



By Thais Santi - Special for *O Papel*

## NORTH AMERICA AND LATIN AMERICA – CHAPTER 1

This issue kicks off Chapter 1 of the new international series called The Sector Around the World, introduced in the August edition of *O Papel* magazine. In this journey through the five continents, and published in the form of five chapters, we start off this month with the Americas, and then move on to Asia, Europe, Africa and conclude our expedition in January 2017 in Oceania.

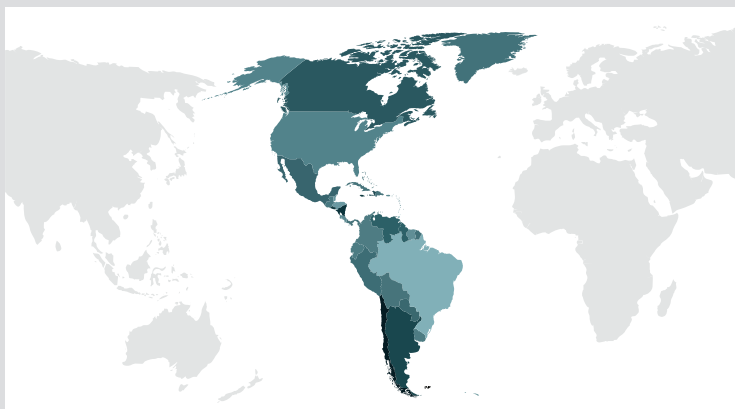
**W**e've landed in the American continent for chapter one of our new international series called The Sector Around the World... Upon our arrival, we are before 35 countries, covering a total area of more than 42 million km<sup>2</sup>, and more than 902 million inhabitants. Brazil, Canada

and United States are the three biggest countries in terms of area in the continent and also represent the three main economies and the top pulp and paper producers on a global level. According to the FAO (Food and Agriculture Organization of the United Nations), there are 58 million hectares of planted forests in the American continent.

Between North and Latin America, Manoel Neves, manager of Economic Studies at consultancy Pöyry, and contributor to The Sector Around the World series, calculates total pulp production (integrated and non-integrated, virgin and recycled fiber, including non-wood) at 151.565 million tons/year. In the case of paper production, 104.790 million tons/year considering all specialties. **(See information about total production, import and export and apparent consumption for North America and Latin America in the infographic).**

Such productivity plays an important role in the economy of this continent. In North America, figures are quite expressive. According to data from the American Forest & Paper Association (AF&PA), in year 2014 the US forestry sector contributed more than US\$84 billion to Gross Domestic Product (GDP). Of this total, the pulp and paper sector was responsible for US\$55.5 billion and wood products for US\$28.7 billion. Overall, the forestry products industry was responsible for 4% of industrial GDP and employing 914 thousand people in 2014.

In Canada, the scenario also demonstrates the forestry sector's relevance, with annual revenues of US\$58 billion in 2014, representing 1.25% of the country's GDP and 12% of industrial GDP, according to the Forest Products Association of Canada (FPAC). It is also important



to point out that the sector employs more than 230 thousand people and exports to over 180 countries. Total exports in 2014 amounted to US\$29 billion, of which US\$7 billion in pulp, US\$8.7 billion in paper and US\$12.7 billion in wood, with a trade surplus of US\$19 billion. The country's main markets include

the United States, Western Europe, China and Japan. Official data of the Canadian government reports that roughly 47% of total forestry exports stem from three key products: bleached long fiber softwood kraft pulp (NBSK); newsprint, with roughly 4 million tons, and softwood (coniferous wood), responsible for 20% of forestry product exports, with the United States being the main destination of products.

The three biggest pulp and paper companies in the region are International Paper, WestRock and Georgia-Pacific. **(See more details for each company in the "Top3 – North America" box and also capacity expansion projects in North America through 2020).**

In Latin America, the biggest pulp producers are Brazil and Chile. Data from the *Brazilian Tree Industry Annual Report (Ibá)* shows that in 2015 the sectorial GDP amounted to R\$69.1 billion, which represents 1.2% of all wealth generated in Brazil and 6% of industrial GDP. Other figures for the sector show that exports totaled US\$9 billion, or 4.7% of total exports. Last year, the sector directly employed 540 thousand people. Chile mainly stands out for the production of firewood (roundwood) and sawnwood, wood panels, pellets and pulp, with an export market that amounted to US\$6.095 billion in 2015, according to the *Forestry Institute's Annual Forest Report (Infor)* and Chile's Ministry of Agriculture.

