

# Key Statistics 2014

EUROPEAN PULP AND PAPER INDUSTRY



# Table of Contents

Introduction	1
CEPI Key Figures	2
From Raw Materials to Paper	4
Pulp	5
Industry Structure	5
Production and Consumption	6
Production and Consumption by Grade	7
Production and Consumption – Global View	8
Exports and Imports	9
Paper & Board	10
Industry Structure	10
Production and Consumption	11
Production and Production Capacity	12
Production and Consumption by Grade	13
Production and Consumption – Global View	14
Exports and Imports	15
Raw Materials Summary	16
Wood	17
Consumption by Species	17
Trade Flows and Wood Origin	18
Paper for Recycling	19
Utilisation by Sector	19
Utilisation by Sector and by Grade	20
Utilisation and Recycling Rate	21
Exports and Imports	22
Non-Fibrous Materials	23
Energy	24
Energy and Electricity Consumption	24
Energy & Environment	25
Key Figures	25
Environmental Impact and Water	26
Social Affairs	27
Employment and Accidents	27
Glossary	28



Scan the code with your smartphone  
and download our key statistics online

# Introduction

Welcome to the latest issue of CEPI's Key Statistics, covering data for 2014. This booklet contains the key statistics necessary to give a clear picture of the performance of the European pulp and paper industry in 2014.

The statistics included in this booklet are a compilation of data received from the National Associations which are CEPI members, under the auspices of CEPI's Statistics Network. Some additional sources, such as Eurostat, have been used where necessary and relevant. Extra statistical information is accessible online to members on CEPI's Members Area website at [www.cepi.org/members/statistics](http://www.cepi.org/members/statistics) and to non-members by subscription<sup>1</sup>.

---

The Confederation of European Paper Industries (CEPI) is a Brussels-based non-profit making organisation founded in 1992, which represents the European pulp and paper industry towards the European Institutions. Through its member associations, CEPI also represents approximately 505 pulp, paper and board producing companies across Europe, ranging from small and medium-sized enterprises to multinationals (counting companies with a presence in more than one CEPI country only once). It represents 93% of the European<sup>2</sup> pulp and paper industry in terms of production. The pulp and paper industry provides 180,000 jobs in Europe directly, and 1.5 million in the value chain. It has a turnover of 75 billion euros and adds 15 billion euros to the EU GDP.

## Members of CEPI in 2014

The National Associations of the 18 following countries are CEPI members: Austria, Belgium, Czech Republic, Finland, France, Germany, Hungary, Italy, The Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, United Kingdom.

### Data quality

Responsibility for the collection and management of statistical data lies with the CEPI statistics department, which is constantly working to improve the quality of the data reported. In order to further increase the reliability and credibility of the data reported, CEPI has commissioned Ernst & Young to issue a limited assurance statement on the data quality rating that CEPI carried out on its core indicators in the statistics report. The limited assurance statement is available at [www.cepi.org/topics/statistics](http://www.cepi.org/topics/statistics)

<sup>1</sup> For more information on statistics, please contact:

*Eric Kilby – Statistics Manager – [e.kilby@cepi.org](mailto:e.kilby@cepi.org)*

*Ariane Crèvecoeur – Statistics Officer – [a.crevecoeur@cepi.org](mailto:a.crevecoeur@cepi.org)*

