

ABTCP 2011

44º CONGRESSO E EXPOSIÇÃO INTERNACIONAL DE CELULOSE E PAPEL



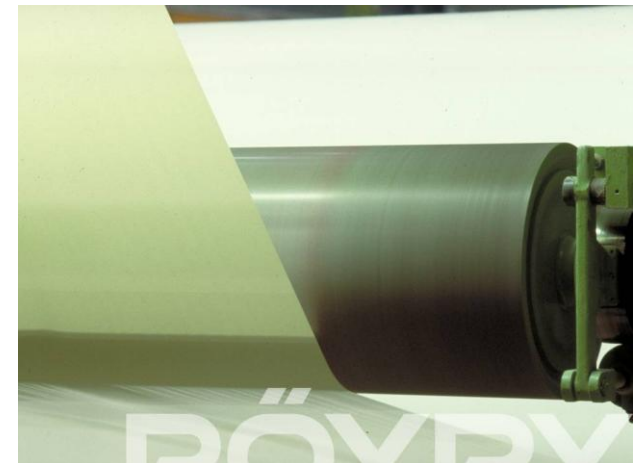
PARQUE FABRIL DE CELULOSE E PAPEL – SITUAÇÃO ATUAL E NECESSIDADE FUTURA

03 de Outubro de 2011

Carlos Farinha e Silva

PERGUNTAS

- Corremos risco de “desindustrializar” o nosso parque de produção de papel?
- E a nossa indústria de celulose de mercado? É isenta de qualquer risco?



FATORES DE RISCO USUALMENTE APONTADOS

- Taxa de câmbio;
- Impostos e complexidade do sistema tributário;
- Concorrência dos importados (devido aos dois fatores acima);
- Infraestrutura deficiente e ineficiente;
- Leis trabalhistas.