The three biggest companies of the sector in Latin America are CMPC of Chile and Fibria Celulose and Suzano Papel e Celulose of Brazil. **(See more details for each company in the "Top3 – Latin America" box and also capacity expansion projects in Latin America through 2020).**



**North America data  
(USA and Canada):**

**Population:** 354.4 million

**GDP:** US\$ 19.2 trillion

(Source: UN, 2014)

**PULP - (000 t)**

**Total production: 115,647**

**Imports:** 7,007

**Exports:** 37,140

**Net trade:** 30,132

**Apparent consumption:** 85,515

32% of production exported

6% of production imported

**PAPER – (000 t)**

**Total production: 83,746**

**Imports:** 12,430

**Exports:** 19,459

**Net trade:** 7,029

**Apparent consumption:** 76,717

(kg/cap) 214.2

23% of production exported

15% of production imported

Source: Pöyry, 2014

**Latin  
America data:**

**Population:** 634.4 million

**GDP:** US\$ 5.6 trillion

Source: United Nations Economic Commission for Latin America and the Caribbean, 2015

**PULP - (000 T)**

**Total production: 35,918**

**Imports:** 4,248

**Exports:** 17,650

**Net trade:** 13,402

**Apparent consumption:** 22,515

(kg/cap) (45.8)

49% of production exported

12% of production imported

**PAPER – (000 T)**

**Total production: 21,044**

**Imports:** 10,223

**Exports:** 2,939

**Net trade:** -7,284

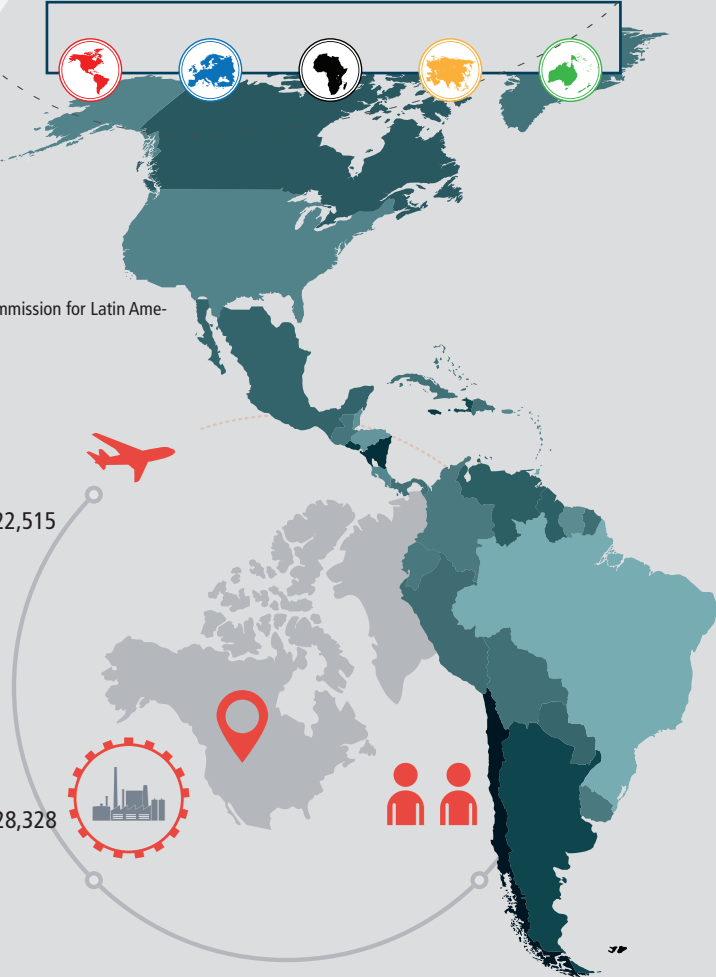
**Apparent consumption:** 28,328

(kg/cap) (45,8)

