FRANKLIN XAVIER

Keeping pace with paperboard growth, Klabin invests in productivity gains

Sector kicks off a new investment cycle

Find out about the projects that will be completed by 2015

By Caroline Martin

In 2010, Brazil's pulp and paper sector consolidated its recovery from the global financial crisis of 2008. According to estimates from the Brazilian Pulp and Paper Association (Bracelpa), pulp production reached 14 million tons, representing a growth of 5.1% in relation to 2009, while paper production reached 9.8 million tons, representing a 3.4% increase.

The closing of a year full of expressive results generates expectations for the new cycle that begins. In fact, a retrospective of events that marked last year is a favorable moment to assess the sector's scenario and make projections for upcoming years. What the country can expect after growing its GDP 7.6% is one of the answers most awaited by industrial segments. Will the trend for 2011 will be a continued accelerated growth rate or will the economy step on the brakes?

The answer, yet in a speculative tone, translates into positive news: even though growth should be less this year, the winds continue in a favorable direction in Brazil. CNI (National Confederation of Industry) projects that the Brazilian economy is headed towards a convergence of its growth potential, and should grow 4.5% in 2011.

"We are seeing the market move, with unemployment at its lowest level

in decades. We expect even better days ahead", said Horacio Lafer Piva, Chairman of Bracelpa's Advisory Board, during a press conference on the sector's results last year. In outlining a macroeconomic outlook with a focus on perspectives for 2011, the executive highlighted an expectation of heterogeneous growth, more concentrated on emerging markets.

The sector intends to fully tap the window of opportunity. Based on the greater economic dynamics of emerging markets and the expected increase in paper consumption, due to a hot economy, the investment plans of companies total US$ 20 billion through 2020. The amount estimated by Bracelpa is sure to leverage various segments that cater to this industry. The current 2.2 million hectares of planted forests shall increase to 3.2 million hectares, while pulp production will grow 57% and paper 30%.

PROJECTS HAVE ALREADY COME OFF THE PAPER

New pulp mills stand out among investments announced for the next years. RISI Economist Patrícia Perez explains that Brazilian projects are mainly focused on market pulp: "the rapid growth of forests and the low production cost lend competitiveness to South American countries. This characteristic, coupled with the increase in demand, mainly due to the increased production capacity of paper in Asia, encourages companies in the sector to conduct feasibility studies for building new mills or expanding the capacity of existing ones".

Stability in commodity prices is another point in favor of industry representatives. In spite of the fact that the last few months of 2010 we saw pressure from the Chinese to lower the price of short fiber pulp, the raw material is expected to remain at its current level. "When we talk about price expectations, there is always a relationship with fact-based data. Today, what prevails is the devalued U.S. dollar. Therefore, I believe in stabilization at the current level over the next few years", says Carlos Alberto Farinha e Silva, Vice-president of Finnish consulting firm Pöyry. In Europe, average prices for a ton of bleached hardwood kraft pulp (BHKP) amounted to US$ 852.98 in December 2010. In China, the average price that same month was US$ 745.66.

New player in the segment, Eldorado Brasil, which has J&F and MCL Empreendimentos as shareholders, stands out as the first of upcoming start-ups. Construction of the production facility in Três Lagoas (MS), with a production capacity of 1.5 million tons/year of eucalyptus pulp, is advancing as scheduled and promises to begin operating in the second semester of 2012. At the end of last year, the company concluded earthmoving works. Over a five-month period 8.3 million cubic meters of earth were moved in an area equivalent to 1.4 million square meters. According to Carlos Monteiro, Technical and Industrial Director of Eldorado Brasil, the record time was due to the earth moving plan. "There was no material that had to be loaned or discarded. All earthmoving activities only moved earth within the site itself", he said.

At present, the project is in its infrastructure and project detail engineering phase. The phase is already 85% concluded and, according to the Industrial Director, 11 process islands have already been purchased. Recently, the company completed the purchase of equipment that will comprise the production line. The suppliers in question are Andritz Brasil and Metso Paper. Andritz will be responsible for 70% of the islands equipment, including woodyard, fiber drying plant and white liquor plant. In turn, Metso will supply the recovery boiler and evaporation line. The project, which totals an investment of R$ 4.8 billion, also includes two Siemens turbo-generators (each 110 MW), purchased last year.