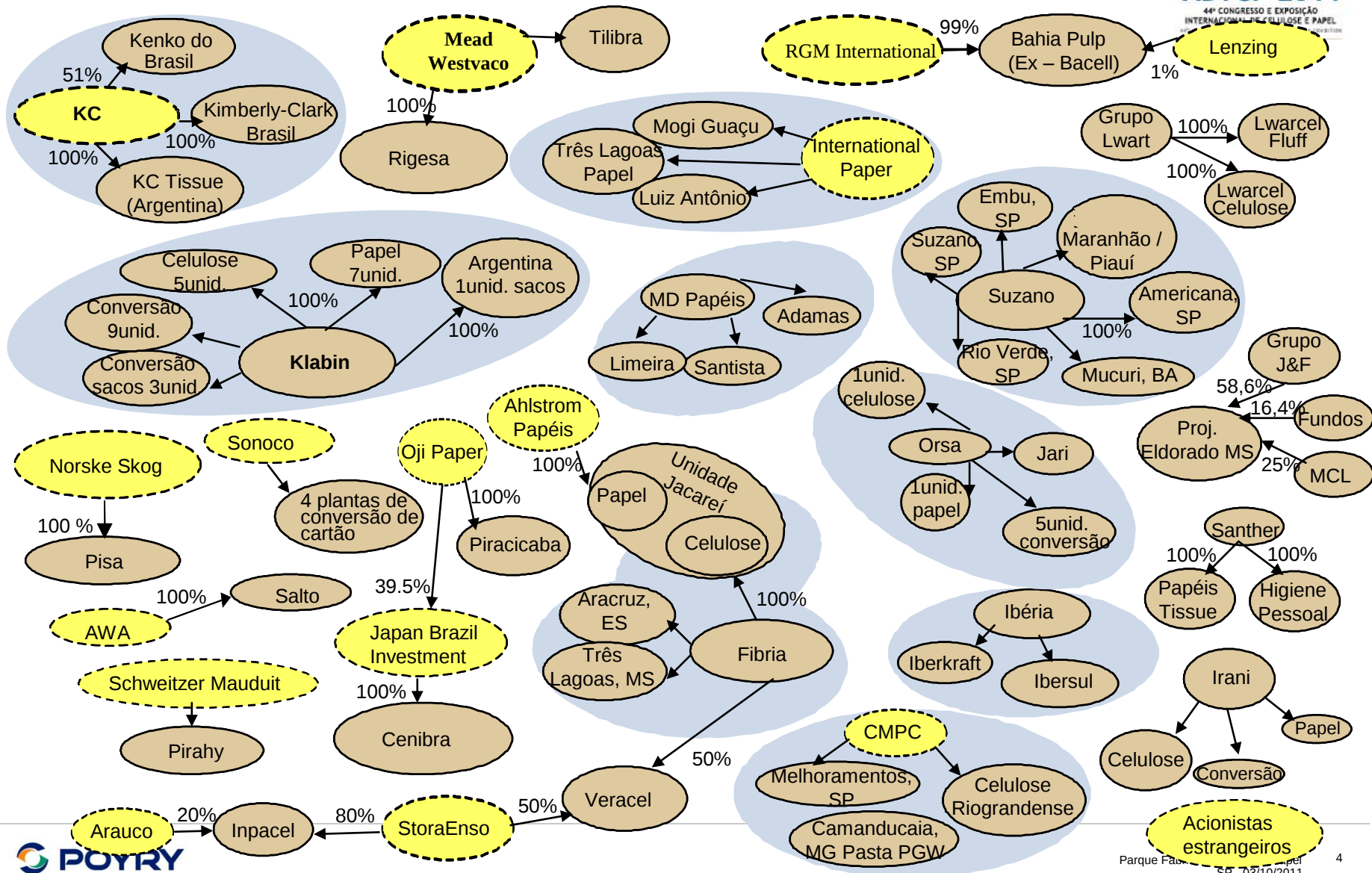


ESTRUTURAÇÃO DA INDÚSTRIA DE CELULOSE E PAPEL NO BRASIL – 2010/2011



ABTCP 2011

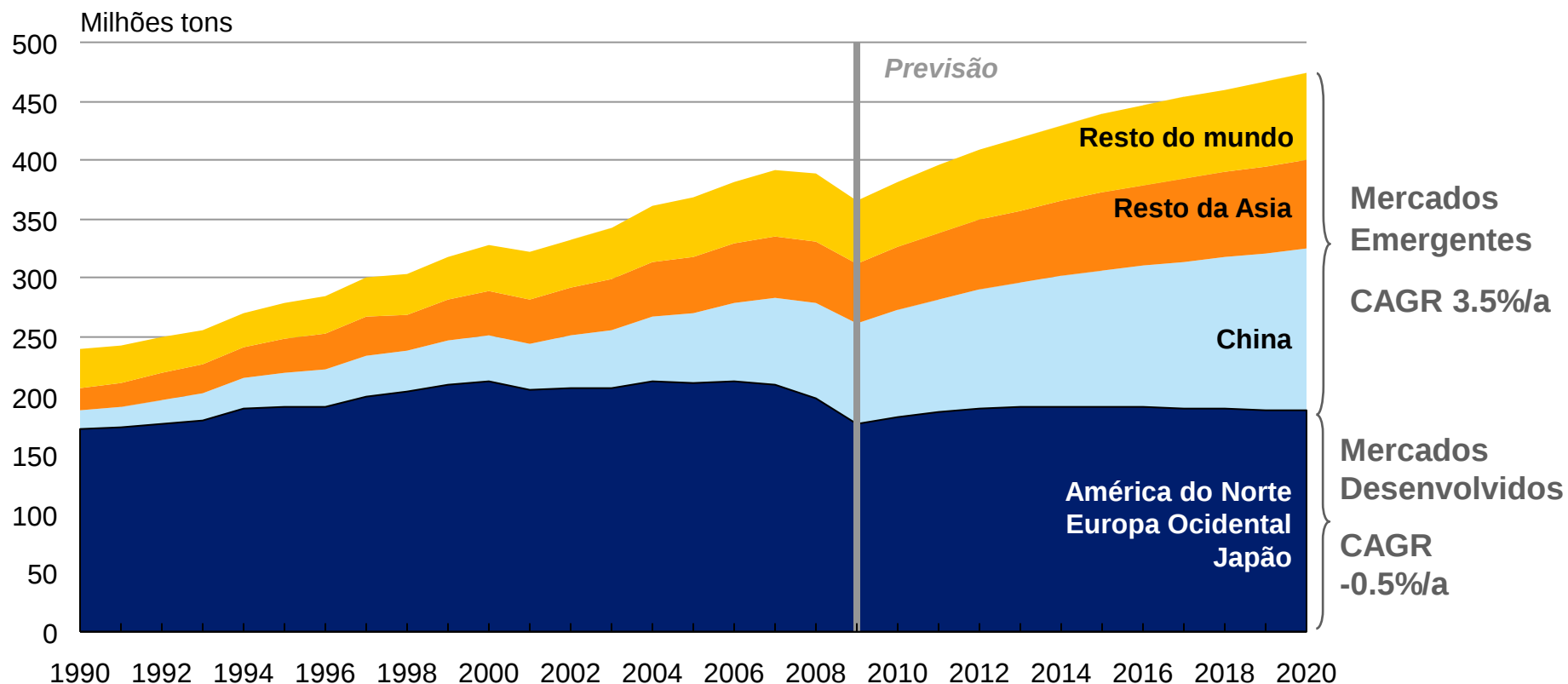
44º CONGRESSO E EXPOSIÇÃO INTERNACIONAL DE CELULOSE E PAPEL



CONSUMO MUNDIAL DE PAPEL E CARTÃO 1990-2020



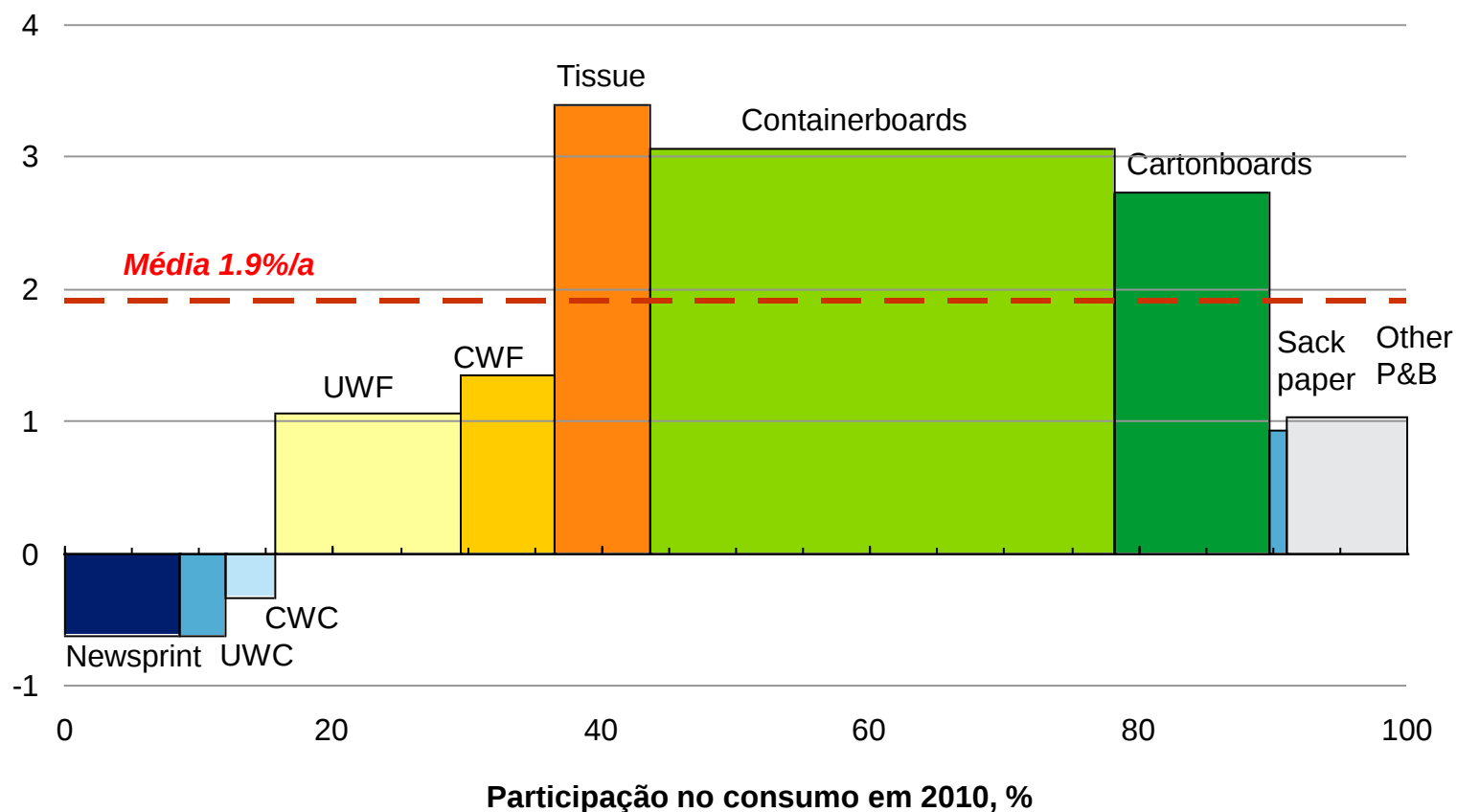
Fatores estruturais como a competição dos meios eletrônicos e a migração do consumo de embalagens para o Oriente impactam negativamente o crescimento da demanda nas regiões desenvolvidas.



¹⁾ Maturing markets, competition from ITC, shifting packaging demand from the West to the East and South

