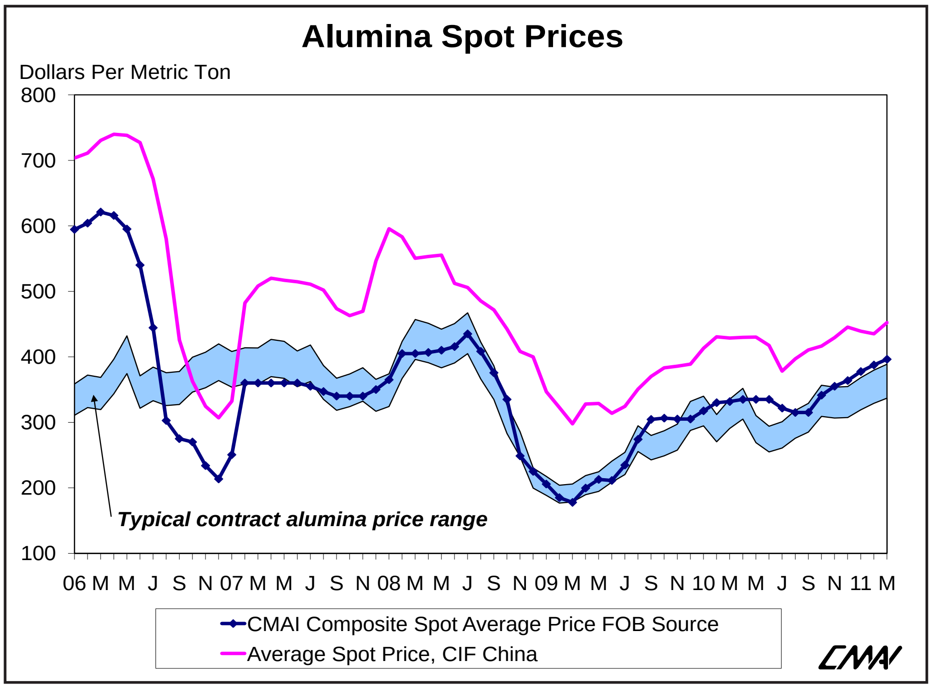
ALUMINA / ALUMINUM by Horacio Correa

ALUMINA/ALUMINUM HIGHLIGHTS

- *The CMAI composite spot average increased to $398 per metric ton FOB*
- *Chinese aluminum smelters are now boosting production*
- *China's auto sales rose 13.8 year-over-year in January to hit 1.89 million*
- *United Company Rusal will not restart alumina production at its idled Alumina Partners of Jamaica Ltd. (Alpart)*
- *Alcoa is restarting 200 thousand metric tons of primary aluminum output in the U.S. market*
- *The London Metal Exchange (LME) 3-month official aluminum price increased 2.2 percent from the end of February to March 28*

Alumina Prices: As of March 28, average spot prices for alumina increased from last month. The CMAI composite spot average increased to $398 per metric ton FOB. Alumina prices in China have been relatively stable; the imported spot price has inched up to 3,000 yuan at Qingdao port of Shandong province. China's domestic alumina refineries were not affected by the energy saving and emission reduction in Q4 last year. So, alumina stocks have increased somewhat in China. The expectation is that spot alumina prices will increase as we see demand steadily picking up. Another variable to consider that may influence the alumina spot price is the financial market's appetite to have aluminum new exchange-traded funds (ETF) for the metal.