Another company that is putting pulp production projects into practice is Suzano Papel e Celulose. Projects, in the plural! The company is planning start-ups for 2013 and 2014. The new pulp mills will be located in the States of Maranhão and Piauí, respectively, and each one will have a production capacity of 1.5 million tons/year. The project plan also includes railroad extensions and a port in São Luis,


DIVULGAÇÃO BRACELPA

"If supervision over tax-exempt paper is not maintained, Brazil will lose its printing and writing paper market to exports", alerts Elizabeth de Carvalhaes

designed to receive up to 4.5 million tons/year – a size sufficient for the production flow of both mills already announced and a third one that Suzano is planning further down the road. Total investment in the project amounts to US$ 4.6 billion.

According to Suzano's Project Director Luís Baroni, the basic engineering of the mill in Maranhão was concluded in 2010, as well as obtainment of the preliminary installation permits. Works in the city of Imperatriz, however, will only begin in the middle of the year, after the rainy season in the region. Additionally, only as of June 2011 will the equipment be purchased. With regards to the production facility in the city of Palmeirais, in Piauí, Baroni informs that the project's licensing process started last year and the preliminary permit should be approved by the middle of the year.

Another company that's adjusting its strategic plan in accordance with the positive trends in the market is Klabin, which announced the intention to build a new pulp mill with a 1.3 to 1.5 million ton annual capacity. The additional production will increase the company's production to 3.2 million tons/year. The company, however, has not yet defined where the mill will be installed, nor the beginning of construction or the future mill's start-up date. The same situation occurs with Celulose Riograndense, which has already announced its definitive expansion, but some details continue pending. The reason is the restructuring of budgets, based on needs of the Chilean headquarters and current demand.

Also in the pulp segment, Fibria surprised the sector by kicking off its project to double the Três Lagoas mill in 2010. The socio-environmental license process has already begun and the company has already announced the start-up for 2014, adding another 1.5 million tons/year to its current production capacity. Veracel Celulose plans to invest in the same production capacity, doubling its structure, even though the company has not yet started implementing the project, nor divulged additional details.

While the duplication project is not put into practice, Veracel invests in its current operational line. Starting the second semester of this year, it will use natural gas (GNP) in the Eunápolis mill lime kiln, in southern Bahia. Implementation activities of the gas pipeline have already started. According to Veracel's Industrial Director Ari Medeiros, the substitution of BPF 1A oil for natural gas (GNP) is aimed at using a cleaner fuel that offers significant environmental advantages. Another important factor is the reduction of roughly 20% in operating and logistics costs as of 2012.

CAUTION ACCOMPANYING INVESTMENTS

The combination of positive factors that create a favorable investment environment in pulp does not exclude certain risks that surround this market. Economic instability is one of them. "We are still talking about an erratic market", points out Bracelpa's board member. Piva says that the current moment presents certain worries for exporting sectors, such as the high rate of inflation. "Concerns grow with the possibility of China boosting its interest rates", says Piva about the Brazilian sector's fears.

The focus of Brazilian exports to the Asian country hides another aspect that may become a barrier. "Nowadays, the market is concentrated on Asia, particularly China, which accounts for more than 70% of incremental demand", says Pöyry's Vice-president Carlos Alberto Farinha e Silva. "When specialists say there is room for a new mill per year, it considers that China will continue at a strong pace, that Chinese installations will continue being closed down and that these inefficient and ecologically unfavorable productions will continue being substituted for imports", he said about market expectations.

The exchange rate is another factor that deserves being mentioned when the subject matter is risk. The overvalued Brazilian real (R$) reduces the commodity's competitiveness in international markets. "In fact, this is one of the industrial sector's main concerns. Unfortunately, however, the Brazilian real shall continue resisting pressure for the U.S. dollar to go up", says Piva. He recalls that President Dilma Rousseff's first speech showed an intention to reduce government expenses, which would create space for a reduction in interest rates and balance the exchange rate. "We are betting on this and would also like to see advancements in matters relating to tax reform. We would especially like to at least see a reform in VAT tax (ICMS)", he said.

In order to avoid a loss in international competitiveness, Farinha points out another key factor: expansion of the forest base. "Pulp companies need to have considerable control over their forest base so that they keep up with the production of new mills and maintain Brazil at the forefront in exports of this commodity". He also said that, even though there is still a lot of land available in the country, those that offer logistical qualities are scarcer. "And, obviously, logistics costs are a very important aspect of future projects."

PAPER ALSO WANTS ATTENTION

Pulp is becoming more and more the cash cow in Brazil's paper industry, receiving the majority of investments from companies in the sector. For Pöyry's Vice-president, however, this scenario should have already been different. "It is necessary for the sector to assume its role of major paper producer in order to remain competitive", he said.

