver Home Price Indices Options</td>
</tr>
<tr>
<td>LAV</td>
<td>Las Vegas Home Price Indices Options</td>
</tr>
<tr>
<td>LAX</td>
<td>Los Angeles Home Price Indices Options</td>
</tr>
<tr>
<td>MIA</td>
<td>Miami Home Price Indices Options</td>
</tr>
<tr>
<td>NYM</td>
<td>New York Home Price Indices Options</td>
</tr>
<tr>
<td>SDG</td>
<td>San Diego Home Price Indices Options</td>
</tr>
<tr>
<td>SFR</td>
<td>San Francisco Home Price Indices Options</td>
</tr>
<tr>
<td>WDC</td>
<td>Washington, D.C. Home Price Indices Options</td>
</tr>
</tbody>
</table>

The new products are the first comprehensive financial tools which make it possible to manage risks associated with the volatile U.S. housing market. These products provide the same tools for risk management and investment that CME Group has brought to agriculture and finance. These contracts are listed with, and subject to, the rules and regulations of CME.

For contract specifications click here

CME Delists Treasury Matched Mid-Curve Options

On March 23, 2012, CME delisted the Treasury Matched Mid Curve (CME Code: TOMMI) options. A new weekly Mid Curve is scheduled to be listed in place of the TOMMI options in May 2012. Four weekly Mid-Curve expirations will always be listed in addition to the standard Mid Curve options expiration with this change.
Xetra Launches ETCs Issued by ETFS Securities

On March 15, 2012, Xetra, for the first time, started trading ten exchange-traded commodities (ETCs) issued by ETFS Hedged Commodity Securities Limited. Investors can participate in the performance of individual commodities (Brent crude, natural gas, gold, copper, silver, wheat, and WTI crude oil) and baskets of commodities (agriculture, precious metals, and all commodities) in the DJ UBS Commodity subindex family. These new ETCs provide hedging against exchange rate fluctuations with the US dollar.

Single commodities:
- ETFS EUR Daily Hedged Brent Crude (DE000A1N3G19)
- ETFS EUR Daily Hedged Copper (DE000A1NZLLO)
- ETFS EUR Daily Hedged Gold (DE000A1NZLM6)
- ETFS EUR Daily Hedged Natural Gas (DE000A1NZLP1)
- ETFS EUR Daily Hedged Silver (DE000A1NZLR7)
- ETFS EUR Daily Hedged Wheat (DE000A1NZLSS)
- ETFS EUR Daily Hedged WTI Crude Oil (DE000A1NZLM8)
- ETFS EUR Daily Hedged Brent Crude (DE000A1N3G19)
- ETFS EUR Daily Hedged Agriculture DJ-UBS EDSM (DE000A1NZLJ4)
- ETFS EUR Daily Hedged All Commodities DJ-UBS EDSM (DE000A1NZLK2)
- ETFS EUR Daily Hedged Precious Metals DJ-UBS EDSM (DE000A1NZLQ8)

Commodities baskets:
- ETFS EUR Daily Hedged Agriculture DJ-UBS EDSM (DE000A1NZLJ4)
- ETFS EUR Daily Hedged All Commodities DJ-UBS EDSM (DE000A1NZLK2)
- ETFS EUR Daily Hedged Precious Metals DJ-UBS EDSM (DE000A1NZLQ8)

Two ETC issued by ETFS Securities (ETFS Commodity Securities Limited) offer investors the possibility to participate in the performance of Brent Crude.

- ETFS Brent Crude (DE000A1N49P6)
- ETFS Forward Brent Crude (DE000A1N49Q4)

NCDEX Launches Rubber Futures Contacts

On March 28, 2012, National Commodity & Derivatives Exchange Limited (NCDEX) launched rubber futures contracts for trade date March 29, 2012. The mode of delivery for these contracts is a physical warehouse receipt based delivery system. These contracts are subject to the rules and regulations of NCDEX.

<table>
<thead>
<tr>
<th>NCDEX Code</th>
<th>Rubber Futures Contract</th>
</tr>
</thead>
<tbody>
<tr>
<td>RBRRS4XOC</td>
<td>Rubber Futures Contract</td>
</tr>
</tbody>
</table>

For contract specifications click here

Xetra Launches Lyxor Commodity Index ETFs

On March 26, 2012, Deutsche Börse expanded its XTF segment for exchange-traded index funds by introducing four new Lyxor commodity index ETFs.

1. ETF name: Lyxor ETF Broad Commodities Momentum TR
   - Asset class: commodity index ETF
   - Benchmark: S&P Commodities Curve Momentum Beta+ TR TM
   - The Lyxor ETF Broad Commodities Momentum TR tracks a strategy index weighted according to the movements in the commodities market. Thus, in a backwardation situation, commodities have a heavier weighting in order to realize rolling profits. Rolling profits are generated when shorter futures are more expensive than longer ones.

