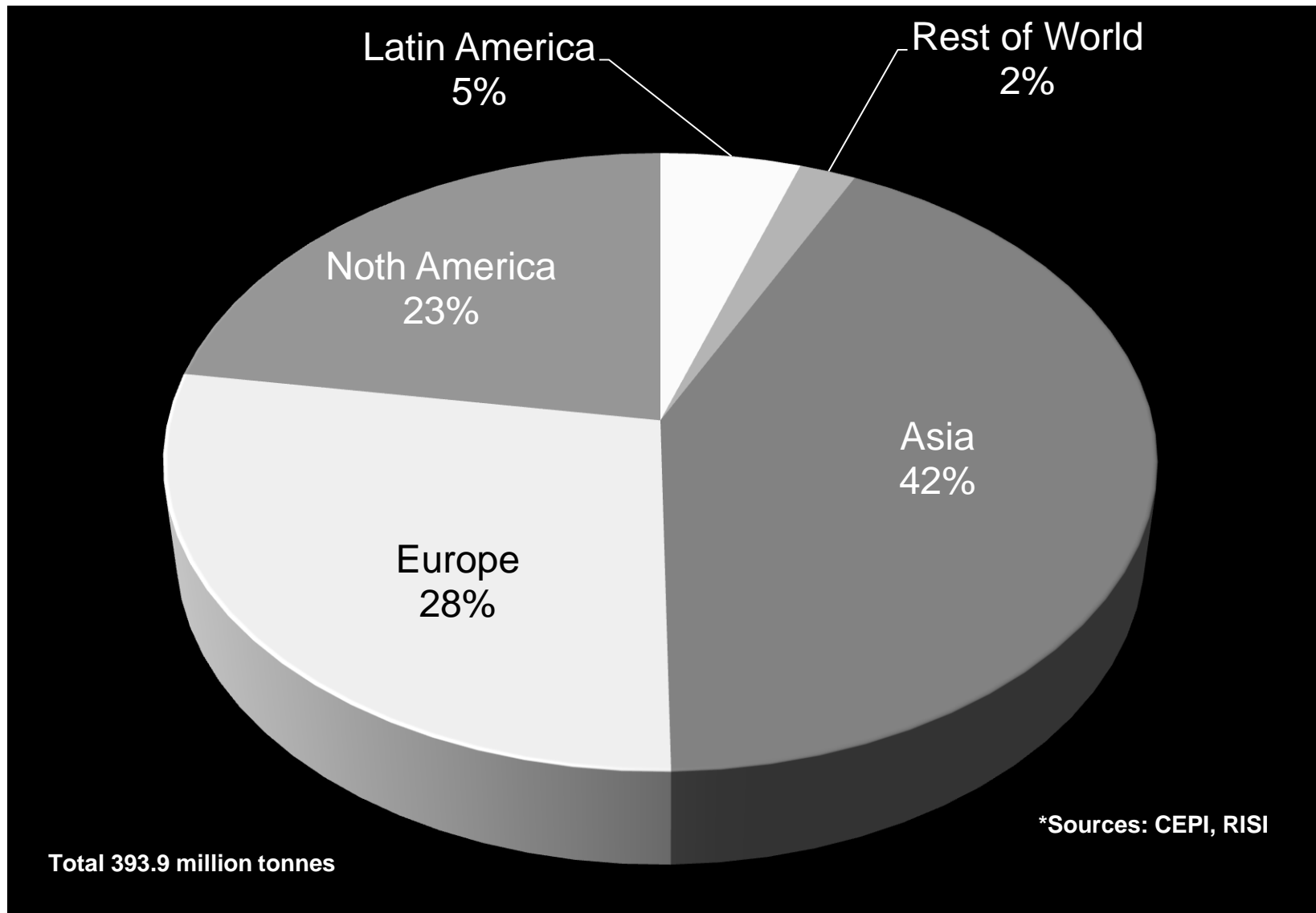




# Water Use and Reuse in an Integrated Paper Mill

Carson Barry – NewPage Corporation

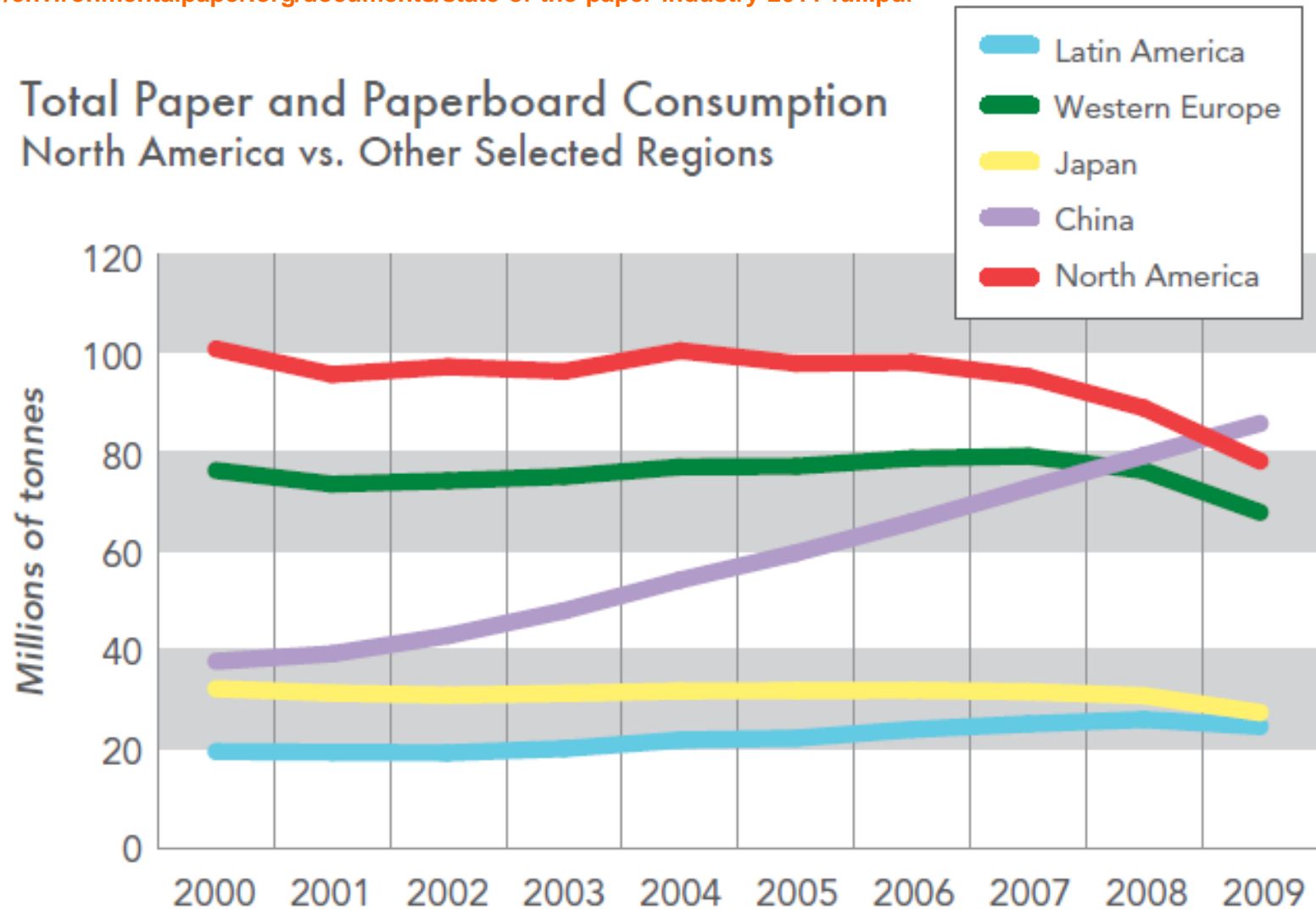
# 2011 Board and Paper Production by Region\*