Indicators for 2010 show that the moment for investments in paper is also favorable – especially regarding paperboard and tissue paper. According to Bracelpa figures for December, domestic sales of paperboard grew 20.6% from January-December 2010 compared to 2009. The numbers representing tissue paper sales are not that high, but are positive nonetheless: 6.2% for the same period.

Tuned into market movements in the segments linked to improvements in purchasing power, companies responsible for these categories are planning investments for this year and the following ones. A fact that should mark the paperboard market in 2011, for example, is the merger between Ibema Companhia Brasileira de Papel and Papirus Indústria de Papel S.A. The companies have been analyzing the idea for two years and consider this the ideal moment to close the deal. "In addition to the favorable economic outlook today, there are two giants in the segment. We must use strategies to become stronger and one of them would certainly be to join forces", bets Nei Senter Martins, Ibema's CEO.

When concluded, the merger will combine Ibema's 12% market share in Brazil with Papirus' 13%, positioning the company as the number three in the sector. The studies that will lead to the conclusion of this partnership are being headed by consulting firms KPMG and Pöyry. "We hope the agreement is concluded in 2011 and that joint operations can begin in 2012", prospects Martins. According to the executive, the project of a new structure will be discussed later on. For the time being, "one thing is certain: logistics will be much better. It won't make sense, for example, for Papirus to supply products to Santa Catarina, since Ibema is located much closer to this market. Likewise, it won't make sense for us to deliver our paperboard in São Paulo. We will rethink how to service clients in the market".

DIVULGAÇÃO BIGNARDI

Bignardi is a major exporter of notebooks to the North American market

Other projects in the paperboard sector include Klabin. The company's strategic plan is mainly directed at reducing costs and boosting productivity. The Monte Alegre (PR) mill, for example, will receive the installation of a high voltage transmission line, which is expected to start up in the second half of this year. In turn the Otacílio Costa and Correia Pinto production sites will each receive a new biomass boiler. The first shall begin operating yet this year, while the second has an 18-month implementation term.

Brazil's tissue segment has four upcoming projects in the pipeline. Bipacel is one of the players. In the beginning of the year, the Manaus-based company presented the market new lines of tissue paper. The big news is that the products, which until now were made only using wastepaper, are now being produced using pulp. "We are pioneers in this type of production in the northern part of the country and we are looking to satisfy the demand of the new social layer", said the company's CEO Tocandira Carreira Benaion.

The executive says that the idea is to broaden the portfolio, not substitute the existing one. At present, recycled papers account for the main part of the mill's production, totaling 40 tons/day. The latest products, which are made using pulp, amount to 10 tons/day. "We have an installed capacity to produce 60 tons a day of paper made from virgin pulp. Nowadays, one needs to be polyvalent", said the executive. Even though the current production capacity of equipment can be expanded, Benaion believes that recycled papers will still prevail in the region, due to their cost-benefit ratio.

The mill possesses one paper machine that underwent changes to operate with a mix of wastepaper and pulp. "We kept a large part of the equipment, but had to purchase, for example, extra paper rewinder and paper sheeter". The machine retrofit and launching of new products resulted in a total cost of R$ 1 million. The capital injection, according to Benaion, was made by the company itself. "Northern Brazil has difficulty tapping the National Bank of Economic and Social Development

(BNDES), as we are distant from the financial market", regrets Benaion. For Bipacel's CEO, it would be fundamental that the bank expand its reach nationwide", but the differences in Brazil are just as big as its dimension".

The three other companies in the tissue segment that have already announced projects are Melhoramentos Papéis, Ipel and Carta Fabril. Melhoramentos' unit in Caieiras promises to be the first company to expand capacity, with activities scheduled to start up yet this year. According to Global Mill Project Database, a RISI study on capacity expansion projects through 2015, investments by Ipel should take place in 2012, but the company does not confirm this. Also according to the RISI document, Carta Fabril expects to invest in 2012 and 2013.

In addition to focusing on promising markets, Brazil's paper sector intends to join forces to boost the printing and writing paper segment. According to a study conducted by Suzano, the increase in paper demand worldwide shall be 1.8% a year until 2015, whereby the printing and writing paper niche specifically shall average around 0.9% a year. The study indicates that emerging markets lead the increase in demand and supply. This is explained by the fact that the printing and writing line is significantly leveraged by the increase in income per capita and access to education and information in developing markets.

