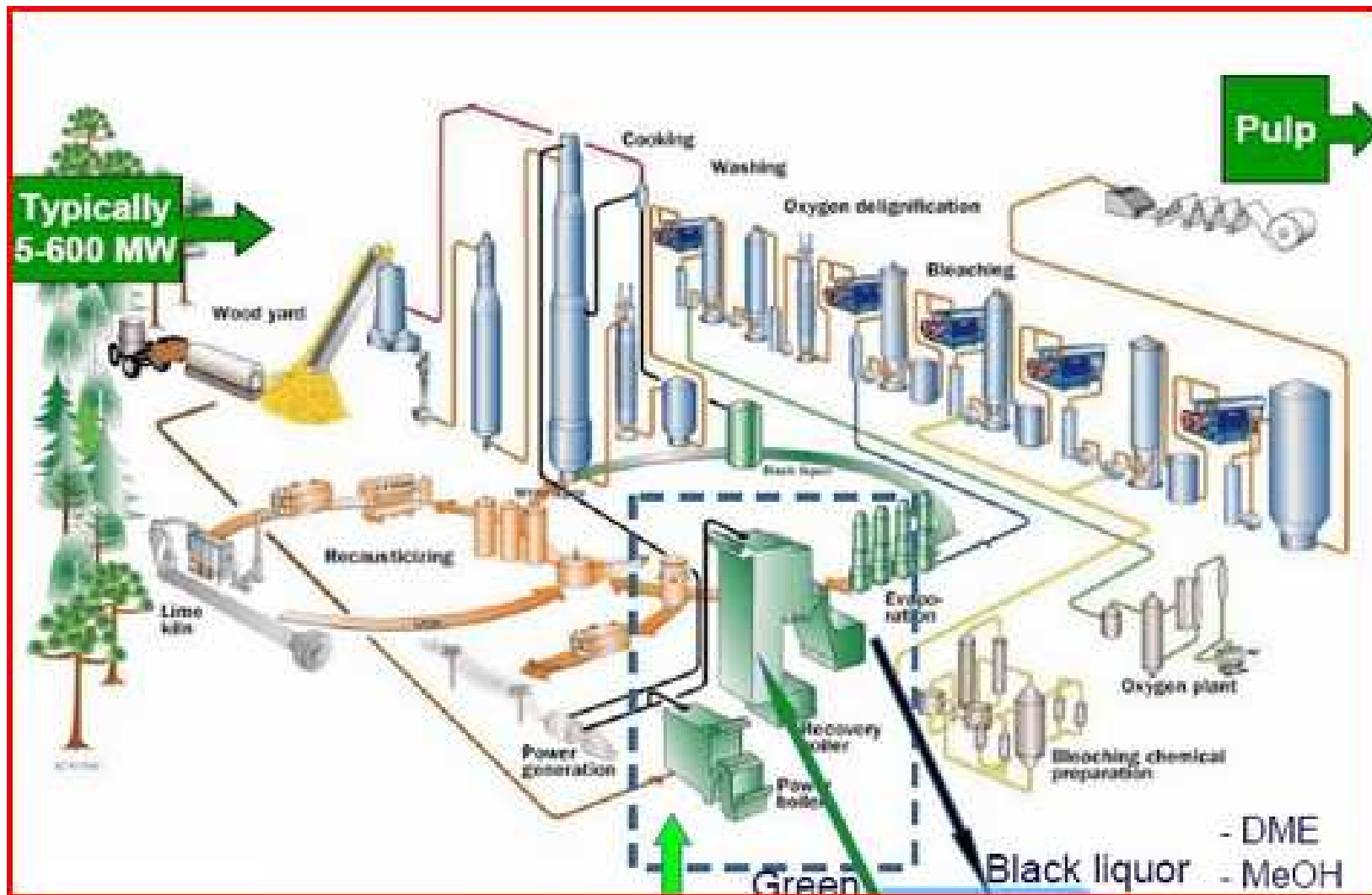


# Contents/themes

- Pulp production and consumption by area
- Major pulp producers by country
- Paper production and consumption by area
- Trade flows: pulp – imports and exports
- Types of pulps