2. ETF name: Lyxor ETF Broad Commodities Optimix TR
   - Asset class: commodity index ETF
   - Benchmark: S&P Commodities Optimix TR TM
   - The Lyxor ETF Broad Commodities Optimix TR tracks a strategy index that aims for an optimum rolling mechanism. The best time to roll a future is determined for each of the 24 commodities on the basis of factors such as the futures curve, seasonal fluctuations and historical patterns.

3. ETF name: Lyxor ETF S&P GSCI Aggregate 3 Months Forward
   - Asset class: commodity index ETF
   - Benchmark: S&P GSCI 3-Month Forward Capped Sector Equal Weight Composite Index
   - The Lyxor ETF S&P GSCI Aggregate 3 Months Forward follows the performance of the three equally weighted commodities sectors energy, metals, and agriculture and livestock. It is based on futures contracts with 3-month terms.

4. ETF name: Lyxor ETF S&P GSCI Aggregate Inverse 1 Month Forward
   - Asset class: commodity index ETF
   - Benchmark: S&P GSCI Inverse 1-Month Forward Capped Sector Equal Weight Composite Index Total Return
   - The Lyxor ETF S&P GSCI Aggregate Inverse 1 Month Forward reflects the inverse performance of the three equally weighted commodities sectors: energy, metals, and agriculture and livestock. This is based on futures contracts with 1-month terms.

CFTC Rejects Nadex’ Political Event Derivatives Contracts

On April 2, 2012, the Commodity Futures Trading Commission (CFTC) issued an order to prohibit the North American Derivatives Exchange (Nadex) from listing, or making available for clearing or trading, a set of self-certified political event derivatives contracts. The contracts were expected to be binary option contracts that pay out based upon the results of various U.S. federal elections to be held in the current year.

Pursuant to CFTC Regulation 40.11(c), CFTC initiated a 90-day review period of the Nadex self-certified contracts on January 3, 2012. Consequently, CFTC decided that the contracts involve gaming and contradict the public interest, and cannot be listed or made available for clearing or trading.

CME Enhances User-Defined Spreads by Adding New Functionality

On April 16, 2012, CME enhanced the execution for User-Defined Spreads (UDS): Covereds to better ensure delta neutrality. In certain scenarios, the matching process may result in a Covered trade that is under or over-allocated on the futures fills. Starting March 25, 2012, the Covered matching algorithm started tracking executions of a resting order, such that a futures contract is allocated to the next fill when the executed quantity of a customer's option order results in an accumulated delta futures allocation of or above 0.5. Using a phased implementation, the enhancement was initiated for the following products:

- CME Interest Rate Options
- CBOT Interest Rate Options
- COMEX Options
- Green Exchange Options
- NYMEX Crude Options
- NYMEX Non-Crude Energy Options

For more information click here
MCX Awaits Trading Rules in Commodity Options, Indexes

On Feb 17, 2012, Multi Commodity Exchange of India (MCX) expressed its hopes that the proposed amendments in the Forward Contract Regulation Act (FCRA), which allows trading of options and indexes in commodities, will be passed by Parliament. The amendment in the FCRA would allow MCX to expand its product range by offering trading in real estate indexes and futures, as well as options on rainfall based-products. Having ties with firms providing weather and real estate related data, MCX hopes to widen its scope by providing innovative products and introducing new revenue lines such as data vending. MCX, as the largest commodity exchange in India, is the fifth largest commodity exchange globally, and figures among the top two positions in gold and silver segments.

CME Group Acquires GreenX

On April 3, 2012, CME Group acquired a 100% equity interest in GreenX Holdings LLC. By purchasing the world’s second largest carbon exchange, CME would strengthen its foothold in the trade of carbon-based derivatives. CME plans to migrate GreenX contracts and open interest to CME Group, which would allow CME Group exchange clearing members to clear GreenX products. CME would work with market participants to ensure trading and clearing of existing contracts on CME Globex and CME ClearPort continues with slight impact throughout the migration process.

According to CME, volumes across all contracts on GreenX grew 332% in 2011 with more than 450,000 contracts traded. After signing a MOU with the Bank of China only last month, CME Group’s acquisition of GreenX in April is an indicator of an evolving company that is now growing into environmental markets by providing its customers access to a wider portfolio of products. Sara Stahl, managing director of global marketing at GreenX, confirms that CME Clients will have access to 63 clearing members instead of 16. CME’s stock is up 20% so far this year, yielding a healthy growth since the beginning of this year.

DOE Starts Research on Massive Data Set for Supercomputers

On March 29, 2012, Steven Chu, the U.S Secretary of Energy, announced $5 million to establish the Scalable Data Management, Analysis and Visualization Institute as part of the Big Data Research and Development Initiative of the US administration. The objective is to improve the nation’s ability to extract knowledge and insights from large and complex collections of digital data. The SDAV Institute will bring together the expertise of six national laboratories and seven universities to create new tools to manage and visualize data on the Department’s supercomputers for scientists and researchers.