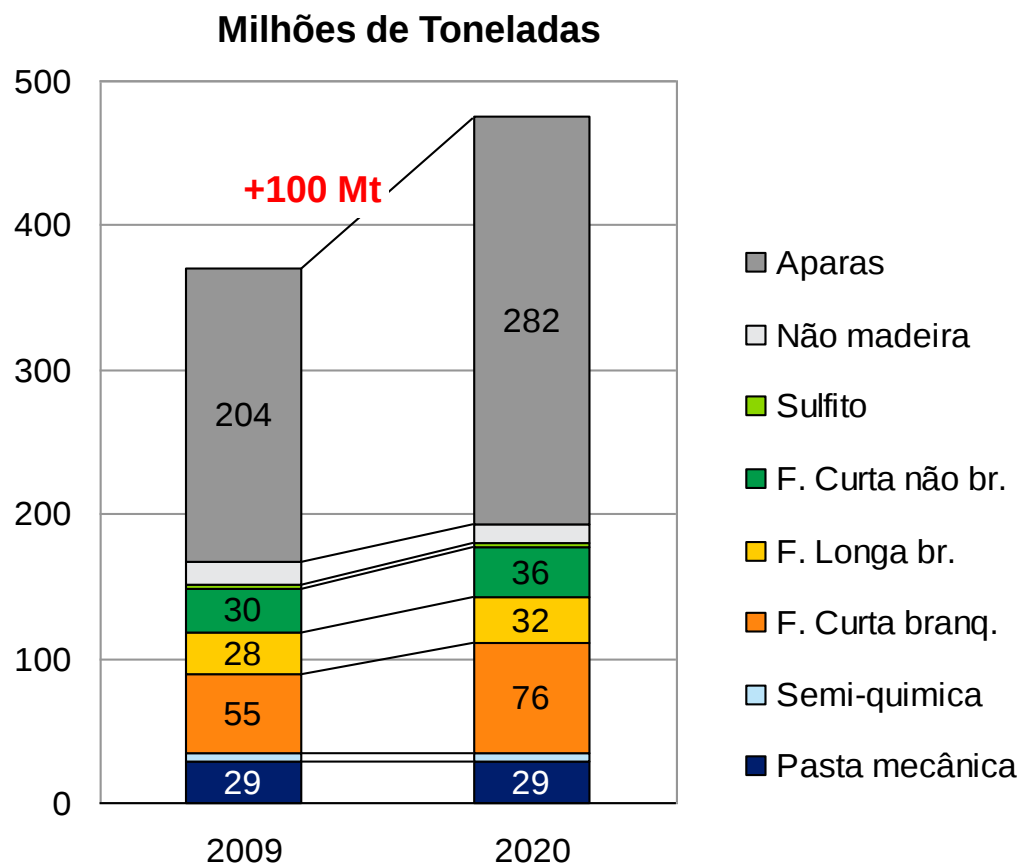
PROJEÇÃO DO CRESCIMENTO MUNDIAL DO CONSUMO PARA PAPEL E CARTÃO 2010-2020

CRESCIMENTO DO CONSUMO %/a



BALANÇO GLOBAL DE FIBRA

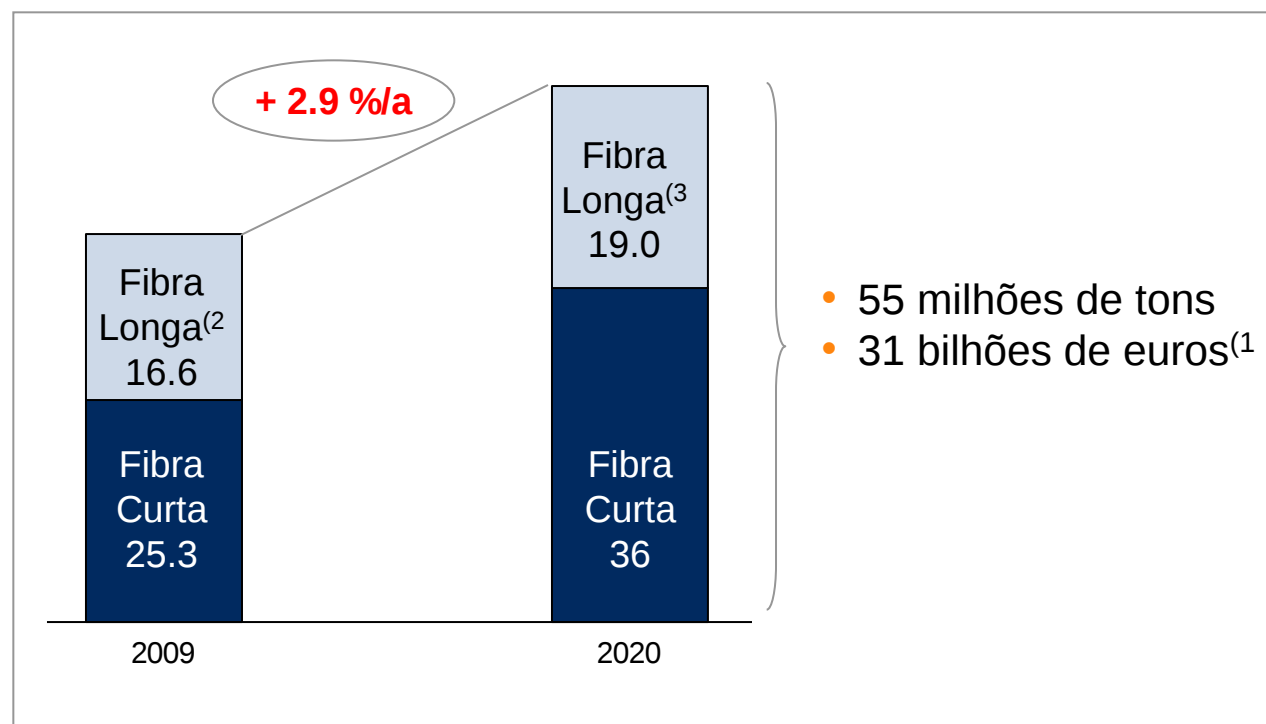
O Mundo irá consumir perto de 100 milhões de toneladas adicionais de hoje até 2020. Cerca de 75% desta demanda adicional será papel reciclado (aparas).



CONSUMO GLOBAL DE CELULOSE BRANQUEADA PARA MERCADO EM MILHÕES DE TONELADAS

O negócio de celulose de fibra curta para mercado movimenta hoje cerca de 22,5 bilhões de Euros... em 2020 deverá aumentar para 31 bilhões de Euros.

**80 % do
incremento de
13,1 milhões de
tons deverão ser
Fibra Curta**



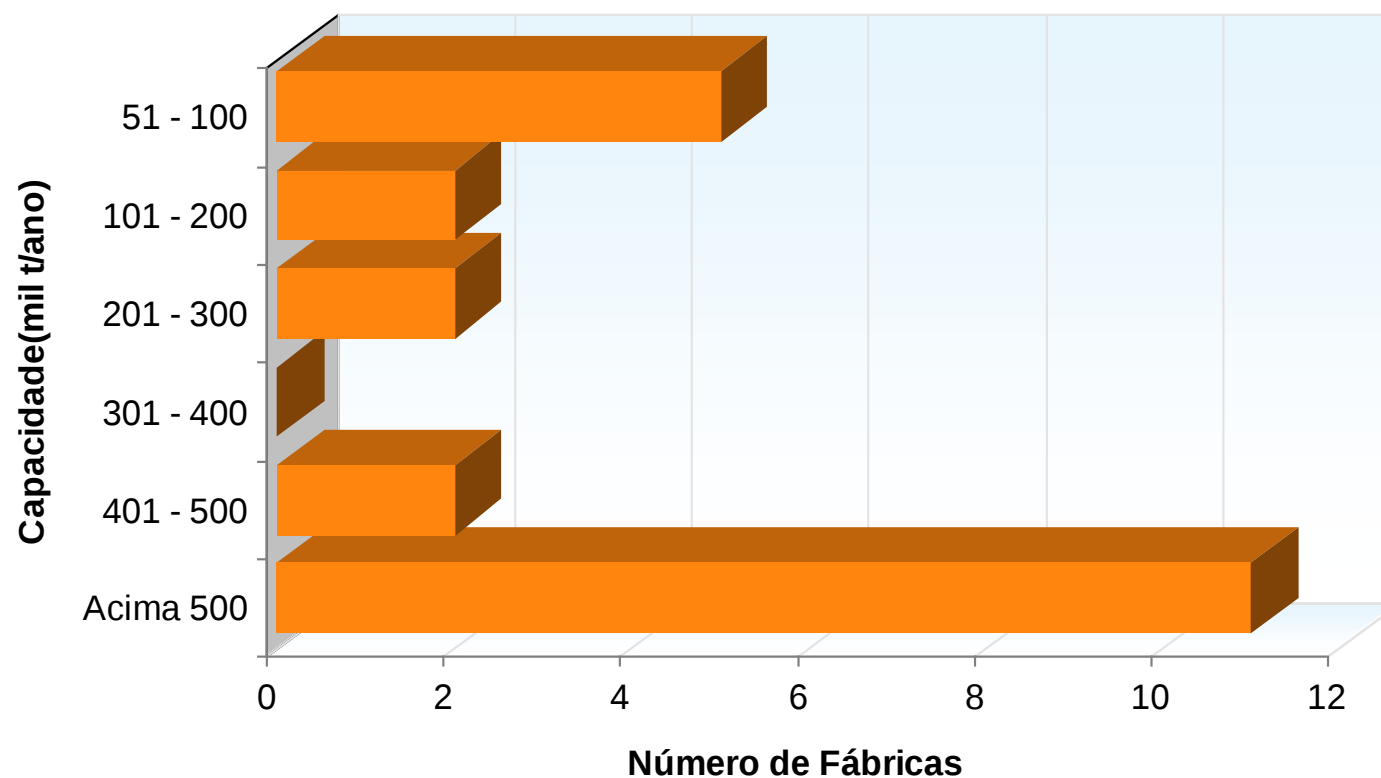
¹⁾ Trend price 2020, BHKP 538 EUR/t and BSKP 613 EUR/t