# Pulpmill schematic





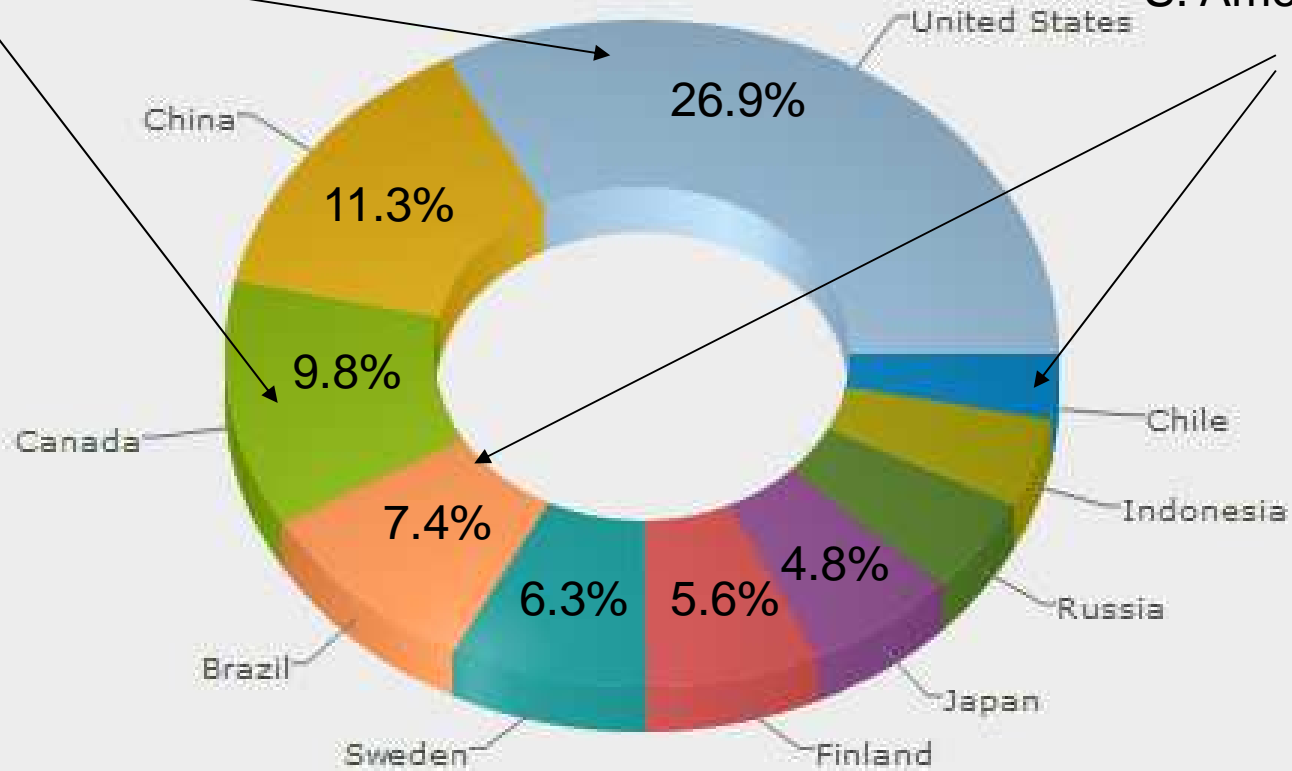
# Pulp for paper: world production

|   | Country       | Rank | Pulp for paper, total, production weight (tonnes) |   |
|---|---------------|------|---|---|
|   |               |      | Value as number                                   | Value as bar  |
|    | United States | 1    | 50,187,450  |    |
|    | China         | 2    | 21,102,200  |    |
|    | Canada        | 3    | 18,327,000  |    |
|    | Brazil        | 4    | 13,922,000  |    |
|    | Sweden        | 5    | 11,655,151  |    |
|    | Finland       | 6    | 10,362,000  |    |
|    | Japan         | 7    | 9,025,000   |    |
|    | Russia        | 8    | 7,214,000   |    |
|   | Indonesia     | 9    | 6,560,000   |   |
|  | Chile         | 10   | 4,896,000   |  |
|  | India         | 11   | 4,047,900   |  |
|  | Spain         | 12   | 2,846,899   |  |
|  | Germany       | 13   | 2,725,000   |  |
|  | Portugal      | 14   | 2,107,131   |  |
|  | France        | 15   | 1,832,772   |  |
|  | Norway        | 16   | 1,774,000   |  |