# Global Paper Consumption Trends

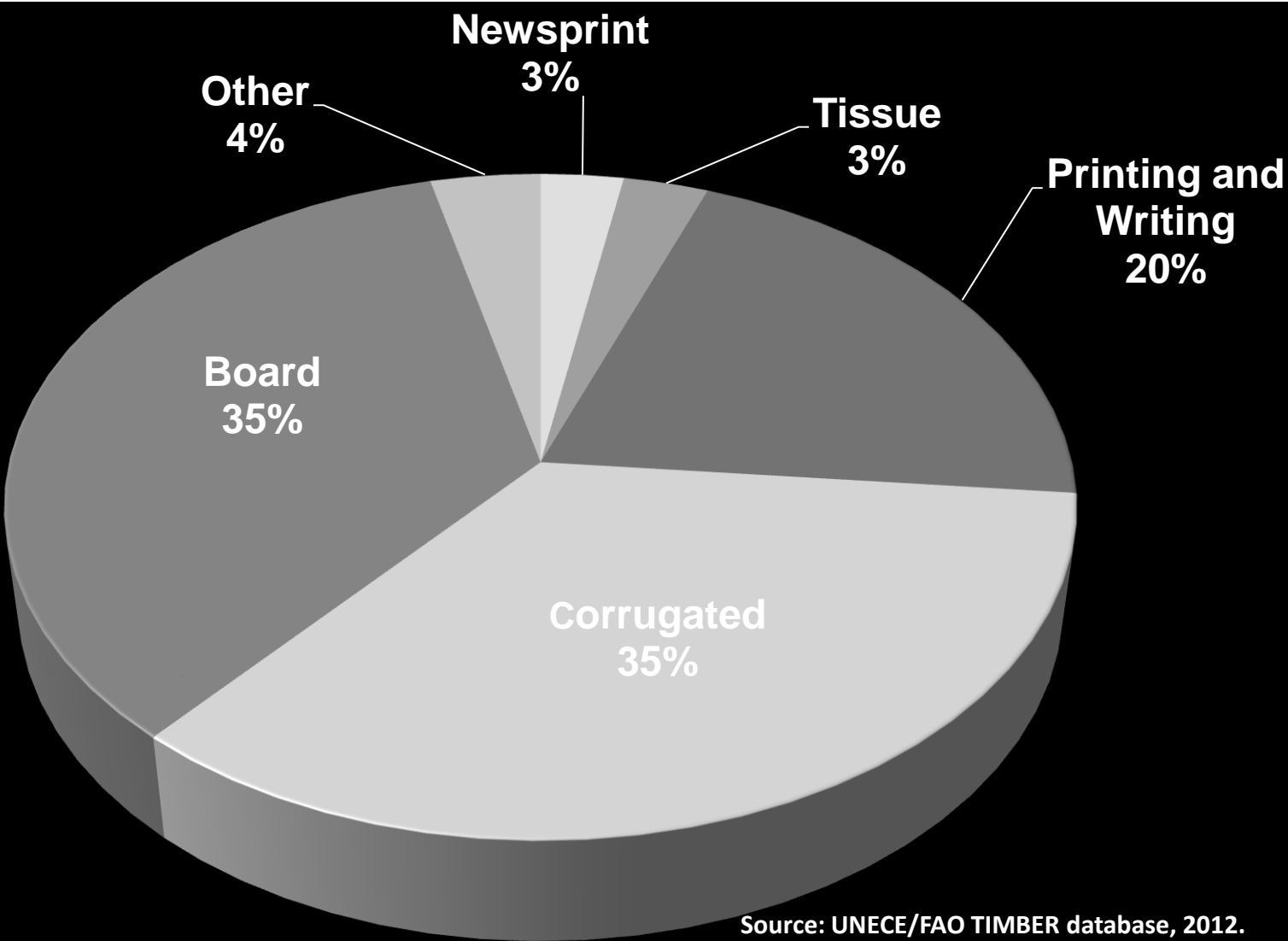
<http://environmentalpaper.org/documents/state-of-the-paper-industry-2011-full.pdf>

Total Paper and Paperboard Consumption  
North America vs. Other Selected Regions