14% of production exported

49% of production imported

Source: Pöyry, 2014



**Capacity expansion projects in North America (through 2020)**

Company	Country	Segment
WestRock	USA	Boxboard
International Paper	USA	Containerboard
Pratt Paper	USA	Containerboard
Kruger	Canada	Containerboard
Milwaukee MiniMill	USA	Containerboard
WestRock	USA	P&W
Columbia Pulp	USA	Pulp
International Paper (Riegelwood)	USA	Pulp
Domtar (Ashdown)	USA	Pulp
Paper Excellence (Chetwynd)	Canada	Pulp

Source: RISI

**Capacity expansion projects in Latin America (through 2020)**

Company	Country	Segment
Pulpaca	Venezuela	Newsprint
Eldorado	Brazil	Pulp
Fibria	Brazil	Pulp
Lwarcel	Brazil	Pulp
MD Papéis	Brazil	Paperboard
Celulose Irani	Brazil	Paperboard
Klabin	Brazil	Paperboard
International Paper	Brazil	P&W
Smurfit Kappa Group	Mexico	Containerboard
Klabin	Brazil	Containerboard
Celulose Irani	Brazil	Containerboard

Source: RISI



## Top 3 Producers of Paper and Board + Market Pulp in North America

	International Paper	Westrock	Georgia-Pacific
<b>Description of company</b>	Global leader of paper and packaging, with production operations in North America, Europe, Latin America, Russia, Asia and Northern Africa	Created in 2015 following the merger between MWW and RockTenn, WestRock is one of the global leaders in consumer and corrugated packaging	Georgia-Pacific is one of the main global producers of tissue, pulp, paper, packaging, building products and related chemicals.
<b>Products</b>	<ul style="list-style-type: none"> <li>• Containerboard (linerboard, fluting, white top, recycled linerboard, recycled fluting and saturating kraft)</li> <li>• Printing &amp; Writing</li> <li>• Pulp (fluff, softwood long fiber, hardwood short fiber)</li> <li>• Consumer packaging (coated board)</li> </ul>	<ul style="list-style-type: none"> <li>• Paperboard, containerboard and various types of packaging (boxes, corrugated paper boxes, dispensers and displays)</li> </ul>	Since 2016, it has already invested more than US\$13.5 billion in its operations. The company produces toilette tissue, paper towels and napkins, paper-based packaging, office papers, pulp, specialty fibers, tissues and nonwoven, building products and related chemicals.
<b>Production</b>	<ul style="list-style-type: none"> <li>• Containerboard: more than 13 million tons</li> <li>• P&amp;W: 4 million tons</li> <li>• Pulp: 1.8 million tons</li> <li>• Consumer Packaging: 1.2 million tons</li> <li>• JV with Ilim Holding S.A.(Russia): 3.4 million tons of various types of pulp and paper</li> </ul>	<ul style="list-style-type: none"> <li>• Paperboard and containerboard: more than 13 million tons</li> <li>• Packaging: billions of units of all sorts</li> <li>• In its productive processes, the company recycles and recovers 7 million tons of fiber</li> </ul>	The company is present in more than 30 states in the United States, possesses 51 production units and employees roughly 35,000 people.
<b>Forestry base/ raw material</b>	<ul style="list-style-type: none"> <li>• Raw materials used include wood fiber, purchased in the form of pulpwood, wood chips and old corrugated containers (OCC)</li> <li>• Possesses 1.4 million acres globally</li> </ul>	<ul style="list-style-type: none"> <li>• Main raw materials include recycled and virgin fiber (long and short fibers).</li> <li>• Has 80 thousand acres in the Charleston region and approximately 135 thousand acres of forest land in Brazil (54 thousand hectares, of which 30 thousand in pine and eucalyptus plantations and 21 thousand hectares of natural forests in permanent-preservation or legal-reserve areas)</li> </ul>	
<b>Global footprint</b>	11 countries	19 countries	
<b>Production units</b>	298	255	
<b>Employees</b>	55,000	41,000	