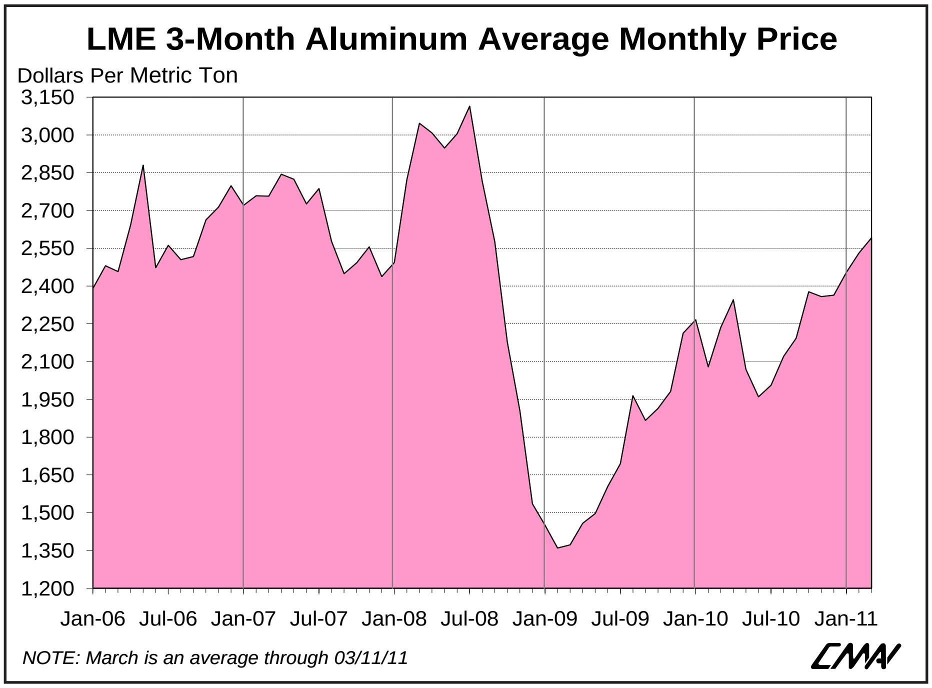


Alumina Market (Supply/Demand): Alumina demand is driven almost entirely by demand in the aluminum market. As a result, it is critical to monitor the latter industry. *Chinese aluminum smelters are now boosting production*. The restart of the idled aluminum capacity is underway, and the release of that capacity is gradual. It is expected that Chinese aluminum smelters will increase buying of alumina in the coming weeks. As 2011 is underway, China's restart of idled aluminum production will begin to trigger further alumina imports.

In addition, alumina producers in the western hemisphere are looking to cater to all of the new aluminum smelter startups in the west as well, but the problem is that the market is tight for alumina. There were several aluminum smelters that started up this year as discussed below, and as demand has jumped so have rising costs, leading to expectations of a higher alumina spot price.

United Company Rusal will not restart alumina production at its idled Alumina Partners of Jamaica Ltd. (Alpart), due to the inefficient technology of the plant. However, Rusal does still plan on starting up operations at West Indies Alumina Co. (Windalco), a subsidiary of Rusal. Windalco has two alumina refineries located in Jamaica. One of the two plants is Ewarton Works. Ewarton Works' annual alumina capacity is 600,000 metric tons per year. Ewarton Works re-started in June of last year. This year, Windalco's second alumina plant facility, Kirkvine Works, is scheduled to re-start in July. Rusal has currently indicated that they expect to produce 225,000 metric tons of alumina this calendar year. If expectations are met, we can expect to see an approximate 825,000 metric tons of alumina from Windalco's alumina refineries.

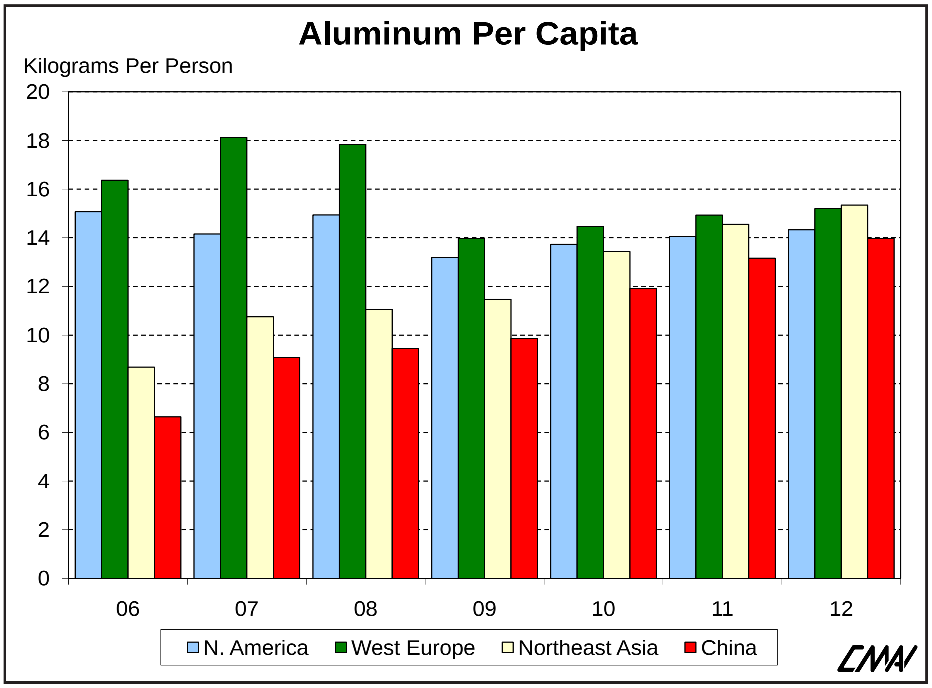
Aluminum Prices: *The London Metal Exchange (LME) 3-month official aluminum price increased 2.2 percent* from the end of February to March 28. The official March monthly average price was $2,578 per metric ton, which was up $47 per metric ton from February 2011. The price is still up compared to March 2010 by about 14.8 percent year-to-date.