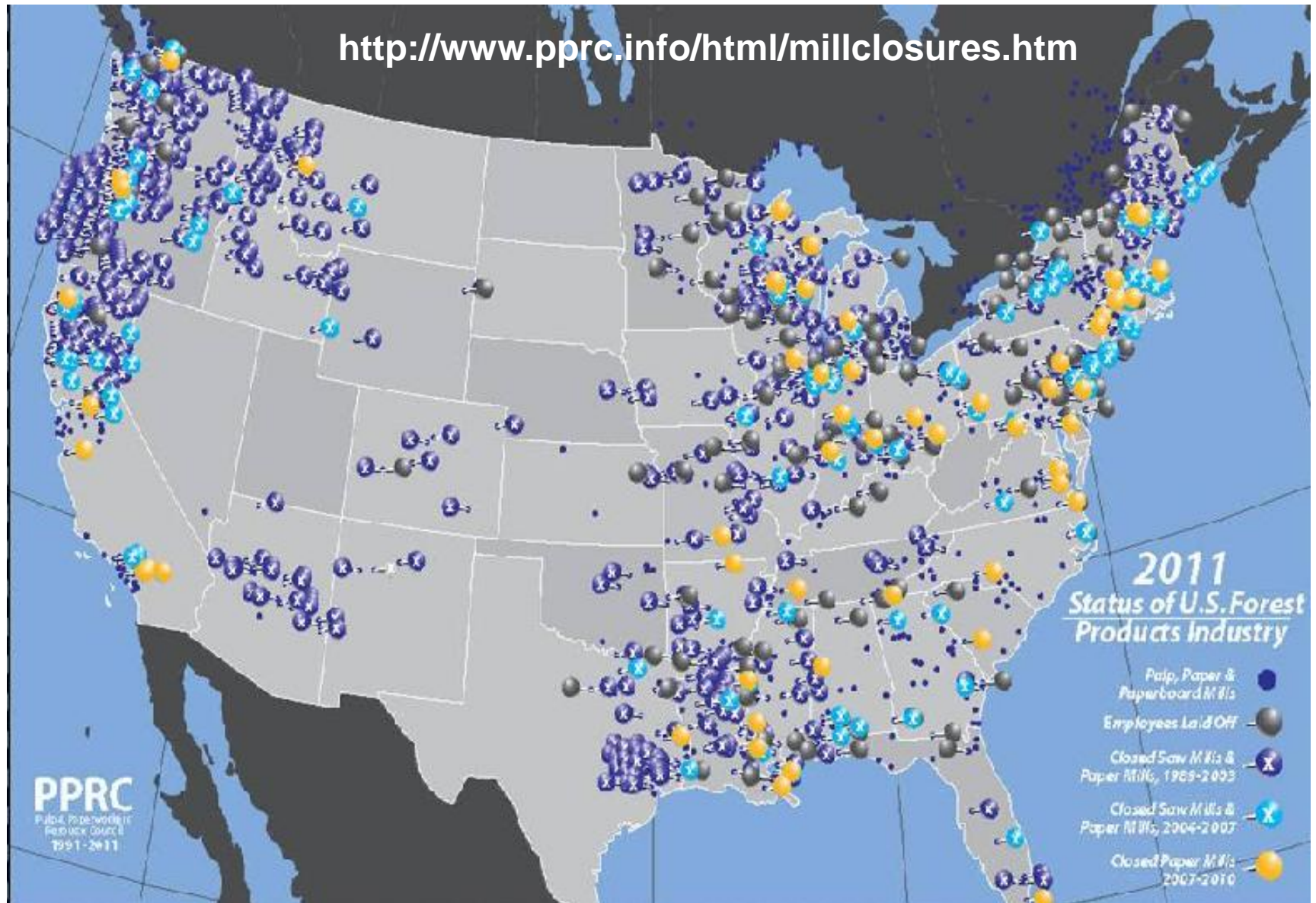
Source: RISI World Pulp Annual Historical Data 2010