Source: Pöyry, April/2016





## Top 3 Producers of Paper and Board + Market Pulp in Latin America

	Fibria	Suzano	CMPC
<b>Total sales</b>	R\$ 10.1 billion	R\$ 10.224 billion	US\$ 4.846 billion
<b>Revenue per segment</b>	100% Bleached hardwood kraft pulp	64.6% pulp and 35.4% paper	20% Tissue 12% Paper 51% Pulp 17% Forestry products (EBITDA – breakdown by business area)
<b>Key markets</b>	37 countries. In North America (23%), Europe (43%), Asia (24%) and Latin America (10%)	Sells pulp to 31 countries and paper to 60 countries - the main markets for pulp are Europe and Asia. The domestic market is serviced by the paper segment (65%) – the main export markets are: 15% South/Central America and 10% North America	Exports to 45 countries, the main ones being: China, Korea, Japan, Indonesia, Taiwan, India, Australia, Germany, France, Italy, Spain, England, Israel, Jordan, United States, Venezuela, Colombia, Argentina and Brazil
<b>Products</b>	Bleached hardwood kraft pulp	Hardwood pulp and fluff pulp, coated and uncoated paper, printing and writing paper and paperboard	Bleached eucalyptus pulp and bleached <i>Pinus radiata</i> pulp
<b>Production capacity</b>	5.3 million tons/year	2015: 1.209 million tons of paper and 3.373 million tons of pulp	1.8 million tons of bleached eucalyptus pulp/year in Brazil, 1.5 million tons of eucalyptus pulp in Chile and 700 thousand tons/year of <i>Pinus radiata</i> pulp in Chile.
<b>Forest base</b>	The company possesses 969 thousand hectares of forests, of which 568 thousand of planted forests, 338 thousand of preservation and environmental-conservation areas and 63 thousand earmarked for other uses	1.2 million hectares (518 thousand hectares of planted forests and 480 thousand earmarked for preservation)	707 thousand hectares (Chile, Brazil and Argentina)
<b>Global footprint</b>	4 plants in Brazil, with offices around the world: Miami (United States), Lustenau (Austria) and Hong Kong (China)	The administrative headquarters are located in São Paulo/SP, with five industrial units in Brazil. Outside the country, the company has a commercial office in China and subsidiaries in the United States, Switzerland, England and Argentina	8 countries (Chile, Colombia, Brazil, Argentina, Ecuador, Peru, Mexico and Uruguay)
<b>Production units</b>	4 (Três Lagoas, Jacareí, Aracruz and Eunápolis)	5 - three in São Paulo state (Limeira and two in Suzano), one in Bahia (Mucuri) and one and Maranhão (Imperatriz)	38
<b>Employees</b>	17,000	8,066 employees and 11,108 outsourced workers	17,562
<b>Company description</b>	Created in 2009 following VCP's incorporation of Aracruz Celulose, Fibria was already born a global leader in market pulp production, which position it maintains to this date	Suzano was founded in 1924 in the city of Suzano (SP), initially as a paper reseller. Its first paper mill began operating in 1939, in the same city.  Suzano is the second biggest producer of eucalyptus pulp in the world and the fifth largest producer of market pulp	CMPC is one of the leading companies in Latin America, producing and selling forestry products, pulp, paper and tissue
<b>Recent investments</b>	R\$ 7.9 billion in the construction of a 2 <sup>nd</sup> pulp production line at the Três Lagoas (MS) unit, known as Project Horizonte 2	In 2015, Suzano invested R\$ 1,741,847,000.00 to expand and modernize plants, plant and maintain forests and narrow the average radius. It also invested in logistics operations through lighter vehicles to transport wood	R\$ 5 billion for plant expansion R\$ 22 million in the Port of Pelotas R\$ 25 million in private access R\$ 44 million in public road improvements in Guaíba R\$ 200 million in Line 1

Source: Pöyry, April/2016

Note: RISI, the top provider of information about the pulp and paper market, and contributor to O Papel magazine's The Sector around the World series, offers reports, databases and studies with detailed information about these projects, which can be accessed at <http://www.risiinfo.com/>

**RISI**