<sup>2</sup> Europe minus the Russian Federation

# Key Figures

## CEPI Pulp and Paper Industry

	1991	2000	2005	2010	2013	2014	% Change 2014/2013	% Change 2014/2000
<b>Industry Structure</b>								
Number of Companies <sup>1</sup>	1 032	929	831	674	<b>636</b>	<b>628</b>	-1.3	-32.4
Number of Mills	1 570	1 309	1 224	992	<b>941</b>	<b>920</b>	-2.2	-29.7
Pulp	296	233	218	172	<b>163</b>	<b>159</b>	-2.5	-31.8
Paper & Board	1 274	1 076	1 006	820	<b>778</b>	<b>761</b>	-2.2	-29.3
Number of Paper Machines	2 182	1 858	1 725	1 393	<b>1 307</b>	<b>1 283</b>	-1.8	-30.9
Employment	411 113	279 987	246 785	194 894	<b>183 690</b>	<b>181 111</b>	-1.4	-35.3
Turnover <sup>2</sup> (Million Euros)	n.a.	79 388	74 537	76 226	<b>75 337</b>	<b>74 500</b>	-1.1	-6.2
Investments <sup>2</sup> (Million Euros)	n.a.	5 637	5 318	2 728	<b>3 425</b>	<b>3 500</b>	2.2	-37.9
Added Value <sup>2</sup> (Million Euros)	n.a.	24 494	18 154	16 560	<b>16 500</b>	<b>16 000</b>	-3.0	-34.7
<b>Total Pulp<sup>3</sup> ('000 Tonnes)</b>								
Production Capacity	39 584	43 842	47 247	44 189	<b>41 480</b>	<b>40 960</b>	-1.3	-6.6
Operating Rate	85.4%	91.2%	88.1%	87.6%	<b>89.8%</b>	<b>89.2%</b>	-0.6	-1.9
Production	33 807	39 962	41 602	38 695	<b>37 263</b>	<b>36 545</b>	-1.9	-8.6
CEPI Internal Deliveries	n.a.	39 224	40 150	37 045	<b>36 690</b>	<b>35 716</b>	-2.7	-8.9
Consumption*	37 815	46 377	47 492	43 849	<b>41 198</b>	<b>41 051</b>	-0.4	-11.5
<b>Market Pulp ('000 Tonnes)</b>								
Production	9 314	11 423	13 142	12 706	<b>13 352</b>	<b>13 164</b>	-1.4	15.2
Exports to Outside CEPI	n.a.	1 332	2 071	2 567	<b>3 785</b>	<b>3 239</b>	-14.4	143.1
Imports from Outside CEPI	n.a.	7 924	7 961	7 721	<b>7 721</b>	<b>7 745</b>	0.3	-2.3
Consumption	n.a.	18 015	19 032	17 860	<b>17 288</b>	<b>17 670</b>	2.2	-1.9
Exports/Production	n.a.	11.7%	15.8%	20.2%	<b>28.3%</b>	<b>24.6%</b>	-3.7	12.9
Imports/Consumption	n.a.	44.0%	41.8%	43.2%	<b>44.7%</b>	<b>43.8%</b>	-0.8	-0.2
<b>Paper &amp; Board ('000 Tonnes)</b>								
Production Capacity	73 280	97 658	109 801	103 714	<b>101 181</b>	<b>101 026</b>	-0.2	3.4
Operating Rate	88.8%	93.0%	89.5%	91.7%	<b>90.2%</b>	<b>90.1%</b>	-0.1	-2.9
Production	65 052	90 823	98 259	95 065	<b>91 268</b>	<b>91 067</b>	-0.2	0.3
CEPI Internal Deliveries	n.a.	78 796	84 661	80 263	<b>76 343</b>	<b>76 470</b>	0.2	-3.0
Exports to Outside CEPI	n.a.	13 887	17 793	19 164	<b>19 649</b>	<b>19 164</b>	-2.5	38.0
Imports from Outside CEPI	n.a.	6 383	5 903	5 783	<b>4 800</b>	<b>5 177</b>	7.9	-18.9
Consumption*	60 102	82 065	86 369	81 684	<b>76 419</b>	<b>77 080</b>	0.9	-6.1
Exports/Production	n.a.	15.3%	18.1%	20.2%	<b>21.5%</b>	<b>21.0%</b>	-0.5	5.8
Imports/Consumption	n.a.	7.8%	6.8%	7.1%	<b>6.3%</b>	<b>6.7%</b>	0.4	-1.1

	1991	2000	2005	2010	2013	2014	% Change 2014/2013	% Change 2014/2000
<b>Wood ('000 m³)</b>								
Consumption	120 274	148 093	153 380	148 901	<b>147 911</b>	<b>146 696</b>	-0.8	-0.9
Hardwood	30 410	40 048	41 337	38 119	<b>40 533</b>	<b>41 159</b>	1.5	2.8
Softwood	89 863	108 046	112 043	110 782	<b>107 378</b>	<b>105 538</b>	-1.7	-2.3
Imports/Consumption	12.8%	17.1%	19.2%	17.1%	<b>16.4%</b>	<b>16.5%</b>	0.2	-3.1
Domestic/Consumption	87.2%	82.9%	80.8%	82.9%	<b>83.6%</b>	<b>83.5%</b>	-0.2	0.6
<b>Paper for Recycling ('000 Tonnes)</b>								
Collection*	25 452	43 658	53 100	55 917	<b>55 475</b>	<b>55 231</b>	-0.4	26.5
Utilisation	25 360	40 922	46 745	48 122	<b>47 534</b>	<b>47 546</b>	0.0	16.2
Exports to Outside CEPI	n.a.	3 751	7 698	9 592	<b>10 019</b>	<b>9 557</b>	-4.6	154.8
Exports/Collection	n.a.	8.6%	14.5%	17.2%	<b>18.1%</b>	<b>17.3%</b>	-0.8	8.7
Imports from Outside CEPI	n.a.	1 015	1 343	1 796	<b>2 078</b>	<b>1 872</b>	-9.9	84.4
Imports/Utilisation	n.a.	2.5%	2.9%	3.7%	<b>4.4%</b>	<b>3.9%</b>	-0.4	1.5
Utilisation Rate*	39.0%	45.1%	47.6%	50.6%	<b>52.1%</b>	<b>52.2%</b>	0.1	7.2
<b>Recycling Rate in Europe<sup>4</sup></b>								
Recycling Rate*	40.3%	51.8%	61.8%	68.5%	<b>72.0%</b>	<b>71.7%</b>	-0.4	19.9
<b>Non-Fibrous Materials ('000 Tonnes)</b>								
Consumption	9 504	15 545	16 496	16 163	<b>15 434</b>	<b>15 451</b>	0.1	-0.6
<b>Energy and Environment<sup>5</sup></b>								
Fuels Consumption (Tj)	929 863	1 141 232	1 268 995	1 281 746	<b>1 159 470</b>	n.a.		
Biomass Use (%) of Total FC	44.1	49.1	50.1	52.9	<b>57.1</b>	n.a.		
Electricity Consumption (GWh)	86 527	110 424	113 874	113 137	<b>101 528</b>	n.a.		
% of Electricity produced through CHP <sup>6</sup>	88.0	90.4	94.4	95.4	<b>96.4</b>	n.a.		
CO <sub>2</sub> Emissions (Mega Tonnes)	39.05	41.94	42.85	37.45	<b>33.20</b>	<b>31.64</b>	-4.7	-24.6
Specific CO <sub>2</sub> Emissions (kt CO <sub>2</sub> /kt of product)	0.54	0.42	0.38	0.35	<b>0.32</b>	<b>0.30</b>	-4.3	-28.6