# US Paper Segment Breakdown (Tonnage)

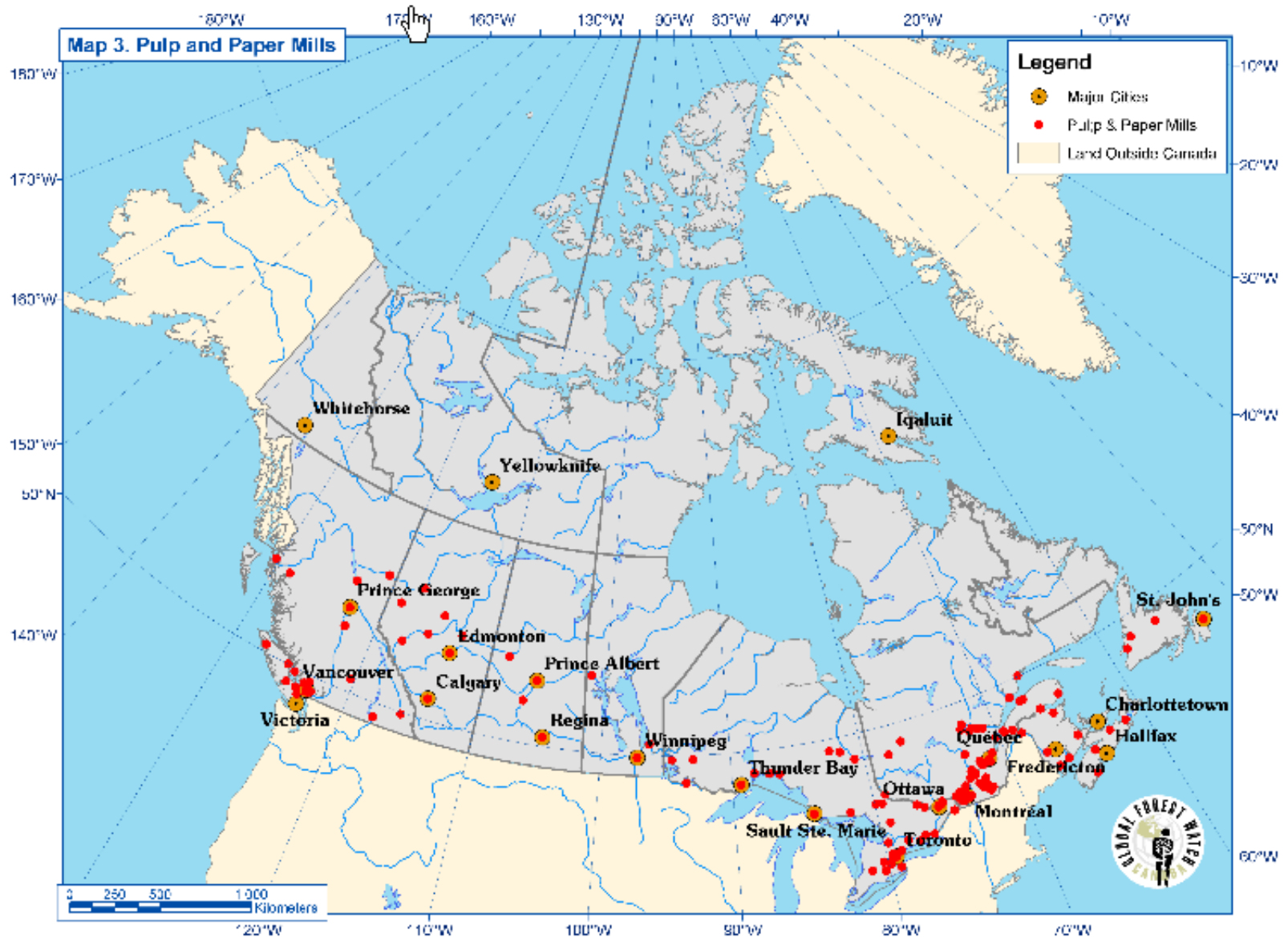


Source: UNECE/FAO TIMBER database, 2012.

<http://www.pprc.info/html/millclosures.htm>



# Canadian Pulp and Paper Mills



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## EMPLOYMENT

Forestry & Logging	107,100
Wood Products	388,600
Pulp & Paper	<u>391,400</u>
<b>Total Employment</b>	<b>887,100</b>

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## ANNUAL PAYROLL INCOME *(in thousands of dollars)*

Forestry & Logging	\$3,073,000
Wood Products	\$16,501,000
Pulp & Paper	<u>\$29,911,000</u>
<b>Total Compensation</b>	<b>\$49,485,000</b>