**Pulp for paper, total, production weight (tonnes)**  
**Top 10 countries for the latest values**

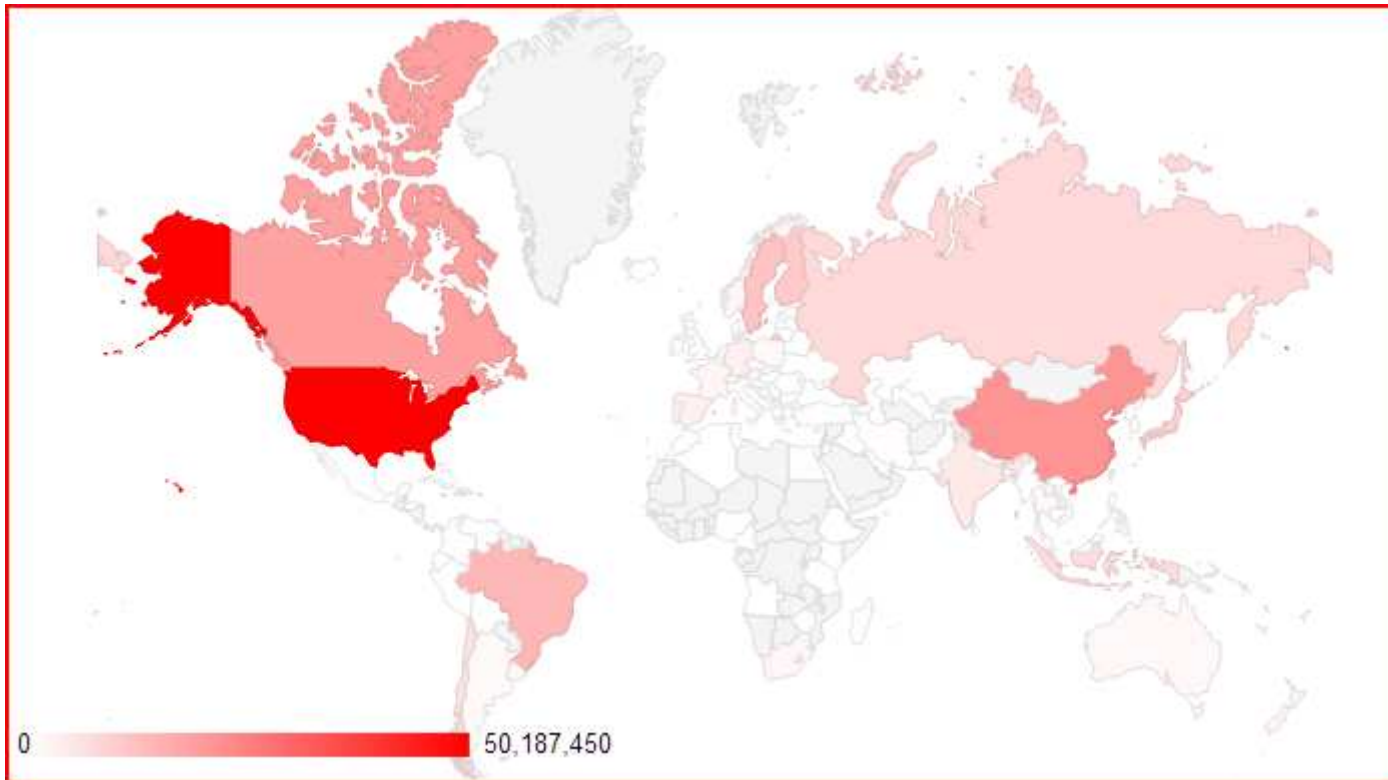
North America = 36.6%

S. America = 10.0%



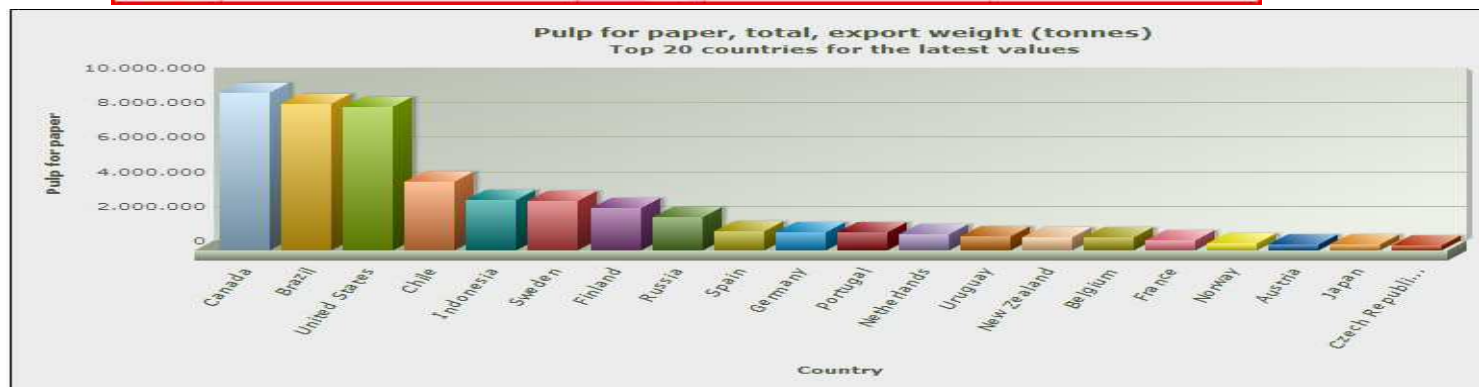
Global production = 187 MMT

# Pulp for paper: map of global production distribution



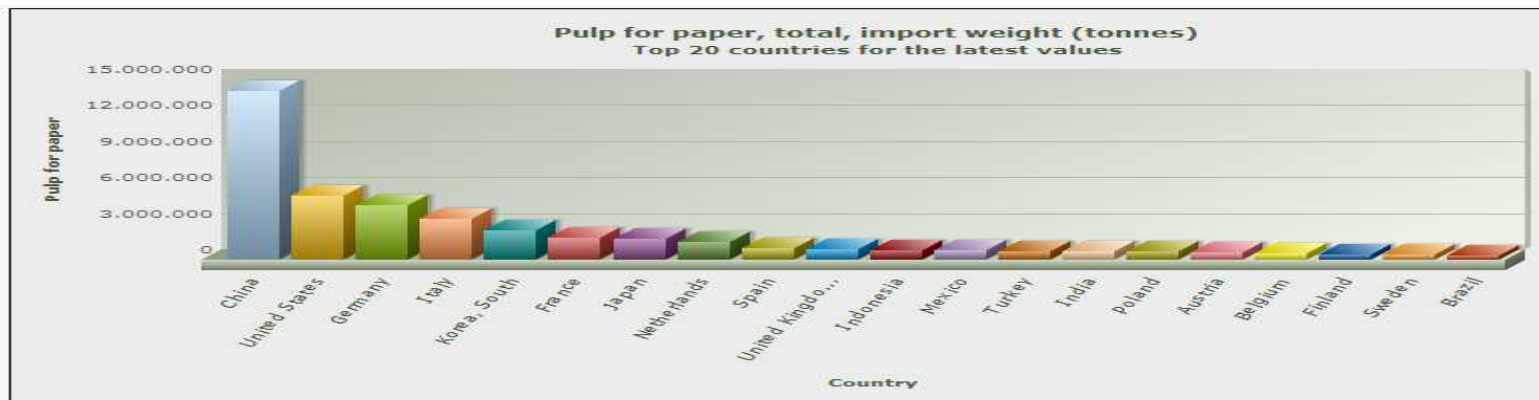
# Exports worldwide: pulp for paper

|  | Country       | Rank | Pulp for paper, total, export weight (tonnes) |  |
|--|---------------|------|---|--|
|  |               |      | Value as number                               | Value as bar   |
|   | Canada        | 1    | 9,157,243                                     |   |
|   | Brazil        | 2    | 8,481,358                                     |   |
|   | United States | 3    | 8,325,020                                     |   |
|   | Chile         | 4    | 4,025,473                                     |   |
|   | Indonesia     | 5    | 2,933,995                                     |   |
|   | Sweden        | 6    | 2,923,678                                     |   |
|   | Finland       | 7    | 2,475,177                                     |   |
|   | Russia        | 8    | 1,980,090                                     |   |
|   | Spain         | 9    | 1,129,494                                     |   |
|   | Germany       | 10   | 1,099,836                                     |   |
|  | Portugal      | 11   | 1,088,664                                     |  |