Although the perspective is positive and the consumption of this paper has posted growth rates of 10% between 2007 and 2010, Brazilian companies did not accompany this growth. "The deficit is caused by imports. Domestic companies lost 56% of the internal market", said Bracelpa's executive president, Elizabeth de Carvalhaes, at a press conference in the end of 2010. She pointed out that in the past three years, the growth in imports overall was 145%, while China and Indonesia's stake in these imports grew 750%.

In this unfavorable scenario for Brazil's industry, Chinese government subsidies are pointed out as one of the main factors hindering local producers. "It's impossible to work in a free market where a government injects capital to benefit production", said the executive. Elizabeth said that the entity defends market isonomy, however, "with subsidies and price dumping it is difficult to argue competitiveness". In her opinion, Bracelpa, the government and Brazilian investors should combat all sources of government subsidy, local and internationally.

Another issue that requires a commitment on the part of the sector and government refers to supervision over tax-exempt paper. "We need to pressure Brazilian authorities to not interrupt the measures adopted in 2010", says Elizabeth. The loss of income for the government due to the lack of taxation on paper that was not truly used for publication purposes amounted to R$ 450 million between 2005 and 2010. "If Brazilian authorities do not entirely embrace the supervision cause, Brazil will very soon lose the printing and writing paper market exclusively to imports used irregularly", she said reinforcing the need for urgent measures.

In addition to the threats imposed by imported papers, the Commercial Director of Bignardi Papéis, Alexandre Duckur, points out that virgin fiber has a very high cost for non-integrated paper mills, comprising the income generation of industries. "I would say that this is a historical paradox, but I

Projected start-ups in Latin America

LATIN AMERICAN MARKET PULP CAPACITY EXPANSIONS, 2009-2015 *'Thousand Tonnes*

Company	Country	Date
Fibria	Brazil	2009
Arauco	Chile	2011-2012
Arauco	Chile	2011-2012
CMPC	Chile	2012
Eldorado	Brazil	2013
Suzano	Brazil	2013
Stora Enso/Arauco	Uruguay	2013
Veracel	Brazil	2014
Suzano	Brazil	2014
Fibria	Brazil	2015
Klabin	Brazil	2015
CMPC	Brazil	2015

***Credits:** Global Mill Project Database (RISI)*

LATIN AMERICAN MARKET PAPER CAPACITY EXPANSIONS, 2009-2015

'Thousand Tonnes

Company	Country	Date
Ibema	Brazil	2011 Q1
Iguaçu	Brazil	2011 Q1
MD Papéis	Brazil	2011
Klabin	Brazil	2011-2012
Papirus	Brazil	2012 Q4
Papeles de Bolivia	Bolivia	2010 Q4
KM Papel	Brazil	2011 Q2
Bignardi	Brazil	2011
Jatipap	Cuba	2011
International Paper	Brazil	NA
Papelera Andina	Argentina	2009 Q1
Papelera Nacional	Ecuador	2009 Q1
Papelera Concepción	Chile	2009 Q2
Industrias del Papel	Peru	2009 Q2
Kartotec	Paraguay	2010 Q1
Irmãos Siqueira	Brazil	2009 Q4
INCASA	Ecuador	2010 Q2
Papelbol	Bolivia	2010 Q4
INPA	Brazil	2010 Q2
Zucamor	Argentina	2011
Kartotec	Paraguay	2015
Papeles de Bolivia	Bolivia	2010
Pulpaca	Venezuela	2012
Jatipap	Cuba	2012
CMPC Absormex	Mexico	2009 Q1
Propaper (Prolim)	Brazil	2009 Q1
FACEPA	Brazil	2009 Q2
Copelme	Bolivia	2009 Q2
Ondunorte	Brazil	2009 Q3
Fabrica de Papel San Francisco	Mexico	2009 Q2
SANTHER	Brazil	2009 Q4
Papeles Venezuelanos	Venezuela	2010 Q1
Kimbely-Clark de Centroamérica	El Salvador	2010 Q1
Papelera Samseng	Argentina	2010 Q2
CPMC Tissue	Colombia	2010 Q3
Canoinhas	Brazil	2010 Q3
CMPC Absormex	Mexico	2010 Q3
MANPA	Venezuela	2010 Q3
Mili	Brazil	2010 Q4
Cesar Iglesias	Dominican Republic	2010 Q4
SCA	Mexico	2010 Q4
SANTHER	Brazil	2010 Q4
INCASA	Ecuador	2011 Q1
Familia Sancela	Colombia	2011 Q2
Protisa (CMPC)	Peru	2011 Q2
CMPC Caieiras	Brazil	2011 Q2
BIPACEL	Brazil	2011 Q3
Celulosa Campana	Argentina	2011 Q4
Kimberly Clark	Argentina	2011
IPEL	Brazil	2012 Q3
CMPC Tissue	Chile	2012 Q4
Carta Industrial	Brazil	2012-2013
Atlas	Peru	2012-2013

Credits: *Global Mill Project Database (RISI)*

don't recall having seen the price of pulp stay this close to the price of paper for so long", he said.