“Scientific discovery in energy research and a wide range of other fields increasingly depends on effectively managing and searching large datasets for new insights,” said Secretary Chu. By analyzing large datasets thanks to the tools and techniques developed by SDAV, scientists will be able to make new discoveries and extract insights.

Obama launched the “Big Data Research and Development Initiative” with more than $200 million in new R&D investments to improve the tools and techniques needed to access, organize, and glean discoveries from huge volumes of digital data.

Complimentary Lunch & Learn
Geneva, Switzerland | June 5, 2012

Please mark your calendars for Tuesday, June 5 to join ZE PowerGroup and our partners for a complimentary Lunch and Learn focusing on ETRM Integration and Curve Management for European Energy and Commodities Markets. The event will be held at The Swissotel Métropole Geneva from 11:00 a.m. to 4:00 p.m. (CEST). This is an opportunity for you to learn more about the evolving trends and developments in the European energy and commodities industry, as well as to meet and network with industry experts and market participants.

Agenda
Register

Venue: The Swissotel Métropole Geneva
34, Quai Général Guisan
1211 Geneva 3
Switzerland
On April 3, 2012, ICE announced its plan for launching Heating Oil American-Style Option and RBOB Gasoline American-Style Option contracts for trade date April 30, 2012, subject to regulatory approval. The new contracts are the Equity-style American options, which would be the equivalent of ICE Futures Europe Heating Oil and RBOB Gasoline Futures contracts. The Contract will be cleared by ICE Clear Europe.

**Complimentary Lunch & Learn**

**Geneva, Switzerland | June 5, 2012**

**Electricity DA Prices (ICE)**

During the last month, NYISO spot prices moved lower as slightly warmer weather suppressed demand for heating. California however, witnessed a shortage of supply (San Onofre nuclear station has been offline since the beginning of the year), which put upward pressure on prices.

**Actual Temperature (AccuWeather)**

Temperatures moved substantially higher in the East Coast.

In California, weather remained mild.

**Electricity Price Forward Curves (ICE)**

Electricity price forward curves demonstrate that drivers influencing expectations for future prices vary for different markets. Collective market opinion does not anticipate that power prices in NYISO and Midwest ISO will recover before the year 2014. It is likely that the prices will remain depressed by low natural gas prices, slow economic recovery and energy efficiency programs. In gas-dependent California, low fuel prices do not possess leverage sufficient to suppress the cost of electricity production.

Other factors, such as an increasing amount of renewable generation required by the most aggressive in the nation Renewable Portfolio Standard, create the most uplifting effect on power price levels in the Golden State.

**EUA Forward Curve (ICE)**

Derivatives built on European carbon reduction programs and traded on ICE have been settling significantly higher for the remote years, with tightening regulatory requirements for later periods.
During the last month, natural gas spot prices have been fluctuating at different hubs, with Henry Hub prices dropping to the lowest historical levels, crossing the $2.00 line. The spread between different hubs increased by the end of the period.

Forward curves for Henry Hub natural gas prices built on results of trades executed during the last 30 days vs. the trades of the preceding 30 days show that the most recent traders’ sentiments lie with the overall depressed level of the natural gas prices. Despite such a drop in the price level, spring 2013 is likely to be the pivotal point in the natural gas price movements, and will bring it up by about 40%.

Over the last year, prompt month contracts for the WTI and Brent crude oil have been settled with Brent consistently remaining above the North American benchmark. WTI has been fluctuating within $30/Bbl, while the European marker remained within the $20/Bbl fluctuation range.

Overall, the future expectations of the traders remain with the two major benchmarks moving in unison, and the spread between them narrowing down to a few dollars by 2017. While more abundant North American supply will keep oil prices below the European counterparty, the overall price level for this commodity will be depressed to $90/Bbl level.
Argus Expands Biodiesel Coverage

Argus has recently launched a B100 SME New York Harbor price assessment in response to ongoing market requests for a trustworthy pricing tool for biodiesel barrels purchased in the New York area.

Request more information

Biodiesel demand in New York City is expected to grow significantly as the new B2 heating oil mandate comes into play in October 2012. The mandate, signed in 2010, requires all heating oil grades sold into New York City to contain at least 2pc biodiesel. It is estimated that 20mn USG of B100 per year will be needed to satisfy this mandate.

Argus offers the deepest and broadest biodiesel coverage in the US, including comprehensive biodiesel and RINs deals tables, which bring transparency and capture the full day’s trade. If you are not an existing Argus subscriber request your complimentary trial.

Argus is the only biodiesel pricing service with a US-based biodiesel derivatives market instrument. Learn more about the Biodiesel SME Houston B-100 (Argus) Swaps Futures contract.

IEA Switches to Argus for Oil Price Information

London, 13 April 2012

The International Energy Agency (IEA) has decided to switch its data provider for oil markets to leading energy and commodity price reporting agency Argus. The IEA will use Argus for its crude oil, petroleum products, LPG and freight information. The IEA produces a number of important publications including the influential monthly Oil Market Report (OMR) which will use Argus price data in future.