²⁾ Excluding fluff pulp of 3.9 million tons

³⁾ Excluding Fluff pulp 5.3 million tons

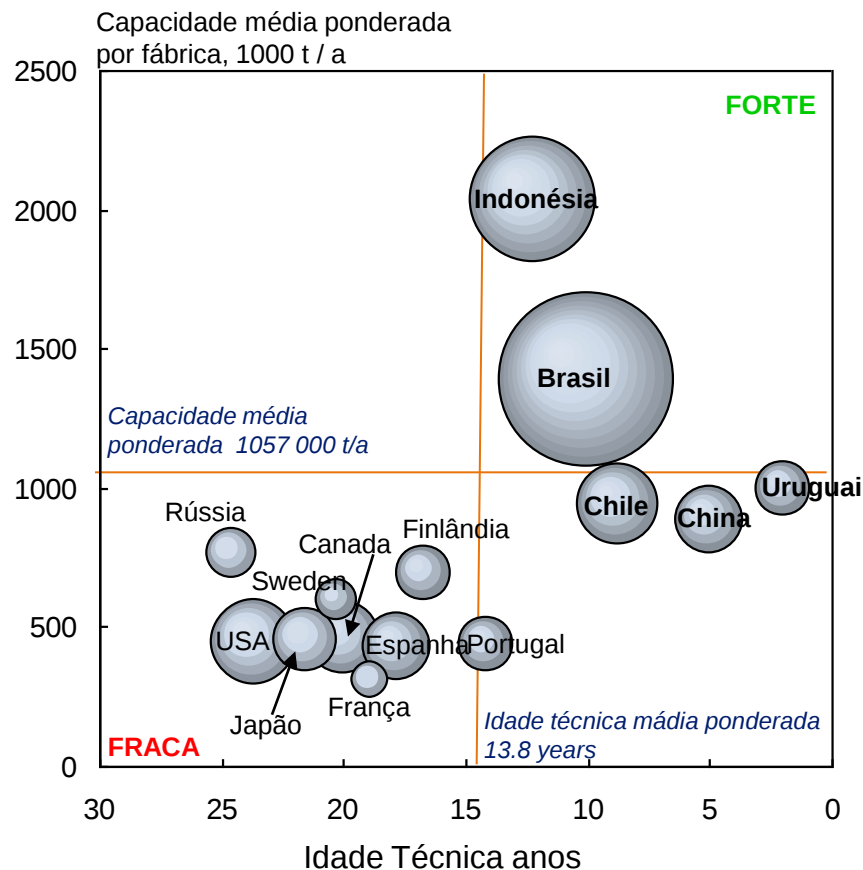
ESTRUTURA DA INDÚSTRIA BRASILEIRA DE CELULOSE – 2010

O Brasil produz celulose em grande e pequena escalas.



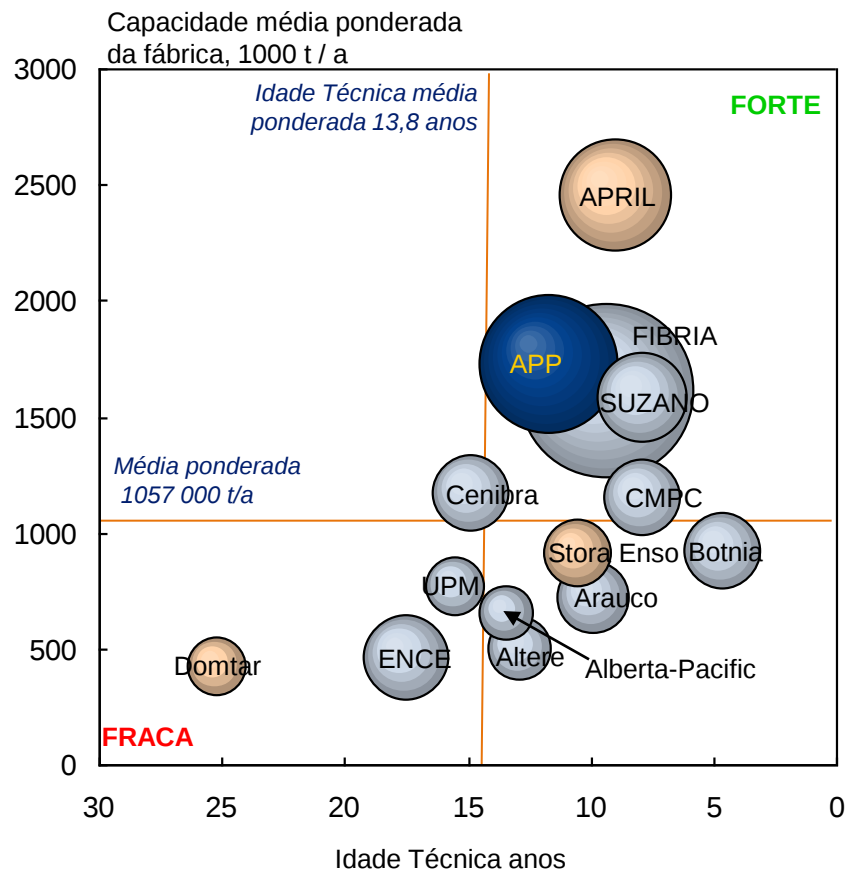
Fonte: Relatório Estatístico BRACELPA

CELULOSE DE MERCADO DE FIBRA CURTA – ESTRUTURA POR PAÍS



 The bubble size reflects the capacity of the pulp type analyzed.

CELULOSE DE MERCADO DE FIBRA CURTA – ESTRUTURA DA INDÚSTRIA POR COMPANHIA

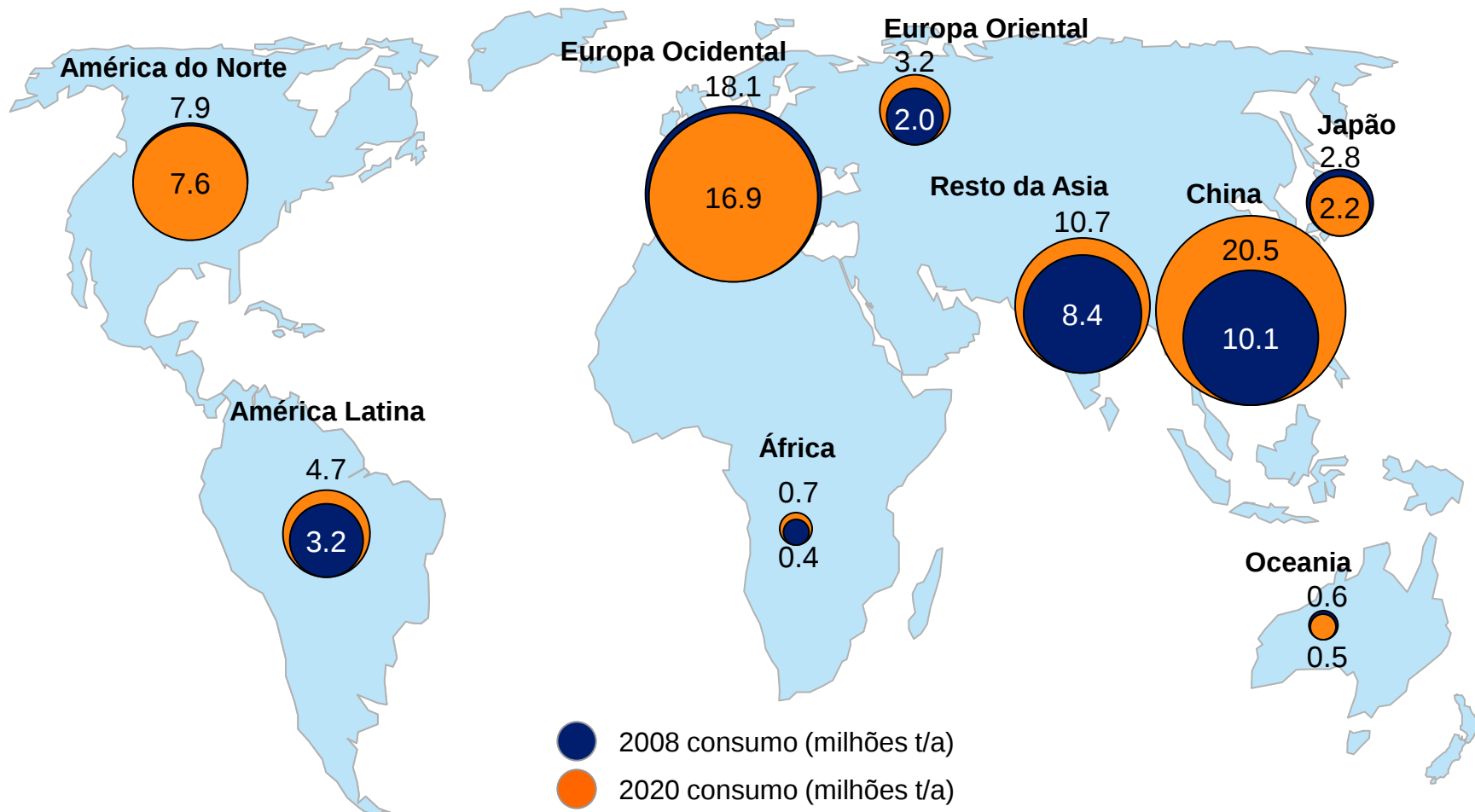


The bubble size reflects the capacity of the pulp type analyzed.