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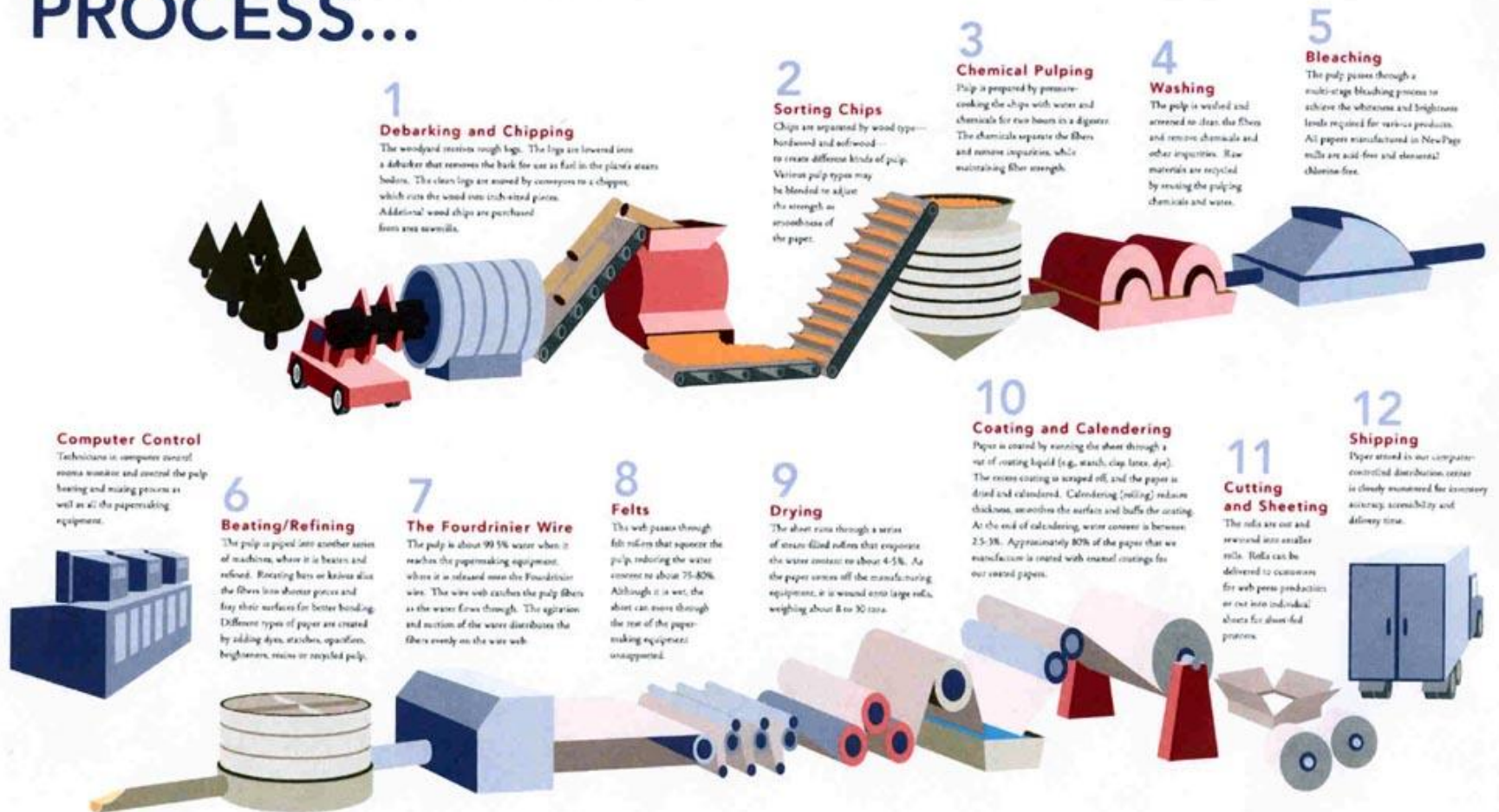
## NUMBER OF MANUFACTURING FACILITIES

Sawmills, Millwork, Treating	674
Engineered Wood and Panel Products	186
Other Wood Products	<u>125</u>
Total Wood Products	985
Pulp, Paper & Paperboard Mills	367
Converted Paper Products	<u>4492</u>
Total Paper Manufacturing	4859
<b>Total All Segments</b>	<b>5,844</b>