The IEA was founded by OECD nations in response to the 1973-74 oil crisis. It provides authoritative and independent energy research, statistics, analysis and advice to OECD governments.

Argus Media chairman and chief executive Adrian Binks said: “We are delighted that a leading organization such as the IEA has made the switch to Argus price assessments. This move helps to demonstrate how it is possible for even one of the largest and most complex international organizations to change its data provider.”

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E: gabriela.alcocer@argusmedia.com

About Argus

Argus Media is a leading provider of price assessments, business intelligence and market data on the global crude, oil products, natural gas, electricity, coal, emissions, bioenergy, fertilizer and transportation industries.

It is headquartered in London and has offices in Houston, Washington, New York, Portland, Calgary, Johannesburg, Dubai, Singapore, Tokyo, Beijing, Sydney, Moscow, Astana, Kiev, Santiago and other key centers of the energy industry. Argus was founded in 1970 and is a privately held UK-registered company.

Argus Launches California Carbon-Power Table

Argus will shortly launch a daily gas-implied and carbon-adjusted table of calendar year 2013 spark spreads at the power pricing point SP-15 in southern California as part of Argus Air Daily.

The table displays the economics of electric generators under California’s greenhouse gas cap-and-trade program and quantifies the cost advantage for more efficient power plans. It combines Argus forward price assessments for California carbon, power and natural gas prices to show the implied marginal heat rate with and without the price on carbon that California will begin enforcing next year.

Argus Air Daily’s new table offers a critical decision-making tool for western power traders and other entities that are affected by the California carbon market, such as refiners, carbon traders and industrial buyers of power.

For more information on Argus’ emissions coverage and to request a complimentary trial to Argus Air Daily, contact us at moreinfo@argusmedia.com.

New Build Alerts

New Build provides continuous tracking of MW additions that affect the net generation of the electric grid. By monitoring the status of the projects (down to the unit level) that are under development, you can effectively gauge future available MW capacity. Track units with commissioning dates from tomorrow out to 2025 with continuous updates on the life span of these projects and get notifications of cancelled, on-hold, and commissioned start-up units to the day.

Features Include:

• Access to live researchers for follow-up questions
• Data confirmed, verified, validated at the Unit Level
• E-mailed updates
• Online analytical graphing & mapping tools
• Export Microsoft® Excel® files with a click of the mouse

Contact the Energy Team

For more information about New Build Alerts or any other IIR Energy services please contact us at any of the below contact points:

Phone: (713) 980-1779
Email: irteam@iirenergy.com
Y!: IIREnergy_info

(continued on the next page)
MDA EarthSat Weather Launches European Weighted Degree Day (WDD) Data

MDA EarthSat Weather offers a variety of data and reports used throughout the energy, agriculture, and weather markets. In addition to providing the basic data products used by traders worldwide throughout these industries (historic, ongoing, and forecast temperatures, precipitation, etc.), EarthSat goes beyond the numbers to provide unique datasets tailored for traders in each industry. New product offerings now include:

**European Weighted Degree Day Data**
- Weighted Degree Day (WDD) Data for both Heating Degree Days and Cooling Degree Days are now available for Europe. Using population data, weights were determined for cities throughout the continent with locations used indicated in the map below. A 30-year history of WDD data has been developed, dating back to Jan 1, 1981. The capability to rank given time periods against others since 1981 is available as well. Forecasts for weighted degree data can also be used, out to 15 days, and are based on American and European model forecast data. Degree day data can come in the form of a single index number for Europe or individually by country. Currently, we have WDD available for the US and Canada and are in the process of developing it for other areas across the world including Asia and Australia.

The Platts REC assessments bring more price transparency to the market and provide an independent assessment of selected REC products, offering a view of values by aggregating multiple data sources to produce a series of prices under an open and validated methodology.

REC assessments provide a degree of transparency to an otherwise opaque market. This is a vital service to the companies and organizations (buyers, sellers, regulators) actively engaged in the market, as well as those considering investments in the renewable space.

The RECs assessments are published every Thursday in Platts Market Data (Category: RE) and Platts Electricity Alert.

To learn more about Renewable Energy Certificates please see our report – www.platts.com/rec-report

This includes:
- How do RECs fit in the broader context of renewable policy?
- How are RECs defined, and why are they needed?
- What are the different REC products, who are the main buyers and sellers, and how does trading occur?
- What are the REC market dynamics?
- How do these concepts connect with real-life case studies?

**Platts Global Alert Quick Guide - Updated**

Platts Global Alert provides global oil industry professionals with the real-time insight needed to stay on top of the markets and think with speed and clarity. It includes up-to-the-minute information on real-time deals, essential breaking news, market analysis and the latest global price assessments.

This quick guide to Platts Global Alert is designed to improve your user experience by providing you essential information to help you discover and navigate through the vast array of the PGA content more efficiently.