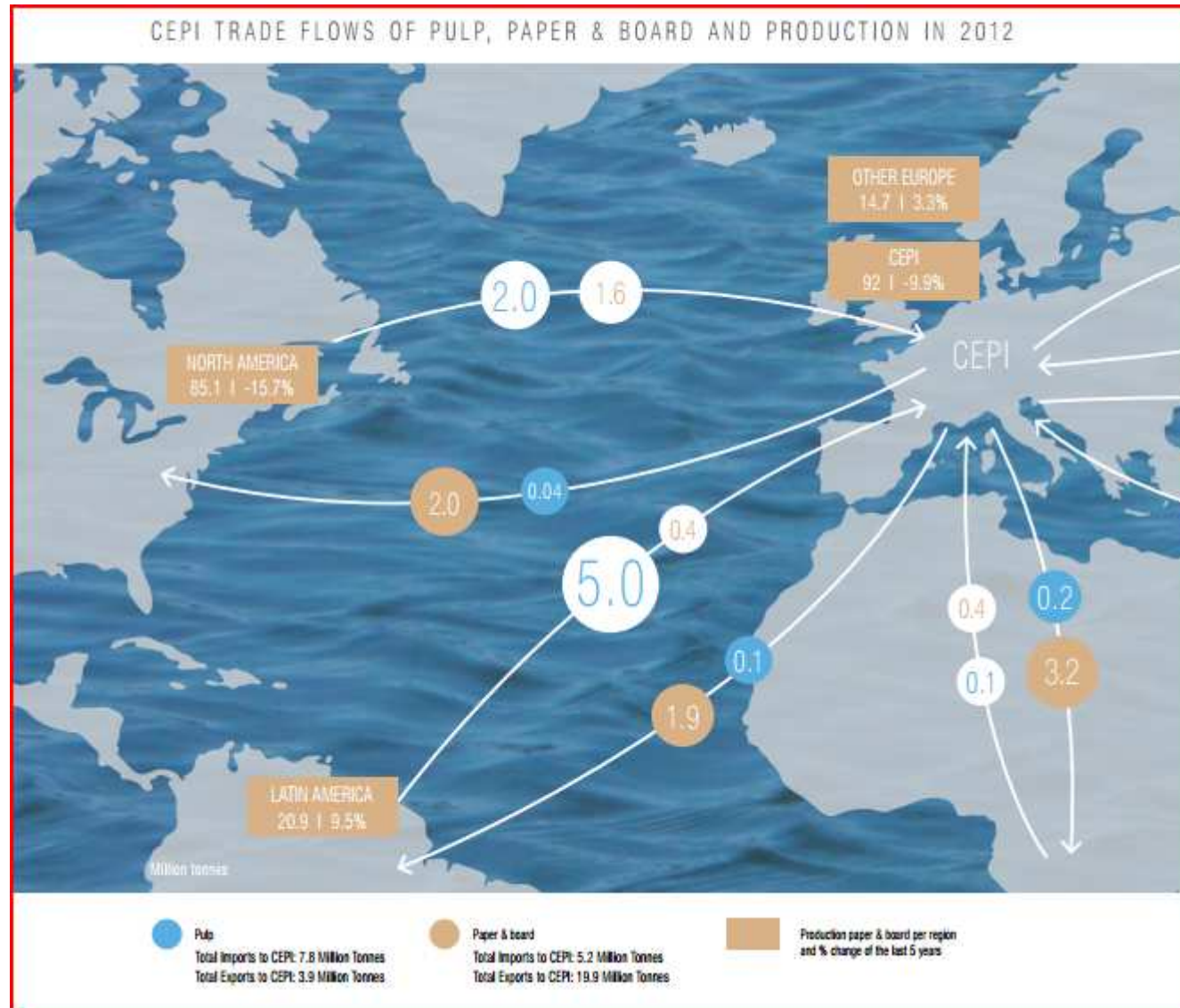
# Imports of pulp for paper

|  | Country        | Rank | Pulp for paper, total, import weight (tonnes) |  |
|--|----------------|------|---|--|
|  |                |      | Value as number                               | Value as bar   |
|   | China          | 1    | 14,045,452                                    |   |
|   | United States  | 2    | 5,329,839                                     |   |
|   | Germany        | 3    | 4,588,770                                     |   |
|   | Italy          | 4    | 3,455,399                                     |   |
|   | Korea, South   | 5    | 2,494,165                                     |   |
|   | France         | 6    | 1,883,568                                     |   |
|   | Japan          | 7    | 1,788,456                                     |   |
|   | Netherlands    | 8    | 1,545,900                                     |   |
|   | Spain          | 9    | 971,136                                       |   |
|  | United Kingdom | 10   | 934,955                                       |  |