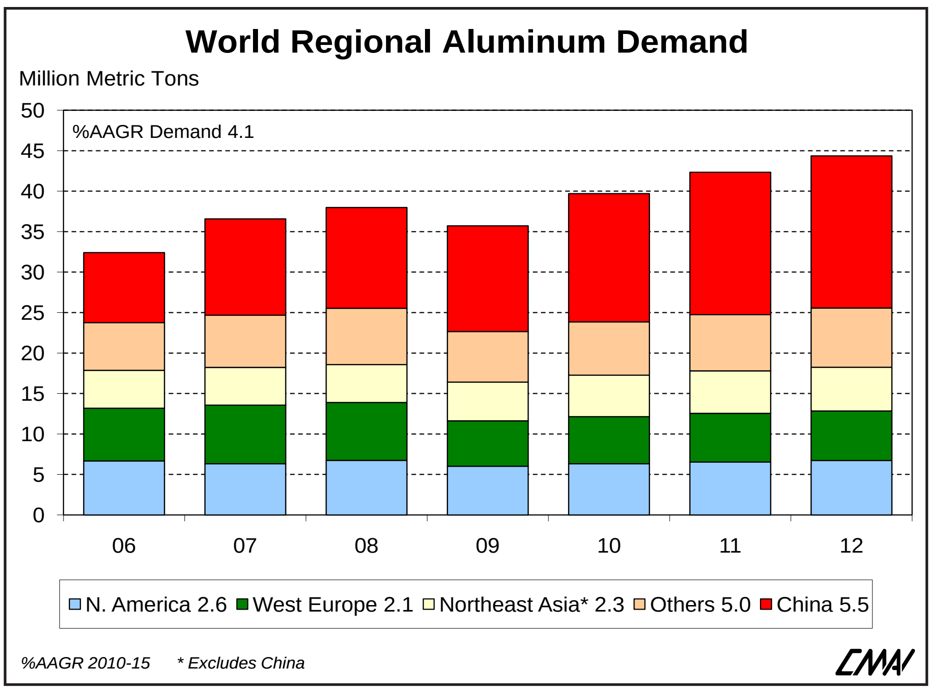
Aluminum Market (Supply/Demand): Chinese aluminum smelters have started to begin full production in February, but we must still keep in mind that as production ramps up, China's Twelfth Five-Year Plan was released on March 5, 2011. China's Five-Year plan is used as a strategic tool to map their strategy for economic development, set growth targets and launch reform in order to ensure China reaches their maximum growth potential. As part of the Twelfth Five-Year Plan, China expects to reduce their energy consumption and CO2 emissions, along with many other milestones they plan to achieve. Nonetheless, the plan falls in line with their attempt to bridge their growth gap of Chinese household consumption.

On the demand side, China's auto sales rose 13.8 year over year in January to hit 1.89 million, a new record on a monthly basis, according to China Association of Automobile Manufacturers. In addition, the Chinese government ended tax breaks for purchases of small cars at the end of 2010 and re-imposed a ten percent tax at the beginning of this year. The tax breaks, introduced in 2009, were used to buoy domestic demand amid the economic slowdown; these tax breaks had boosted China's auto market and helped it overtake the U.S. as the world's largest in 2009 and 2010.