It includes:
- Page numbers/codes to assessments and commentary by region for key content
- Contact details of Platts’ global editorial oil team
- Glossary of commonly used terms.

Click here to download the latest PGA quick guide.

**ZE Hosts Two Complimentary Lunch & Learns in Geneva and Boston in June**

ZE strives to create the most valuable and informative enterprise data management workshops, and the opportunity to network with industry experts across the globe. Our most recent complimentary Lunch & Learn took place on April 10 in Houston, Texas, and received great feedback from participants. We were also pleased to hear positive comments from those who could not attend, but heard of the event’s success.

The next two complimentary Lunch & Learns will take place on June 5 in Geneva, Switzerland, and on June 19 in Boston, Massachusetts. The events will focus on data management, ETRM integration, and curve management for energy and commodities markets. Each event will run from 11:00 am to 4:00 pm local time (CEST Geneva | EDT Boston).

Participants at the Boston event are also invited to join us after the workshop for the complimentary Boston Red Sox baseball game versus the Florida Marlins.

For more information, please go to http://www.ze.com/news/ or contact us directly at contact@ze.com.
Commodities and Energy Market Data in Emerging Economies: Latin America

Part Two: Regulatory Developments in Power Markets

By Olga Gorstenko

It is commonly understood that deregulation, bringing an open competition, results in an influx of market data. The concerns are usually associated with the breadth of data: where to find the additional storage for constantly multiplying data points, tools needed to analyze trends, and how to integrate with enterprise business processes to derive best results. These are not the concerns and questions we asked ourselves when we looked at the deregulated markets in Latin America.

This article addresses deregulation of the electricity industry in five Latin American countries: Brazil, Argentina, Chile, Bolivia and Colombia. In a later DataWatch release, we will examine competition in other commodity sectors and look at how opening the markets influenced the data flow in the public domain.

The 1990s brought a transformation in markets in many countries, including Latin American nations. Latin American power markets started a deregulation process at approximately the same time as those in North America; however, the process was very different and brought varying results. One thing that was common for both continents was that regulatory reforms have a reactive, not proactive, nature. Deregulation reforms, which involve a transformation in the structure and organization of the industry, are usually implemented as a response to reliability setbacks. Meanwhile, the major difference is that Latin America’s rationale for opening up the market is based on pure economic reason: constantly growing significant external debt and shortage of investments in the power infrastructure. As a result, sometimes opening a market to competition actually meant opening a market to foreign investors, which did not necessarily transpire into a “real” and open competition where there are many market participants, active trading and an increasing number of offering of exchange and broker-traded products.

Brazil’s economy overpasses all other South American countries, and Brazil is expanding its presence in world markets. In 2008, Brazil became a net external creditor, and two ratings agencies awarded investment grade status to its debt. With all that in hand, the nation is in a most advantageous position in the region. Brazil has the largest electricity system in Latin America, its power consumption is more than double the combined consumption of Argentina, Bolivia, Chile and Uruguay. Its installed capacity of 106 GW (2009) is comparable to that of the United Kingdom. Geography supports the nation’s high dependence on hydro resources as Brazil boasts the world’s largest water storage. Hydroelectric generation meets 85% of its electricity demand. This ensures low power generation costs; however, the nation remains vulnerable to supply shortages caused by droughts.

Brazil’s power system remained state-owned until it started showing signs of collapse. Inability to sustain heavy subsidies and a revenue shortfall in the sector led to the delay in the construction of hydro plants. The state was unable to resolve the issue with its regular means, so the need for reform emerged.

In 1996, President Cardoso put in a motion to reform the Brazilian electricity sector—the Project for Restructuring the Brazilian Electric Sector. The goal of the reform was to privatize state-owned utilities. Following the reforms, new capital was attracted from the private sector, with foreign investors such as Tractebel, AES, Prisma Energy, El Paso, Duke, EDF, Endesa and Chilectra, which focused their investment on the distribution segment. In the end, however, only approximately 65% of electricity distribution companies were privatized.

Transmission assets remained within state ownership. The enactment of Law 9648 in 1998 led to the creation of an independent operator of the national transmission system and an operator of the commercial market, the Mercado Atacadista de Energia Elétrica, which started operation in 2001.

Efforts failed to resolve the generation constraints, and capacity continued lagging behind growth in demand. Installed capacity expanded by only 28% during 1990-99, whereas electricity demand increased by 45%. Coincidently, several years after the commencement of reform, rainfall was significantly lower than average which led to a hydro shortage. In 2001, the Crisis Management Board introduced emergency measures, such as compulsory rationing, blackouts, and a tiered rate system based on historical and target consumption levels, with some freedom offered to the large users to trade their quotas in a secondary market. The government achieved its goal to reduce consumption by 20%, mostly by paying those consumers who reduced their power consumption. However, reduced demand brought on by lower consumption meant significantly reduced revenues for generators and distributors.