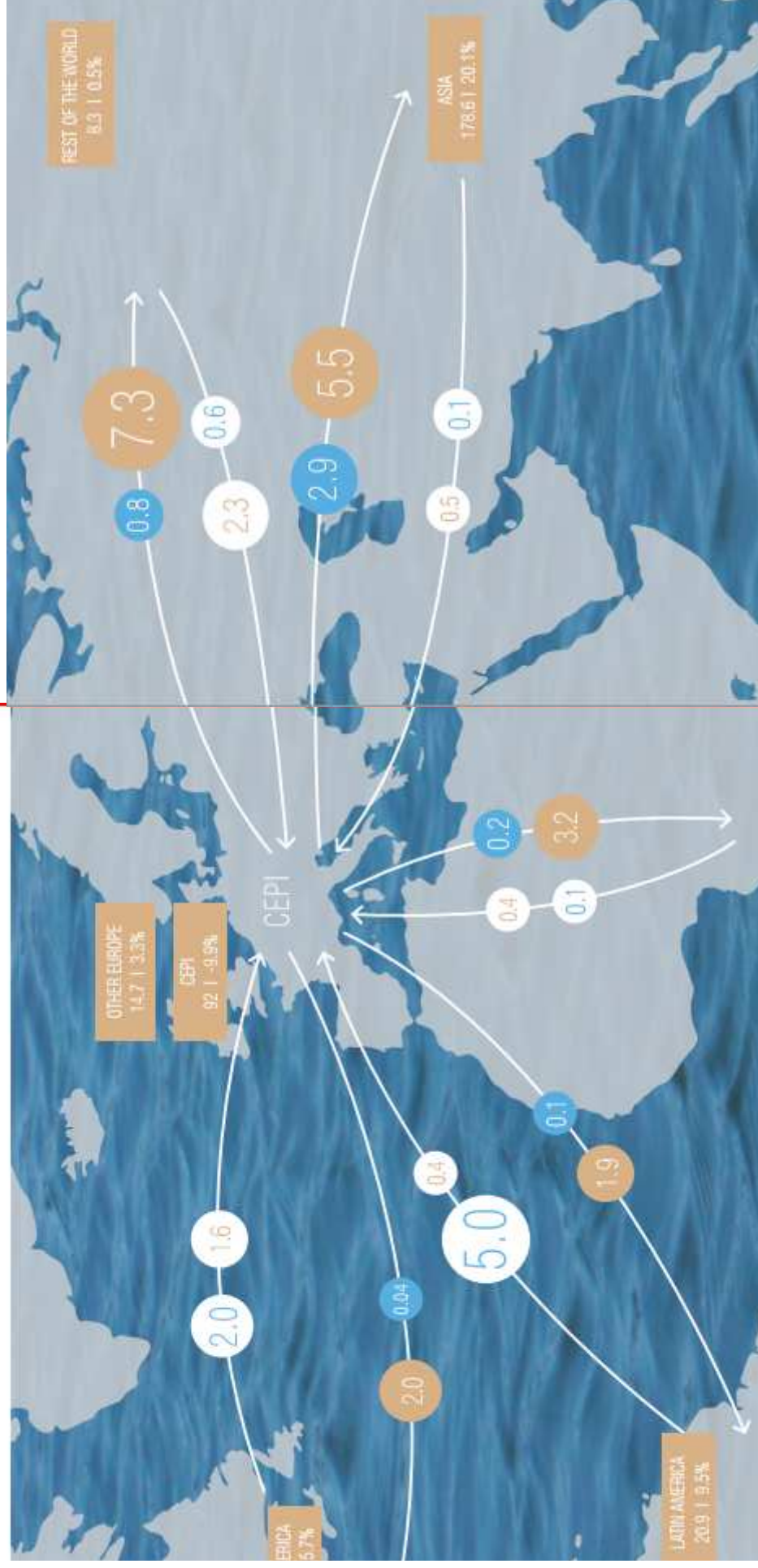




# CEPI TRADE FLOWS: 2012



DE FLOWS OF PULP, PAPER & BOARD AND PRODUCTION IN 2012

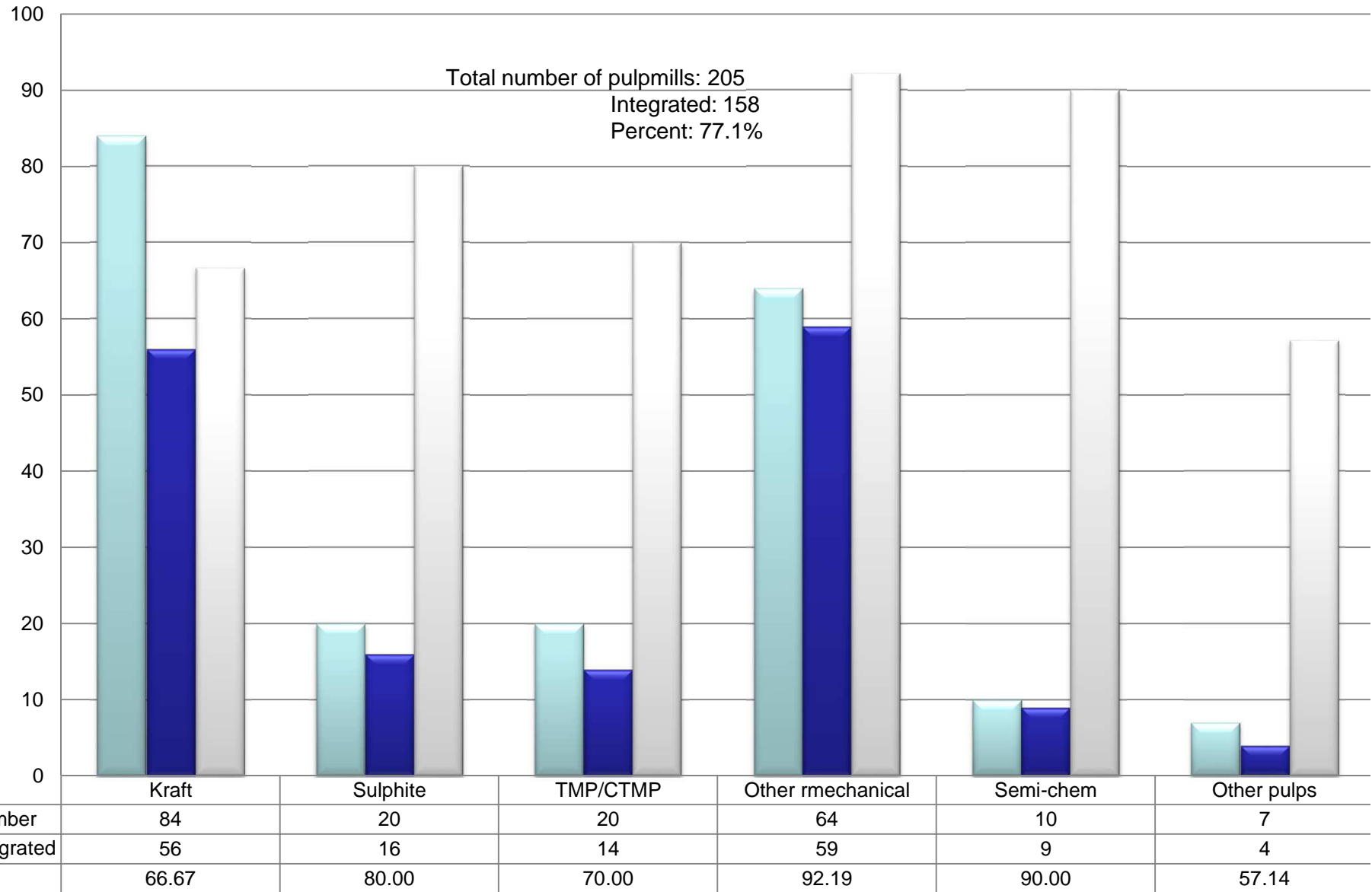


Production paper & board per region and % change of the last 5 years

Paper & board  
 Total Imports to CEPI: 5.2 Million Tonnes  
 Total Exports to CEPI: 19.9 Million Tonnes