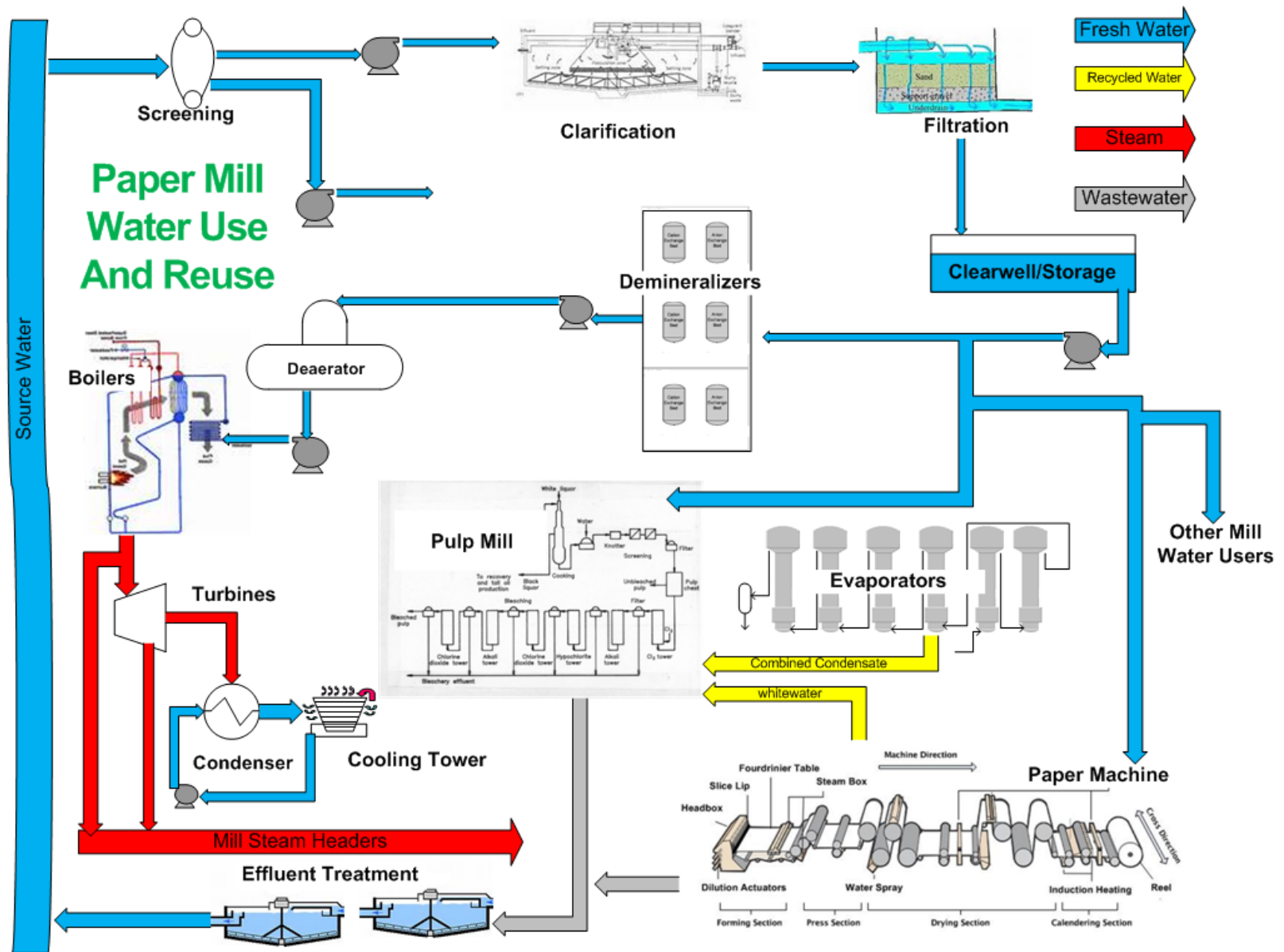
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Source: AF&PA  
as of Dec/2012