Aluminum production in China is heavily affected by the Chinese government, as we observed in the fourth quarter of 2010. Decisions to shut down inefficient smelters was a must in order to reduce their energy consumption and meet government guidelines. How much the Five-Year Plan will affect the aluminum industry will be determined by China's demand for the base metal over the years to come. As we have indicated in our charts below, China's aluminum per capita consumption will potentially increase at an approximate ten percent year-over-year. However, government officials are trying to reduce consumption, as indicated by the quota system, to limit new car licenses from January 1, where only 240k new cars will be registered in the city of Beijing this year compared to the 800k that were on the streets in Beijing last year.



On a global basis, regional aluminum demand has been driven by China. China's aluminum demand has increased 83 percent in four years, and in 2010 had approximately 40 percent of the aluminum demand in the world.



In February, China's aluminum output reached a near all-time high of 46,607 metric tons, as Chinese aluminum smelters continue to ease back into full production with energy cuts fading. China's record aluminum all-time high monthly production is 46,876 metric tons, according to the National Statistic Bureau, a difference of 269 metric tons. As we observe aluminum production starting to increase in 2011, Chinese aluminum producers are only 0.05 percent above their aluminum production from 2010.

In addition to China picking up the smelter production, *Alcoa is restarting 200 thousand metric tons of primary aluminum output in the U.S. market*, while domestic competitors, Ormet Corp and Century Aluminum Co., move forward with their own potline re-starts.

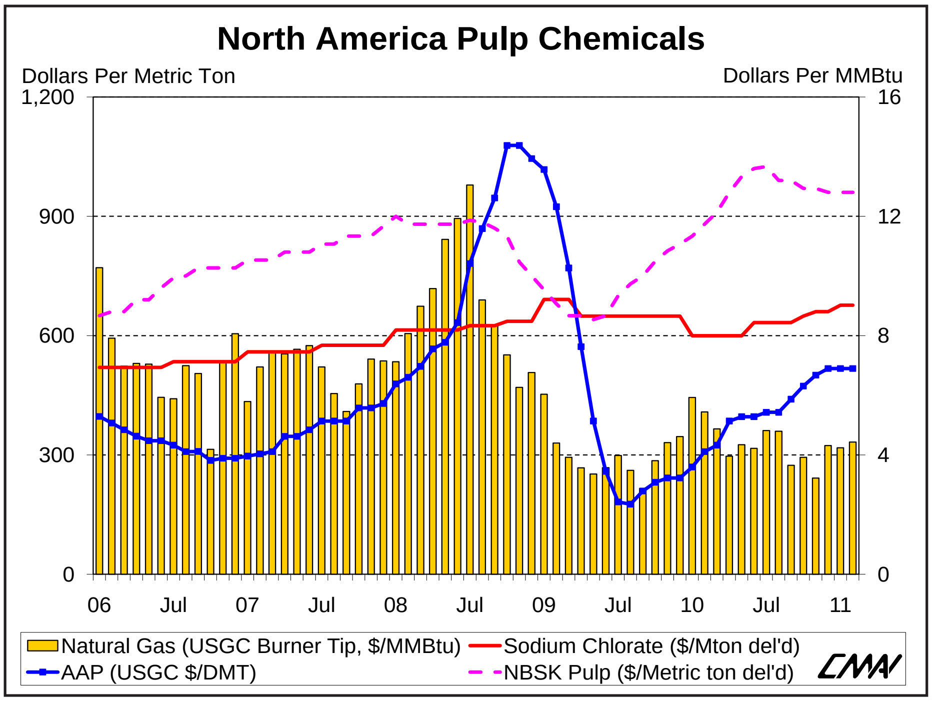
SODIUM CHLORATE / PULP by Horacio Correa

SODIUM CHLORATE / PULP HIGHLIGHTS

- *Fibria made a Bleached Eucalyptus Kraft (BEK) pulp price increase announcement*
- *The shipment-to-inventory (S/I) ratio for global pulp was up to an average of 1.132 for the month of February*
- *As the tsunami and earthquake take a toll on the Japanese industrial producers, there is ongoing concern on how this devastation will affect the pulp and paper producers globally*
- *Canexus announced a global sodium chlorate price increase*
- *Sodium chlorate production and operating rates improved sharply in 2010 along with pulp industry output, and the outlook for 2011 is a continuation of very high production levels*