-  = Production of Eucalyptus pulp
-  = Production of other hardwood pulp
-  = Production of Eucalyptus pulp + other hardwood

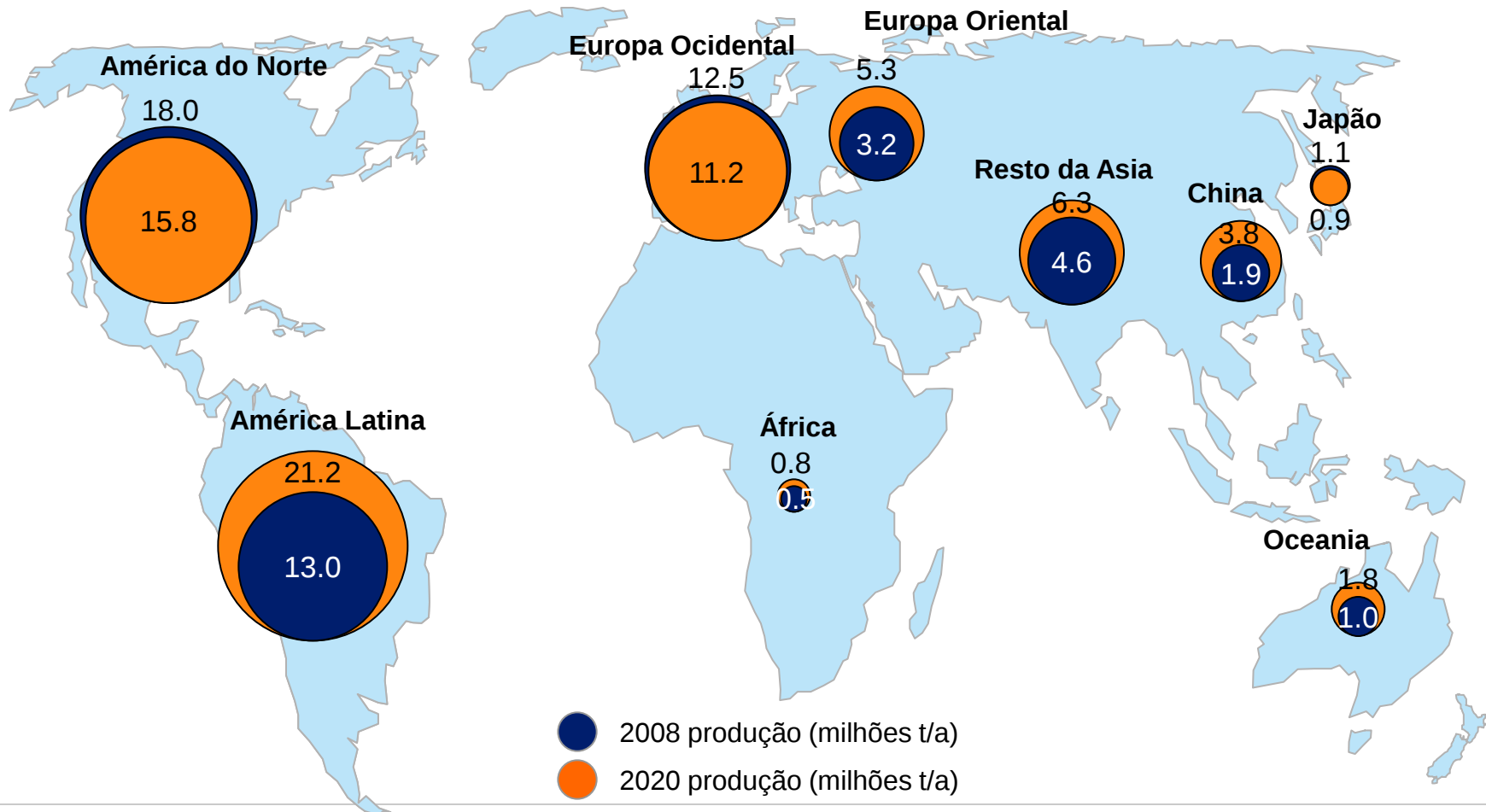
CONSUMO DE CELULOSE DE MERCADO POR REGIÃO

A China será o maior consumidor de celulose de mercado em 2020.



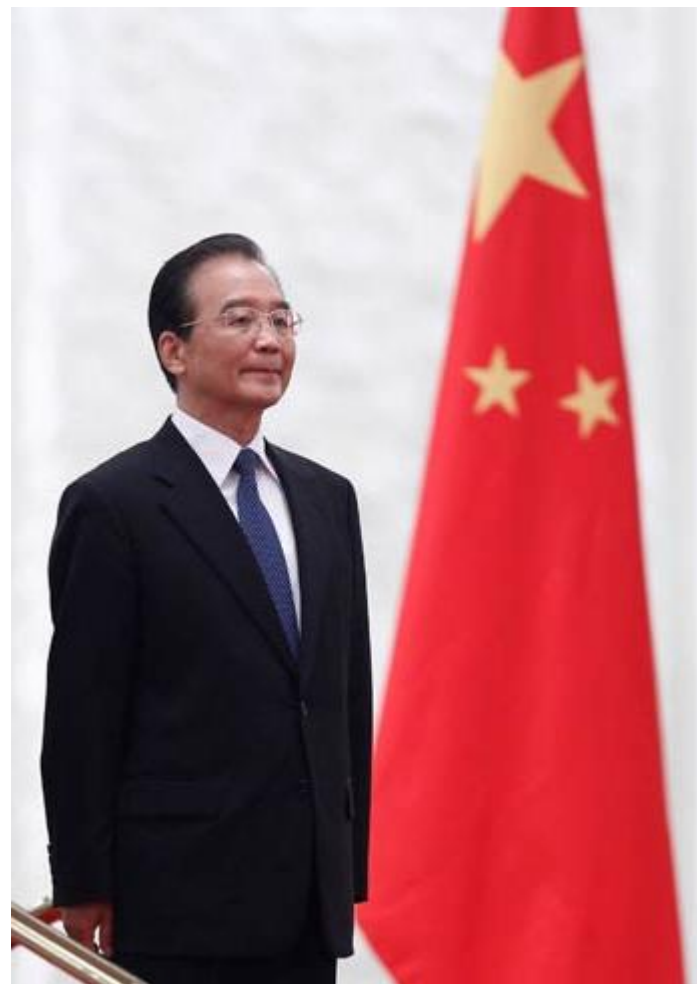
FORNECIMENTO DE CELULOSE DE MERCADO POR REGIÃO

A América Latina continuará a ser o maior fornecedor de Celulose de Mercado.