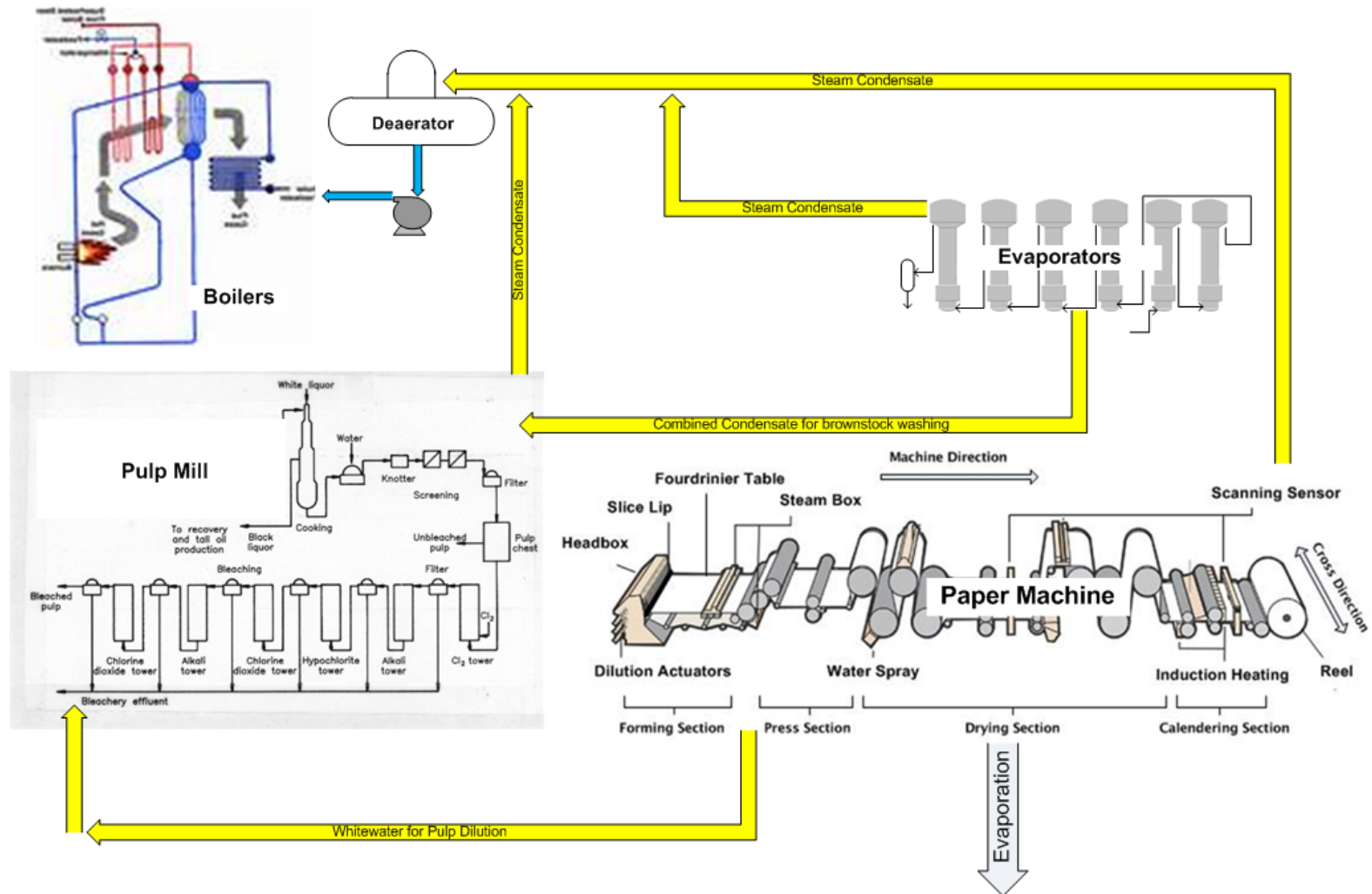
## NewPage Handles Every Step of THE PAPERMAKING PROCESS...



# Water Use and Reuse In Papermaking Overview



## Paper Mill Major Water Recycle Streams



# Millions of gallons per day

Fiber = \$

Coating = \$

Organics

Heat = \$

Water = \$

**Thank You  
Questions?**