As the government seemed to be the savior in the energy crisis, while private business failed to meet the challenge (so perceived because of continually dropping revenues), there was some speculation that the power sector reforms should be recalled. The pending privatization of three generation subsidiaries of the state-owned utility, Eletrobrás, was suspended.
Part Two: Regulatory Developments in Power Markets

Nevertheless, the new administration continued on a course of introducing more competition, and further reforms were implemented in 2004. The new legislative framework was established by Law 10,848, which aimed at ensuring supply through setting a fair return on investments and universal service access. The new Power Sector Model allowing public and private investment in new generation and distribution projects was a hybrid approach under which the sector was split into regulated and unregulated markets for different producers and consumers.

In the unregulated, “free market” (about 25% of the total market), independent power producers and large industrial consumers enter into long-term bilateral contracts at prices that are usually calculated by reference to the regulated market. The regulated market, serving about 75% of the total electricity consumers, is operated by means of energy auctions that are the only procurement mechanism for distribution companies to acquire electricity on a wholesale basis. The public capacity auction is carried out twice every year, three to five years in advance of delivery dates with about 70 distribution companies bidding against each other. Following a successful auction, each generator signs bilateral contracts with each of the distribution companies. Any premium and passed-on costs charged by distribution companies to consumers in addition to the wholesale auction price are regulated.

Under this system, future expansion needs are met and generators are built only after they have won bids in energy auctions and have guaranteed long-term contracts.

The Brazil regulations in the electricity sector focus primarily on distribution, particularly as they are required to oversee the auction process. In 2009, the auction concept started to be applied to wind power after the announcement of Brazil’s commitment to renewable energy expansion. Now the focus is shifting towards long-term investment in the transmission network. Brazil’s transmission infrastructure has been demonstrating unreliable performance. From 2007 to 2009, the average length of power interruptions increased by one day over the previous year.

An auction system, which provides incentives for investors, has been implemented for the expansion of transmission lines, as well as for generation capacity. Even though Electrobras continues owning the transmission lines in Brazil, its market dominance is being slowly reduced.

Argentina

Like many other Latin American countries, during most of the 20th century, Argentina suffered from recurring economic crises, persistent fiscal and current account deficits, high inflation, mounting external debt, and capital flight. A severe depression, and growing public and external debt climaxed in 2001 in the most serious economic, social, and political crisis in the country’s turbulent history. All of this had an impact on power industry development.

Argentina’s Net Electricity Generation Shares

The electricity sector in Argentina remains vertically integrated until the summers of 1988–1989 crisis, which was caused primarily by a lack of maintenance of the country’s thermal power plants (50% were unavailable). After the crisis, a remediation, the government of Carlos Menem introduced a legal framework for the electricity sector through Law 24,065. The reform encompassed unbundling of generation, transmission and distribution and opening up access to the private sector. The new law brought in substantial private investments which transformed power shortage into plenty supply at lower prices.

1992 marked the creation of the Electricity National Regulatory Entity and the Wholesale Electricity Market, which covers up to 93% of total demand on the Argentine Interconnected System. 7% of the remaining demand is served by a separate market in Patagonia, with its own interconnected market, the Patagonian Wholesale Electricity Market. The Wholesale Electricity Market Administration Company (CAMMESA) was formed for the year and coordinates dispatching, setting wholesale prices in the spot market and administrating transactions in the Argentine Interconnected System.

As the reforms brought in investments, a 75% increase in generation capacity and improvement in the distribution network brought in the decrease of prices in the wholesale market. However, the reforms failed to deliver the necessary increase in transmission capacity.

The 2001 economic crisis prompted the government to take over control and the Public Emergency and Exchange Regime Law froze electricity tariffs in January 2002. Because of this freeze, the utilities’ revenues remained stable, while high levels of debt in foreign currency carried by the energy companies - boosted by high inflation and the devaluation of the peso - pushed the sector to a troublesome area with underinvestment and generation shortage.

Following the economic recession that ended in 2002, local demand recovered; however, it could not be served by the shrinking supply. The situation was aggravated by the energy crisis triggered by a natural gas supply shortage in 2003-2004. This had a direct impact on the power sector dominated by fossil-fueled generation. A large number of industrial facilities and power plants, especially in the province of Buenos Aires, and the province of La Pampa, suffered cuts in their supply of natural gas, which reached 13% of industrial demand.

To remEDIATE the crisis, the government, first, increased rates and then moved to the reorganization of the energy sector. In 2004, Energía Argentina Sociedad Anónima (Enarsa) was created to manage the exploitation and commercialization of petroleum and natural gas, and also the generation, transmission and trade of electricity. This arguably marked a “turning back” course with the government regaining control over the energy market that was largely privatized in the 1990s.