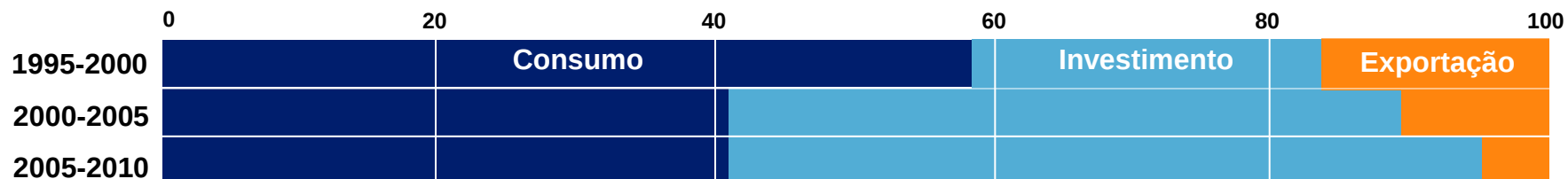
**INSTÁVEL,
DESBALANCEADA,
DESCOORDENADA
E
INSUSTENTÁVEL...**

Primeiro Ministro da
China, Wen Jibao,
descrevendo a economia
chinesa em 2007.



CHINA – CONTRIBUIÇÃO PARA O CRESCIMENTO DO PIB

Por origem %.



Fonte: The Economist Magazine

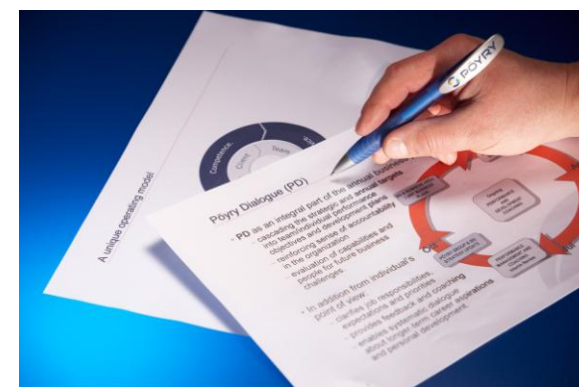


Nenhum País pode ser tão produtivo que possa investir cerca de 50% do PIB em novos ativos fixos sem, no futuro, vir a enfrentar “uma imensa sobre-capacidade e um também imenso problema de estoque de dívidas de pagamento duvidoso”



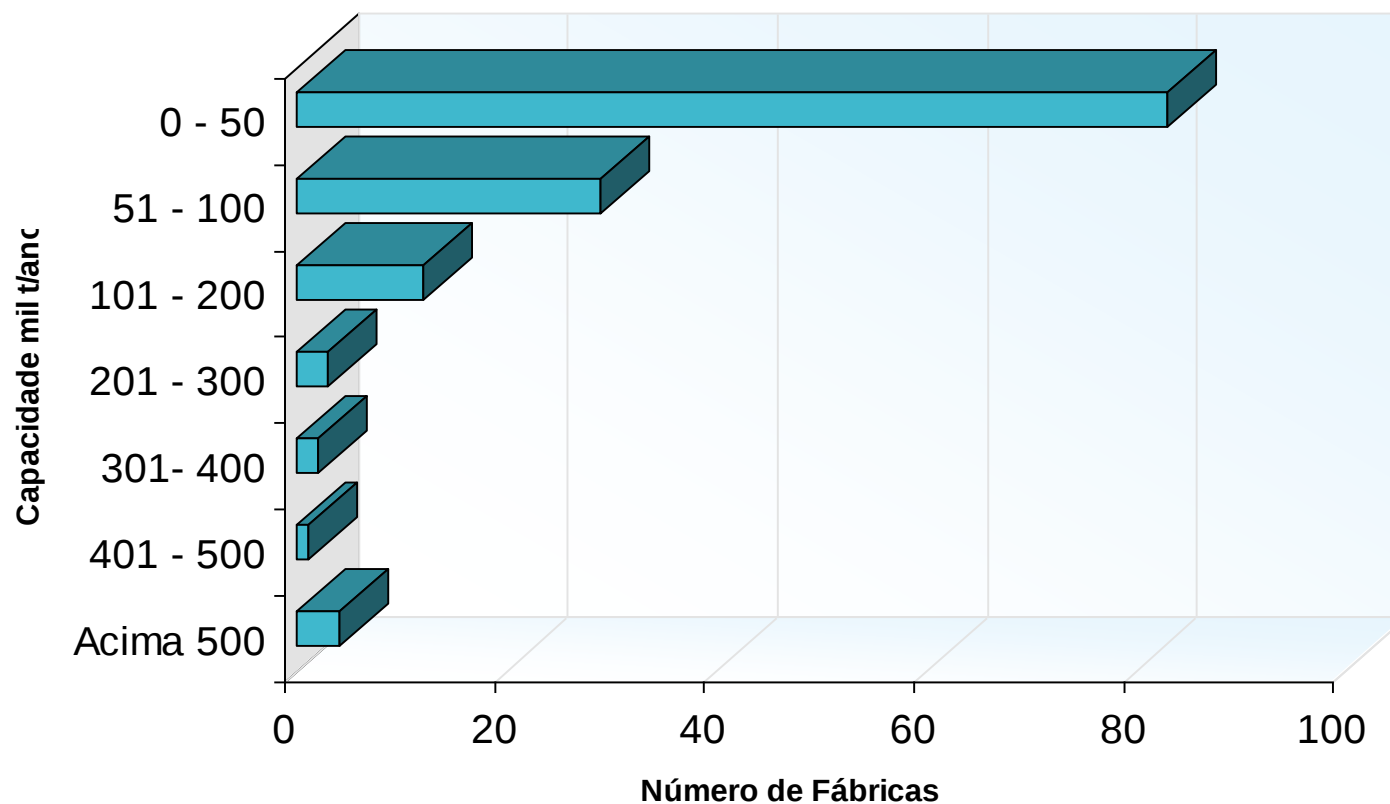
CONSIDERAÇÕES SOBRE A INDÚSTRIA DE CELULOSE

- O parque exportador de celulose de mercado conta com unidades de topo de linha, modernas e competitivas em nível mundial;
- Precisamos assegurar a manutenção da competitividade da nossa base florestal, isto é, assegurar que a madeira seja colocada na porta da fábrica a custo competitivo;
- É fundamental reforçar a disciplina na implantação de novos investimentos no Setor, minimizando o impacto na entrada no mercado de grandes quantidades do produto simultaneamente.



ESTRUTURA DA INDÚSTRIA BRASILEIRA DE PAPEL – 2010

No Brasil, as fábricas de papel são, na sua maioria, pequenas.