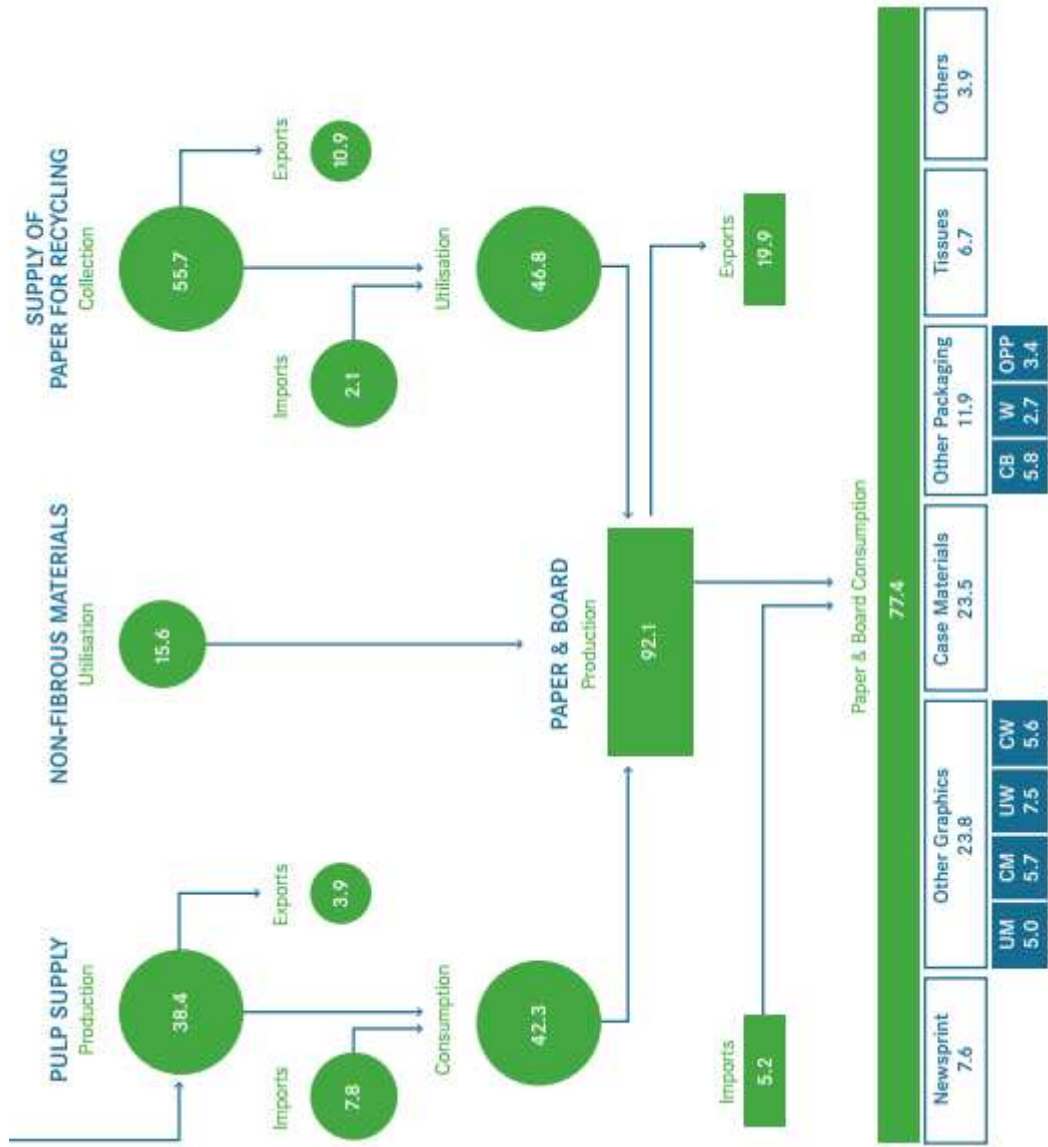
to CEPI: 7.8 Million Tonnes  
 to CEPI: 3.9 Million Tonnes

## CEPI region: pulp mills - integrated as a % of total - 2008 data



# Global Trade flows of wastepaper 2009





Paper & Board Consumption = Production + Imports from outside CEPI - Exports to outside CEPI  
 UM = Uncoated Mechanical - CM = Coated Mechanical - UW = Uncoated Woodfree - CW = Coated Woodfree  
 CB = Carton Board - W = Wrappings - OPP = Other Paper & Board for Packaging