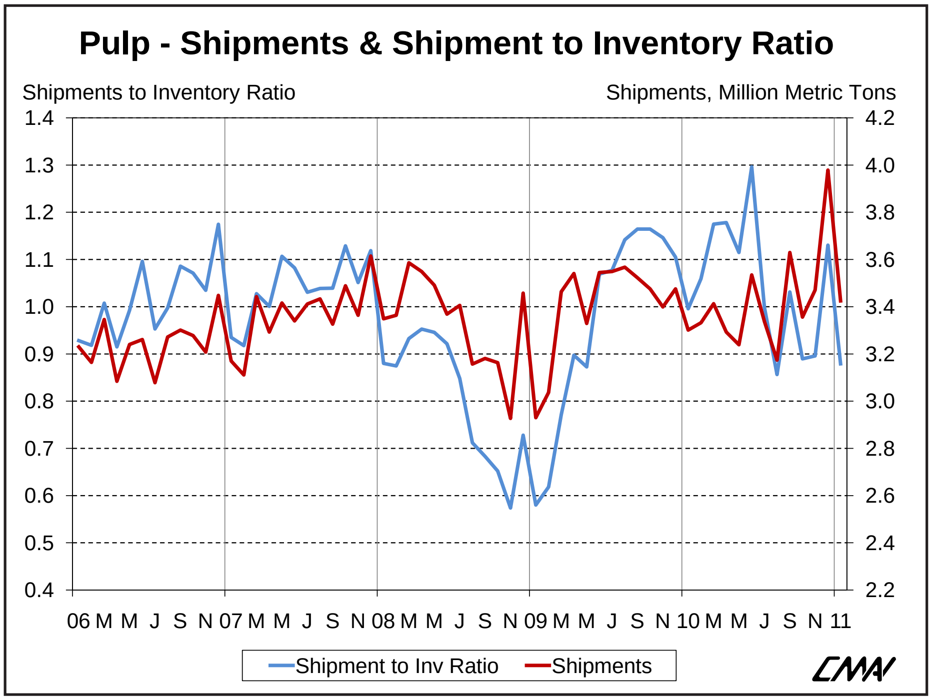
PULP

Prices/Margins: The graph titled "North American Pulp Chemicals" shows price trends for several products related to pulp in the North American market, including natural gas, caustic soda, sodium chlorate, and the NBSK list price. We chart the U.S. Gulf Coast natural gas burner tip price as a marker for natural gas prices in other regions. Gas prices influence the energy costs for chlorate and chlor-alkali plants.



Fibria made a Bleached Eucalyptus Kraft (BEK) pulp price increase announcement. On March 14, Fibria informed customers worldwide that BEK pulp would rise $30 per metric ton, effective April 1. The $30 price hike would raise its list price in North America to $930 per metric ton, in Europe to $880 per metric ton and in China to $780 per metric ton. In addition, Northern Bleached Softwood Kraft (NBSK) market pulp pricing this month in the U.S. rose $30 per metric ton. U.S. NBSK pulp price rose to $990 per metric ton and Southern Bleached Softwood Kraft (SBSK) increased to $950 per metric ton, also up $30 per metric ton. Bleached hardwood prices did not change from last month. NBSK producers set increases this month at $980 per metric ton in Europe and $890-$900 per metric ton in China. Current sentiment in the market is that pulp producers are looking to see higher NBSK increases coming due to upcoming maintenance downtime, and since demand has not let up, prices for NBSK will be going up as well.

The shipment-to-inventory (S/I) ratio for global pulp was up to an average of 1.132 for the month of February, showing a strong, steady increase over the course of 2010 from the low of 0.572 seen in November



2008. In 2010, *global market pulp shipments were up by 15 percent over 2009.* Inventories have been on a decreasing trend since 2008 on an annual basis, although end-of-year inventories in December were 12 percent higher than in December 2009. As we notice in our shipment to inventory ratio chart, shipments picked up at the end of 2010 while inventory levels declined, leading to a tighter market heading into 2011. An S/I ratio below 1.0 typically indicates a weak market. However, anytime there is an inverse relationship of rising shipments and falling inventories, it is an indication of a strengthening market.