Fonte: Relatório Estatístico BRACELPA

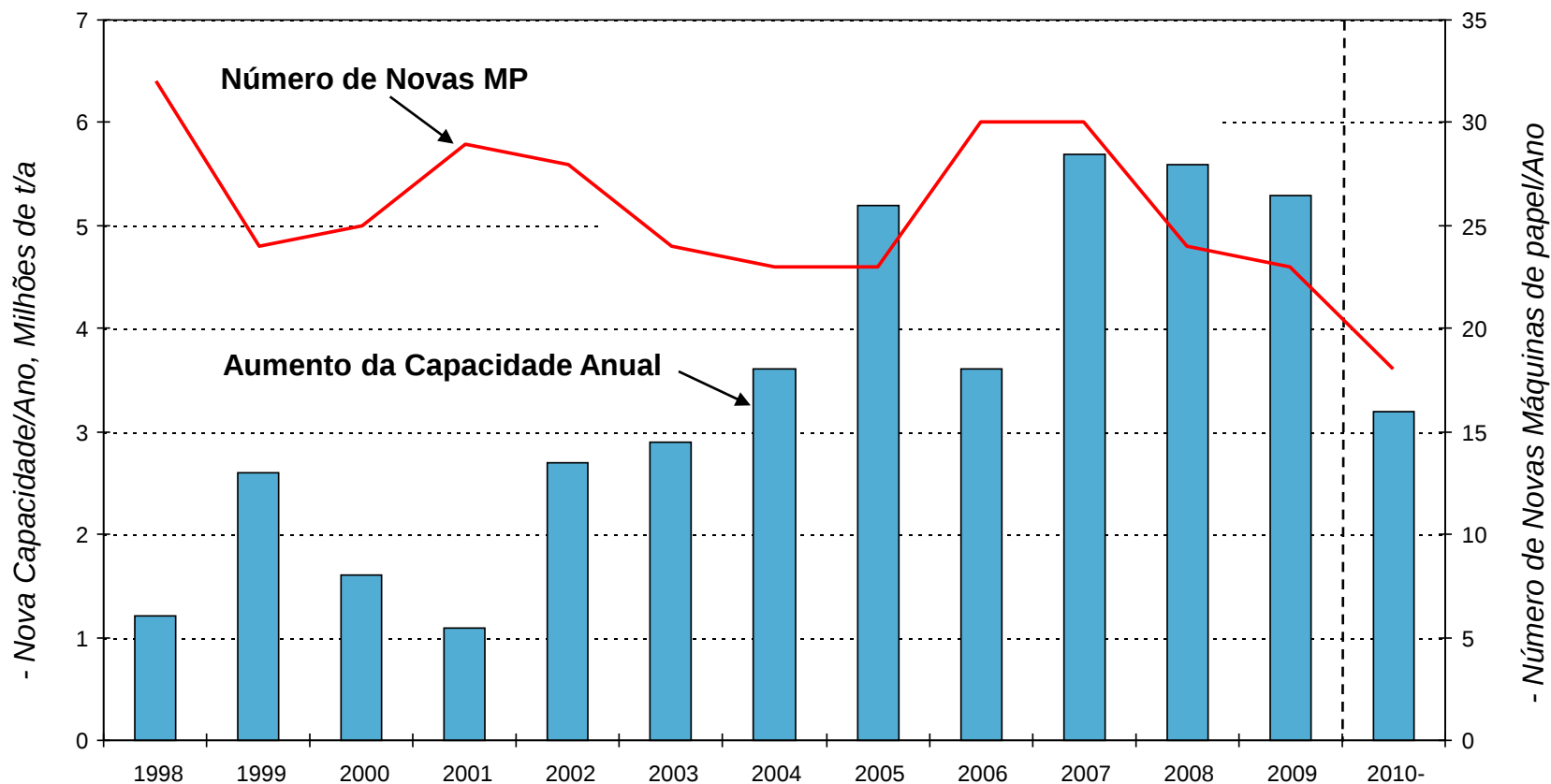
CONSIDERAÇÕES SOBRE A INDÚSTRIA DE PAPEL

- O parque industrial papeleiro conta com algumas unidades muito competitivas e de razoável economia de escala, porém a grande maioria das suas fábricas são de porte médio e pequeno, atuando em mercados locais;
- Atualmente uma boa parte do setor encontra-se em posição defensiva, sofrendo com importações oriundas de regiões, como a Ásia, onde se desenvolveu uma sobre-capacidade de produção;
- Esta sobre-capacidade de produção é mais flagrante para alguns graus, como papéis revestidos de imprimir e escrever e embalagens.



AUMENTO DA CAPACIDADE DE PRODUÇÃO DE PAPEL NA CHINA

Novas Máquinas de Papel na China: A capacidade de produção de papel na China aumentou cerca de 5 milhões de toneladas por ano.

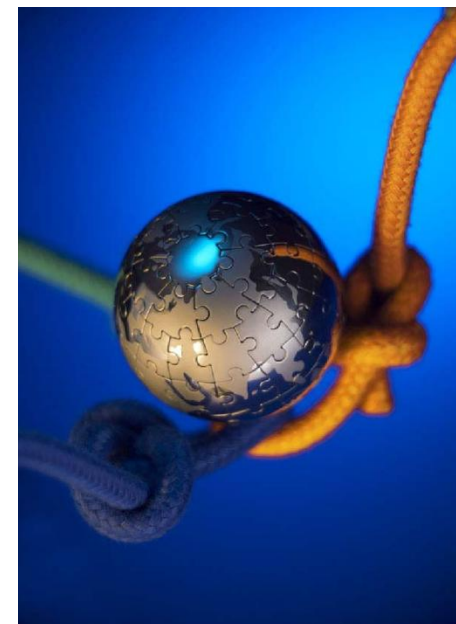


Fonte: Pöyry

CONSIDERAÇÕES SOBRE A INDÚSTRIA DE PAPEL (cont.)



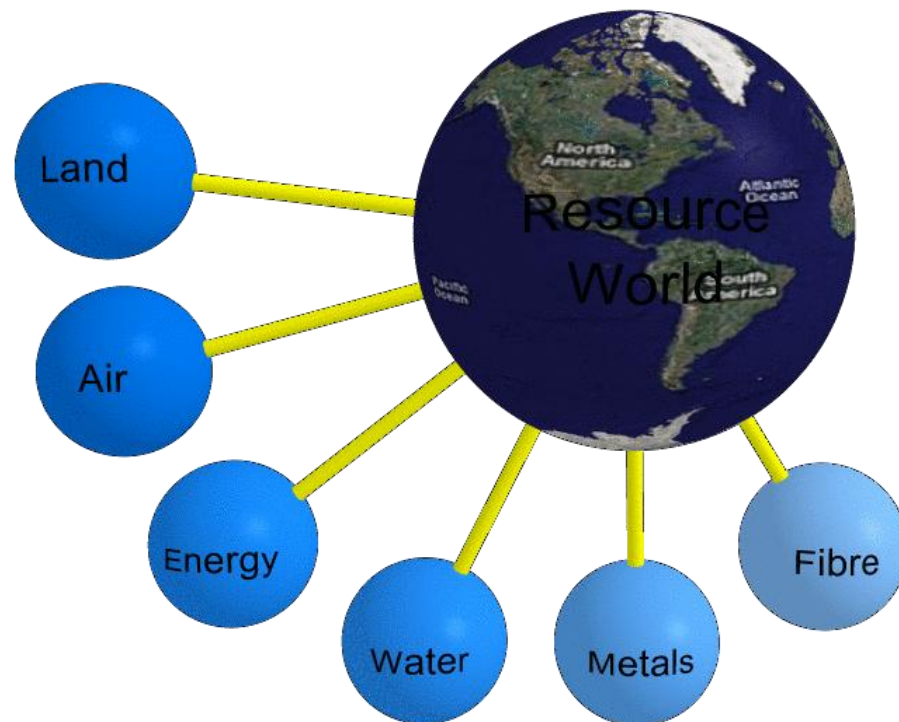
- As regiões desenvolvidas, como a América do Norte e Europa Ocidental, há muito que redirecionaram os seus esforços de crescimento, migrando da produção de celulose para exportação, para o desenvolvimento de produtos de maior valor agregado;
- Têm investido pesadamente em áreas como a nanotecnologia, eletrônica impressa, produtos de consumo diferenciados para fins sanitários e muitas outras aplicações;
- Essa é uma concorrência que será preciso enfrentar, não só na eventual conquista de mercados no exterior, como também na competição com produtos importados que apresentem um apelo ao consumidor, sem similar oferecido pelo mercado local.



O MUNDO EM DISPUTA POR RECURSOS NATURAIS

- Está emergindo uma nova ênfase em recursos naturais: A escassez de água, energia, ar limpo, terra, metais e fibra, em diversas combinações, está tendo um grande impacto nos setores industriais mais diversos.

Tão importante quanto a posse desses recursos é a tecnologia necessária para a utilização inteligente dos mesmos!