The so-called "Brazil-Cost" acts as another barrier for the sector's development. "These are problems that have persisted for years, like the logistics lag that makes transportation expensive and increases the tax load on investments." Duckur points out that Bignardi is an important exporter of notebooks to the North American market, but the exchange rate hinders servicing the market of manufactured products. "Brazil needs to create mechanisms that favor the exporting of its industry abroad", he said as a strategy to be implemented.

The measures that are within the private initiative's reach have already been implemented. Bignardi itself is an example in the printing and writing paper segment that is betting on the sector. This year, the company intends to harvest the investments it made in 2008 and 2010, which totaled R$ 75 million. "The infrastructure Bignardi has in Jundiaí was totally modified in 2008. Now, resources are being invested in improvements. Some components in the paper machine will be substituted so that the production process can be optimized and reach maximum production", said the Commercial Director. The idea is that in the next two years the production capacity will increase from 48 thousand tons/year to 72 thousand tons/year.

KM Papel, another representative of the printing and writing paper segment, intends to celebrate its increase in 2010 revenues by investing R$ 42 million in 2011. The producer of white recycled paper for book printing diversified its array of products and began producing its own line of paper artifacts in the second semester of last year. The positive results revealed greater demand than expected and led to the acquisition of additional machinery, already installed at the Volta Grande (MG) unit. The company's objective for this year is to install four new machines and build warehouses to put them in, increasing the mill's production capacity to 1,000 tons/month. Another thousand tons/month are already produced at the Pirassununga (SP) mill.

The company's CEO Daniel Klabin Wurzmann bets that the investments will increase the mills' revenues even more, which grew from R$ 83 million in 2009 to R$ 100 million in 2010. For 2011, the company projects R$ 118 million and R$ 180 million in 2012. The reasons presented by Wurzmann are that a great majority of the paper produced will be transformed and sold as artifacts (no longer reels and reams), which factor will add value to the product and allows entering the paper artifacts niche. Reducing the raw material cost is also part of the plan, by implementing a deinking plant supplied by Voith Paper.

International Paper do Brasil decided to postpone the construction of a new paper machine programmed for the Três Lagoas production unit. The decision to postpone, which was mutually by Fibria, is in alignment with the business strategies of the companies. In practice, the option should be exercised by January 2010, will be done between 2012 and 2013. "It's a way to ensure greater time flexibility so that all technical, commercial and market studies and analyses can be carried out in a more detailed manner", explains Jean Michel, IP's executive president. Investments are expected to reach US$ 300 million.

At present, IP has three paper mills in Brazil and a production capacity of one million tons/year. In the evaluation of RISI Economist Patrícia Perez, the size of the domestic market is still not sufficient to justify the installation of a cutting edge machine with a capacity in excess of 500 thousand tons/year. According to the economist, the roughly 26 million tons consumed locally represent only 7% of global demand. "We must also not forget that the overvalued real (R$) significantly reduces the competitiveness of Brazilian producers, increasing the presence of imported papers in the domestic market", mentioning the well known obstacle.

The segment of special papers, with a focus on decoration papers, will be represented by MD Papéis' initiative. The R$ 70 million investment contemplates the installation of a new paper machine. The company will follow the strategy of dividing the additional production in two stages: the first, with a start up scheduled for 2012, will add 15 thousand tons/year; and the second, scheduled for 2013 or 2014, will total another 15 thousand tons/year.

All investments presented by the sector are based on and adapted to current market conditions. "Companies are still working on defining the timing of projects. Some of them may even be cancelled or put on hold, in order to avoid excess capacity going into operation at the same time", said Patrícia Perez. To maintain international competitiveness and conquer even higher positions in the ranking of global players, however, it is necessary to look beyond the advantageous fact-based aspects. The possibilities offered by the various branches of technology are pointed out by Pöyry Vice-president, Carlos Alberto Farinha e Silva, as the strengthening factor of the paper industry- especially with regards to bio and nano technologies. He also points out that the ecologically friendly conduct dominated by the sector is a positive factor to be further exploited. "It is time for all segments to come together and strengthen the image of paper as a renewable and sustainable resource, and disseminate such image to the public in general", encourages Farinha e Silva, thinking about the future.