The major objective of the new direction was to increase generation capacity to meet the rising demand for electricity. In September 2006, the Energy Secretariat, responsible for policy setting, launched the Energy Plus (Energy Plus) program. The program required all large users (above 300 kW) to contract the difference between their current demand and their demand in the previous year in the Energy Plus market. In this new market, only energy produced from new generation plants was permitted for trading. Another initiative aimed at resolving a supply/demand imbalance was the launch of the National Program for the Rational and Efficient Use of Energy (Decree 140) in December 2007.

Power generation represents a liberalized market with 75% of the generation capacity privately owned. The generation sector is highly fragmented with more than ten large companies; all of them providing less than 15% of the system’s total capacity.
Argentine law guarantees access to the grid in order to create a competitive environment and to allow generators to serve customers anywhere in the country. Meanwhile, the transmission and distribution sectors are highly regulated and much less competitive than generation. The Compañía Nacional de Transporte Energélico en Alta Tension (Transener) is the owner of the largest transmission network, while three private companies, Edenor, Edesur, and Edelap, dominate the electricity distribution sector, serving a majority of customers.14

The Argentine power sector, while being one of the most deregulated in Latin America, allows the Energy Secretariat to use a veto power over CAMMESA, and this veto can alter the functioning of the whole market.

Chile

Chile is market-oriented and has a high level of foreign trade. Chile deepened its commitment to trade liberalization by signing a free trade agreement with the US on January 1, 2004. Chile claims to have more bilateral or regional trade agreements than any other country. It has 59 such agreements, including those with the European Union, Mercosur, China, India, South Korea, and Mexico. Foreign direct investment inflows reached $15 billion in 2010. In May 2010, Chile signed the Organization for Economic Co-operation and Development (OECD) Convention, becoming the first South American country to join the OECD.15

The electricity sector in Chile relies predominantly on thermal and hydro power generation. Chile’s electricity reform was set in motion by the 1982 Electricity Act, which started with vertical and horizontal unbundling of generation, transmission and distribution. Chile is frequently quoted as the first country to restructure the power sector. The privatization of utilities began in 1986. The results of privatization were very optimistic: Endesa, a state-owned monopoly, was divided into 14 companies: 6 generation companies (including Endesa and Colbun), 6 distribution companies and 2 small isolated generation and distribution companies.

There are 26 companies that participate in generation, although three main economic clusters control the sector: Endesa group, AES Gener and Tractebel (Colbun).

In the Central Interconnected System, there are five players with Transelectro controlling almost the entire transmission grid. In the Norther Interconnected System, mostly serving mines in Chile’s northern regions, the large generation companies are the owners of the transmission systems, such as Electroandina, owned by Tractebel and Codelco.

The drought of 1998-1999 caused blackouts with a total of 500 GWh of electricity being cut. This prompted amendments to the 1982 Electricity Act in 1999 and introduced electricity rationing. More problems were brought in by the 2002 Argentine crisis. A sharp economic recovery in Argentina boosted energy demand and led the country to reduce its gas exports to Chile in 2004.

Coincidently, facing a shortage of hydroelectric capacity at this time, Chile started substitution of more expensive fuel oil for gas. In 2004, Law 19,940, known as Ley Corta I (Short Law), and in 2005, Law 20,018, known as Ley Corta II (Short Law II), addressed those concerns. The amendments to the 1982 Electricity Act allowed access to distribution networks for power generators providing less than 9 MW and established a competitive bidding system to ensure a set price over a given time.16

Chile went through probably one of the longest industry restructuring process and set up example to other countries in such areas as the segmentation of the industry, and the compulsory spot market using marginal pricing principles.17

As a result of the reform of the electricity sector, 100% of generation, transmission and distribution systems in Chile are now in the hands of private companies. The concerns are that by the end of the 1990s, foreign firms had gained majority ownership of this system.18 However, the goal of improving the system through increased investment has been achieved accompanied by plunging prices, improved efficiency, and improved quality of services.

Bolivia

Bolivia, one of the poorest and least developed countries in Latin America, has been dealing with a series of economic and political problems. Its story is an example of what can be done during desperate times when one has little bargaining power.

The electricity supply in Bolivia is dominated by thermal generation and hydropower.

Bolivia’s Electricity Generation, by Type (2008)

An economic crisis of the early 1980s brought in reforms supporting private investments, but not much success was achieved. Empresa Nacional de Electricidad (ENDE) remained a vertically integrated public monopoly until 1994. In 1994, Electricity Law 1994/1604 required the privatization of the electricity system and the unbundling of generation, transmission and distribution activities.19 The law limited the maximum market share that could be held by one company to 35%. As a result, three generation companies were created: Corani (50% owned by Inversiones Ecopefery Bolivia S.A., a subsidiary of France’s GDF Suez), Guaracachi (50% owned by Britain’s Rurelec PLC) and Valle Hermoso (run by a foreign private firm called the Bolivian Generating Group)20. By 1999, more small companies entered the market.