Market (Supply/Demand): *As the tsunami and earthquake take a toll on the Japanese industrial producers, there is ongoing concern on how this devastation will affect the pulp and paper producers globally.* Since the port of Sendai was the major import port for Japanese paper producers, Japan's production of paper has taken a hit; hopefully, these pulp and paper producers' mills will come back on-line later on in the year. Unfortunately, this unexpected turn of events will affect global pulp producers and Japanese imports as well. Logistically, Japan would import wood chips from North America, South Africa and Australia, however, with the potential of receiving docks and pulp mills being offline for an unknown amount of time there are concerns as to how long these ports will be unavailable. We hope to see these pulp and paper mills back on-line as soon as possible. Current estimates indicate that approximately 20 percent of Japan's total integrated pulp capacity, 55 percent of BSK pulp and 15 percent of BHK market pulp production will be unavailable. Currently, Japan's market share in the pulp industry is approximately five percent of global market pulp shipments.

In addition, due to this devastation, a possible alternative for Japanese paper producer's clientele will be looking to fulfill their contracts with potential North American paper producers while Japanese producers look to get their mills back up and running. On the demand side of paper, North American paper producers have an opportunity to meet Japanese clientele demand, but for woodchip producers, imports into Japan will be unavailable in the short term. On a positive note, this devastation would create an opportunity for North American paper producers to meet Japanese clientele paper demand.

A list of pulp and paper plants are down due to the Tsunami and earthquake, but to list some of the larger pulp and paper producers we have obtained information indicating that Mitsubishi Paper Mills Hachinohe Mill, which produces 585 thousand metric tons of bleached hardwood Kraft pulp (BHSK) and softwood kraft pulp (NBSK), was heavily impacted. In addition, Nippon Paper's mills, Ishinomaki and Iwanuma, are off line. The Ishinomaki mill made 643 thousand metric tons of wood pulp and 1.1 million metric tons of graphic and specialty paper.

SODIUM CHLORATE

Prices: With high operating rates and a tight supply demand balance as the backdrop to discussions, it is no surprise that SCL valuations are an issue between buyer and seller. Producers have been implementing an announced $60 per dry short ton price increase since October, and have been reasonably successful. We assess that SCL prices have moved upward since the third quarter of 2010 by roughly $40 per dry short ton, distributed over the period in a variety of patterns.

Despite the apparent gap remaining between announced price increases and the achieved price increases, a continuation of the present supply/demand dynamics would seem to indicate further price announcements could be in store.

Currently, Canexus announced a global sodium chlorate price increase. Canexus has increased the price of sodium chlorate by $50 per metric ton in Canada, US and international shipments. This price increase is due to cost increase of basic material that have impacted Eka Chemicals cost structure.

Market (Supply/Demand): In the market news for sodium chlorate, Eka Chemicals is positioning itself as the supplier for one of the world's largest pulp mills located in Brazil and other Brazilian pulp producers. Towards the end of January, Akzo Nobel announced that Eka Chemicals, which is a business unit within Akzo Nobel, would invest 90 million Euros in order to cater to Brazil's El Dorado Celulose e Papel mill located in Tres Lagoas City. Eka Chemicals will be building a sodium chlorate production unit to supply the projected demands of the El Dorado mill, which has been designed to accommodate three pulp lines.

Demand for sodium chlorate (SCL) is following the pulp industry rebound trend and is strong. Expectations for 2011 are for continued strong demand, but since pulp capacity is operating at reasonably high rates already, there is little upside to SCL demand growth in the domestic markets. Exports from this region are being incented by relatively low energy costs, overall, and are continuing to flow. As we reported last month, exports are higher and are anticipated to reach higher levels in 2011.

Sodium chlorate production and operating rates improved sharply in 2010 along with pulp industry output, and the outlook for 2011 is a continuation of very high production levels. SCL operating rates are estimated to be riding around the very high 90 percent level, reflecting the balance that has been crafted in the last year or so. Key to the high operating rates is obviously the remarkable improvement in the pulp production level since 2009, but there has also been 'right-sizing' in the SCL manufacturing base in North America.

Operating rates are actually on the higher end of industry comfort levels, according to some participants. The industry incidents that occurred in 2010 that resulted in Force Majeure are on buyers' minds, and knowing that there is essentially no slack capacity remaining is creating some uneasiness. Further, warm weather impedes electro-chemical unit capacities, so the summer months will potentially reduce production capacity. Inventories through the supply chain are likely low throughout due to the strong demand and operating issues of 2010.