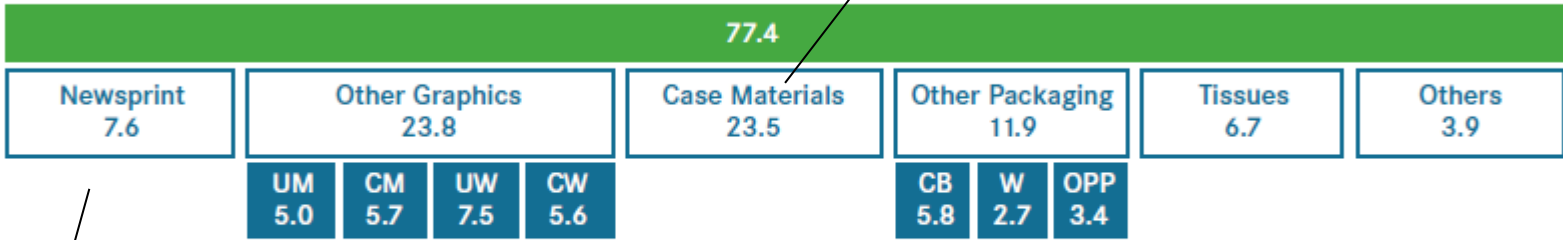
# Grades of paper consumed by CEPI

## Case Materials

Used in corrugated board production  
Includes liner and fluting



Paper & Board Consumption

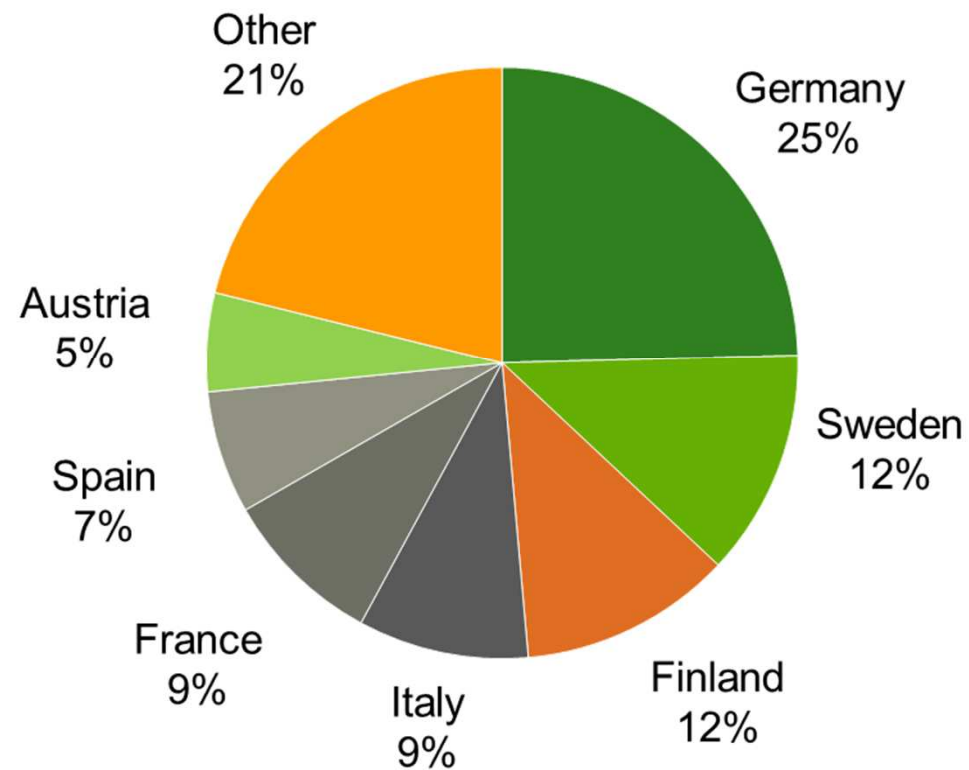


Paper & Board Consumption = Production + Imports from outside CEPI - Exports to outside CEPI  
 UM - Uncoated Mechanical - CM - Coated Mechanical - UW - Uncoated Woodfree - CW - Coated Woodfree  
 CB - Carton Board - W - Wrappings - OPP - Other Paper & Board for Packaging

**Newsprint**  
Paper produced mainly for printing of newspaper

**Uncoated/Coated Mechanical**  
Paper for printing or graphics  
Comprised of <90% Chemical pulp

# Paper production in CEPI countries 2012



**Total CEPI production: 92 Million Tonnes (2011: 94 Million Tonnes)**

Source: CEPI

# Roundwood: types of pulp for papermaking

- Dissolving pulp – not relevant
- Mechanical wood pulp
- Semi-chemical wood pulp
- Chemical wood pulp
  - Sulphite process
  - Sulphate (kraft) process



EMPLOYEES

185,000

GREEN, WHITE AND BLUE COLLAR JOBS

COMPANIES

+ FEW MULTATIONALS ABOUT 2/3 OF SME'S



520

INVESTMENTS

3 BILLION

4% OF TURNOVER INVESTED IN EUROPE

2011-2020

# EUROPEAN PAPER INDUSTRY

TURNOVER

75.3

BILLION

ADDED TO THE EUROPEAN ECONOMY

23%

SHARE OF GLOBAL PAPER PRODUCTION

2011-2020



MILLION TONNES MARKET PULP

13.6

2011-2020



959

2011-2020

MANY IN RURAL AREAS

ADDED VALUE

€ 15 BILLION

2011-2020



MILLION TONNES PAPER & BOARD PRODUCTION

92.1

ROCE<sup>1</sup> 3.2%

2011-2020

EBITDA<sup>2</sup> 11.4%

2011-2020

<sup>1</sup> European Paper Industry's average ROCE is the ratio of Return on Capital Employed. <sup>2</sup> EBITDA: Earnings before interest, taxes, depreciation and amortisation