After this, developments in the power generation sector were centered around giving business to foreign companies and then trying to get it back. The national electricity company, ENDE, was re-founded in 2008. In May 2010, four electricity firms, which accounted for more than half of the electricity market, were expropriated by the government: Corani (50% owned by France’s GDF Suez), Guaracachi (50% owned by the United Kingdom’s Rurelec), Valle Hermoso, and the Empresa de Luz y Fuerza Electrica Cochabamba (ELFEC). The nationalizations returned the firms’ assets to the reconstituted ENDE. The government claimed control over 80% of Bolivia’s electricity generation and expressed a desire to achieve complete control over the sector.21

The transmission network operation has been transferred to two private companies with the entry in this sector by other companies being institutionally restricted. One of these companies is Transportadora de Electricidad, owned by Spain’s Red Electrica de España. Another one is ISA Bolivia, which runs 53% of the transmission network in Bolivia, a corporation controlled by the government of Colombia.

Several distribution firms were created after the reform, the majority of which transferred their status from the public companies to private. The largest one is Electropaz, majority-owned by Spain’s Iberdrola; followed by Empresa de Luz y Fuerza Electrica Cochabamba, which was owned by the American PPL Global until 2007.

(continued on the next page)
Most of the government reforms have been directed at establishing electrification of the rural regions of the country. In 2002, the government established Bolivia’s Rural Electrification Plan to improve access to electricity in rural areas. The short-term goal of the program was to increase electricity access in rural areas from 23% to 45% within five years. 22 The model established by this program did not have a significant effect in expanding infrastructure and improving service quality.

A new Supreme Decree No. 28567, Rural Electrification Decree, was approved in 2005. The new decree aimed at increasing rural access through the expansion of electric networks, development of renewable energy and a change in the energy mix (substitution of diesel with natural gas, biomass and other renewable energies). The regulatory framework encouraged establishment of partnerships with other government agencies. In 2006, President Evo Morales proposed a new Law for Universal Access to Electricity designed to improve both rural and urban electrification. In the final stages, rural access would have increased to 87% by 2020 and universal coverage would be reached by 2025. The Law creates a co-financing mechanism of the National Government with prefectures, municipalities and the private sector. However, the Law is yet to be approved.

Bolivia, while struggling to fight poverty and constricted electrification, has been dealing with the foreign ownership of the electricity assets, which has impeded the country from moving beyond the frames of an artificially maintained status in the open and competitive market.

Colombia

Economic development in Colombia is hindered by an inadequate infrastructure. While the country tries to expand trade and commercial ties with other countries, its internal problems, like inequality, underemployment, and narcotrafficking remain significant challenges to sustainable economic expansion. 24 Colombia represents probably the least optimistic case for power industry deregulation. The electricity sector in Colombia is dominated by large hydropower generation and thermal generation, mainly oil. This generation mix makes the country dependable on oil price movements, as well as weather.

Like most other Latin American countries, Colombia suffered a crisis in the 1980s, as the result of large subsidies, political influence in state run companies, and cost overruns of large generation projects. The 1992-1993 crisis caused by El Niño-Southern Oscillation, associated droughts and the high reliance on hydroelectric generation warranted government intervention. As a result of new policies, the dominance of hydropower in the generation portfolio was significantly reduced. In addition, the government took steps to modernize the system by establishing the regulatory framework for the development of a competitive market in the electricity sector, opening it to private participation through Laws 142 (Law of Public Services) and 143 (Electricity Law) of 1994. The sector unbundled generation, transmission, and distribution services. 25

About 60% of the generation capacity is privately owned by 66 registered electricity producers. Two public companies, Empresas Públicas de Medellín (EEPPM) and ISAGEN, and one private company, EMGES, control more than half of total generation capacity. 26

The 2001 Law 697 was designed to promote the efficient and rational use of energy and alternative energies. 27 The program created under this law, however, admittedly lacks a regulatory support system to encourage investment. Large hydropower and thermal plants continue to dominate the current expansion plans. While there have been a few initiatives on efficient and rational use of energy, the existing system of cross-subsidies from users living in affluent areas and consuming higher amounts of electricity, to those living in poor areas and using less electricity, creates an impediment to successfully implement such initiatives.

Private participation in electricity distribution is very low. The National Interconnected System is operated by seven public companies, the largest of which is Interconexión Eléctrica S.A.

With a constant need to resolve economic and social challenges, Colombia has not been successful in developing the market or even attracting foreign capital.

Latin America was the birthplace of electricity deregulation reforms with Chile starting the trend in 1982. Argentina, Bolivia and Colombia followed Chile a decade later. Brazil joined the suit in the end of the 90s. Following a difficult and winding road of economic instability, political and social distress, the region has reached a certain degree of stability and improvements of the electricity sector. Meanwhile, reforms have been swinging back and forth between state control and deregulation. The success ever achieved by the regulators, has not always been a direct result of a competitive wholesale or retail electricity markets. A large part was played by incentives introduced to support privatization, contractual obligations placed on distribution companies, and other inducements given to investors.
Part Two: Regulatory Developments in Power Markets

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