ALGUNS EXEMPLOS DE INOVAÇÕES JÁ NO MERCADO



Melhores padrões de qualidade de vida, melhores padrões de higiene

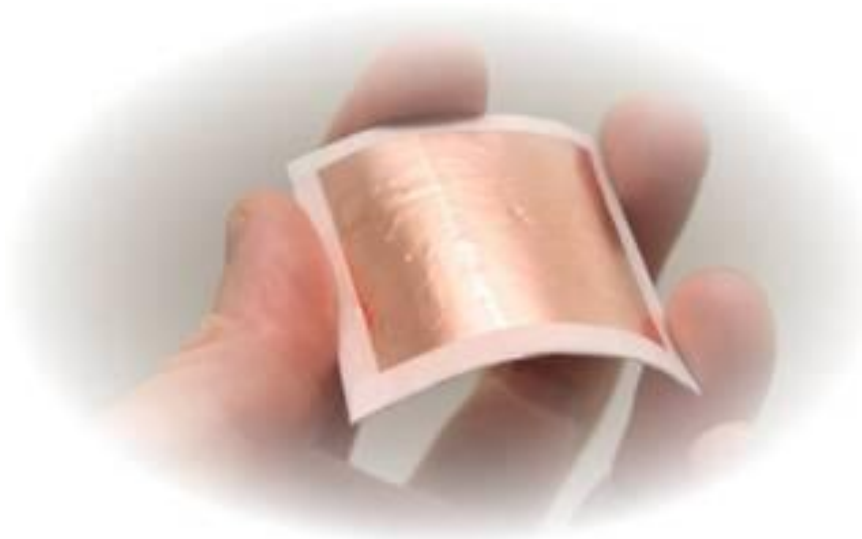
- O aumento do padrão da qualidade de vida significa o aumento dos padrões de higiene e maior precaução contra epidemias – e também enormes programas de pesquisas por grandes grupos dedicados à produção de bens de consumo.

Exemplo: Folhas de papel que se dissolvem em água formando espuma de sabão. Fácil de transportar. Nada de líquidos nos aviões.



ELETRÔNICA E CÉLULAS FOTOVOLTAICAS IMPRESSAS

- Enorme número de interessados e financiadores no desenvolvimento da tecnologia de impressão de circuitos eletrônicos e células fotovoltaicas diretamente em bobinas.



**Exemplo: Recyclable Enfucell
SoftBattery, printed reel-to-reel.**

AUMENTO DA EFICIÊNCIA DAS BARREIRAS NOS CARTÕES PARA EMBALAGEM

**Exemplo: Imerys BARRISURF – barreiras
à base de água e nanocristais.**





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TAPPI Announces New International Nanotechnology Division

TAPPI is pleased to announce that its nanotechnology groups have created a new International Nanotechnology Division. This Division will focus on nanotechnology for renewable materials, including the advancement of research and development for nanocellulose. The International Nanotechnology Division will not only concentrate on developments for traditional forest-based products like pulp, paper and building materials, but also on applications such as coatings, plastics, digital displays, military body armors, and medical implants, among others. Comprised of producers, academia, government, consulting companies, suppliers and others in the industry, it will serve as the leading global forum for knowledge sharing in this high growth sector.

"When TAPPI volunteers suggested we take our nanotechnology efforts to the next level, we jumped at the opportunity to help the industry capitalize on this promising sector," said Larry N. Montague, President and CEO of TAPPI. "We see the new division as a platform for helping the industry respond to the rapidly changing field of nanotechnology, especially as commercialization develops in this fast-growing sector."

NEWS: STORA ENSO INVESTS IN NANOTECHNOLOGY AT THE FINNISH IMATRA MILL - 03 JUN 2011



NEWS

Stora Enso invests in nanotechnology at the Finnish Imatra mill

03 Jun 2011 – Stora Enso is planning to build a pre-commercial plant for the production of microfibrillated cellulose (MFC) at its Imatra mill. MFC is a new type of renewable material that is supposed to be used in existing and new fibre-based paper and board products as well as in barrier materials. Packaging materials containing MFC are said to be lighter and stronger, according to Stora Enso. The company plans to invest €10m in the pre-commercial facility, which is planned to be commissioned by the end of 2011.

Conference



Abstract:

Domtar Corporation (NYSE/TSX: UFS) and FPInnovations today announced that they have formed a new joint venture company to build the world's first one metric ton per day commercial-scale nanocrystalline cellulose demonstration plant at the Domtar Windsor, Quebec pulp and paper mill site. Construction will begin in the coming weeks and will take approximately 20 months to be completed.

Domtar and FPInnovations join forces to develop innovative fiber-based nanotechnologies at new demonstration plant

Montreal | Posted on July 19th, 2010

"As the leader in our industry, we are very excited to explore new frontiers by bringing together our operational expertise and the technical knowledge of FPInnovations for the efficient manufacture of this innovative and renewable product," said John D. Williams, President and Chief Executive Officer of Domtar Corporation. "The remarkable properties of nanocrystalline cellulose and wide range of potential applications speak volumes about the commercial potential of new fiber-based products that go beyond traditional pulp and paper applications."

"This is an important milestone cumulating over 15 years of R&D investments towards the future development of fiber-based products for the industrial world. During this time FPInnovations developed an extensive intellectual property portfolio around the manufacturing and application of nanocrystalline cellulose," said Pierre Lapointe, President and Chief Executive Officer of FPInnovations. "I am confident that this partnership and the strong support of both governments will lead to exciting and successful new commercial applications."

Nanocrystalline cellulose is a renewable, recyclable and abundant nanomaterial made of cellulose fibers from the wood pulp manufacturing process. Potential applications include optically-reflective films, high-durability varnishes, and innovative bioplastics. The properties of this material will provide new opportunities in a wide range of applications for a variety of sectors and markets such as the aerospace, automotive, chemical, textile and forestry industries. There are promising applications for the aerospace industry that will complement Quebec's innovative aerospace "green" aircraft program.



Abstract:

It's super strong, it's green and it's providing new opportunities for business in Alberta. It's called nanocrystalline cellulose (NCC) and Alberta is about to become a leader in its production and study. A new Edmonton-based pilot facility will be the first in Canada to produce the quality of NCC that researchers need to fully explore all its potential applications.

New facility to produce wonder material from forests and farms

Edmonton, Canada | Posted on July 6th, 2011

The \$5.5-million pilot plant, created through a collaboration of the provincial and federal governments in partnership with industry under the Western Economic Partnership Agreement (WEPA), will use wood and straw pulp, like that from flax and hemp, to create up to 100 kg per week of NCC for testing in commercial applications leading to production.

Recent discoveries reveal NCC has useful properties such as great strength, optical characteristics and very large surface area at the nanoscale. The pilot plant will allow researchers to test and validate NCC from a variety of forest and agriculture materials for use in diverse applications such as, automotive components, paints and building materials, plastics, packaging, health care products and energy extraction.

"This has the potential to be one of the technologies that, literally, changes the world," said Greg Weadick, Minister of Alberta Advanced Education and Technology. "This project focuses our Alberta Innovates system on gaining the knowledge and experience we need to develop the greener products that the world demands."

The project opens the door to new and diverse markets for Alberta's forest industry in areas like composite materials and coatings, drilling fluids, pharmaceuticals and more.

"Our Government's investment will help advance a new forestry product with the potential to diversify the industry," said Mike Lake, Member of Parliament for Edmonton-Mill Woods-Beaumont and Parliamentary Secretary to the Minister of Industry. "With numerous sectors in Alberta that could benefit from NCC applications, this initiative will help increase our competitiveness and create jobs in our communities."



Highlights in global markets and emerging technologies

Forestry, as the raw material supplier for the paper and pulp industry, faces global demands to supply the Pulp & Paper Industry which has to produce new and improved paper products. Perhaps, better said, the industry has to come up with new, improved products to maintain a market-share of “paper like products”. Global markets and emerging technologies created a World-Wide Technocratic Place to compete in.

Growing demands are met by emerging new paper industries in Latin America, China, Indonesia, the Philippines and Far-East. These new pulp & paper production facilities implement the latest technologies. When latest technologies are combined with closeness to markets, low cost labor and consequently low cost raw materials, the industry becomes extremely competitive. **To maintain competitiveness there are intensive money investments in developing high technology for pulp and paper production in Europe, particularly – in Sweden. North America’s pulp and paper industries also need to maintain cutting-edge technology.** The Nano Pulp & Paper Company offers nanotechnology know-how and nano-processes, maintaining worldwide competitiveness for the North American Pulp & Paper Industry.

ALICE ATRAVÉS DO ESPELHO: LEWIS CARROLL

*Está vendo, precisa
correr o mais rápido que
puder, para permanecer
onde está. Porém, se
quiser ir a algum outro
lugar, deve correr duas
vezes mais rápido!*

A Rainha



OBRIGADO !!



CONTATO:

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