\*See glossary on page 28

<sup>1</sup> 505 groups or corporations in 2014, when considering the entities established in one or several countries that are not bound together by legal and/or financial links.

<sup>2</sup> 2013 and 2014 figures are based on members' data, Eurostat and estimates for some countries.

<sup>3</sup> Total Pulp = Market Pulp + Integrated Pulp

<sup>4</sup> EU-28 countries plus Norway and Switzerland.

<sup>5</sup> Hungary, Romania and Slovenia are not included in Energy data, except for CO<sub>2</sub> emissions.

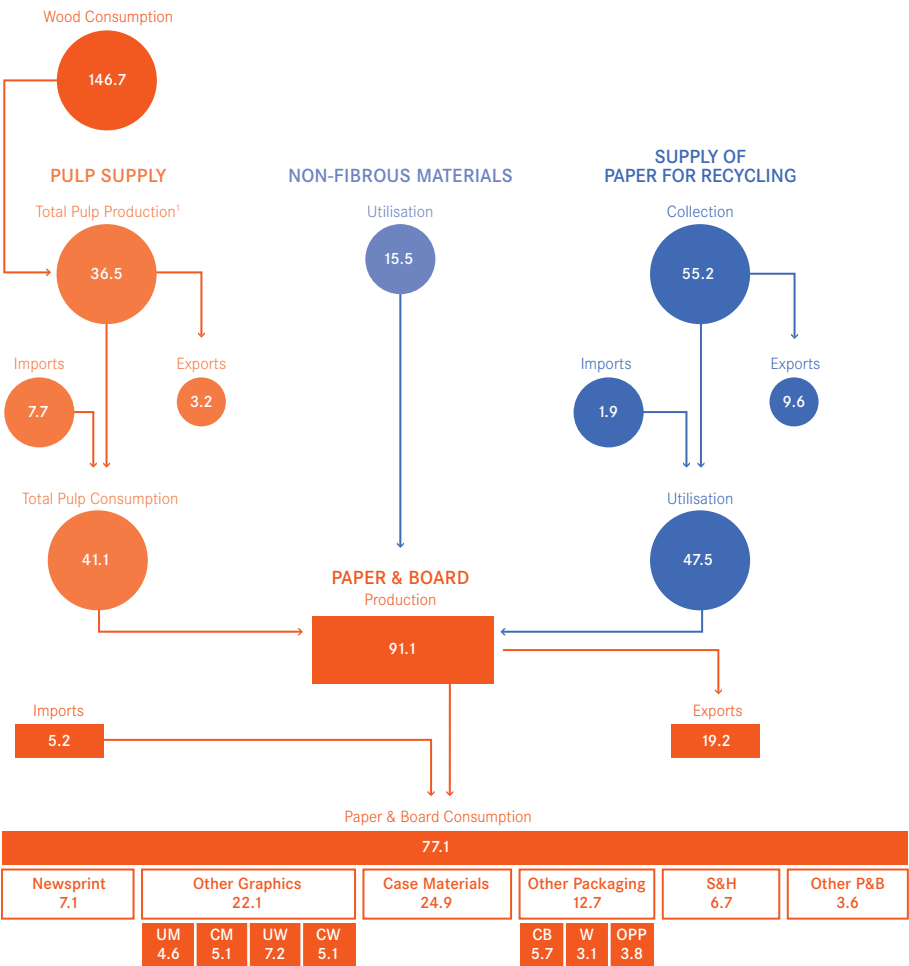
<sup>6</sup> Compared to total on-site electricity generation.

# From Raw Materials to Paper

## CEPI Pulp and Paper Industry in 2014

### WOOD SUPPLY (Million m<sup>3</sup>)

Figures in Million Tonnes

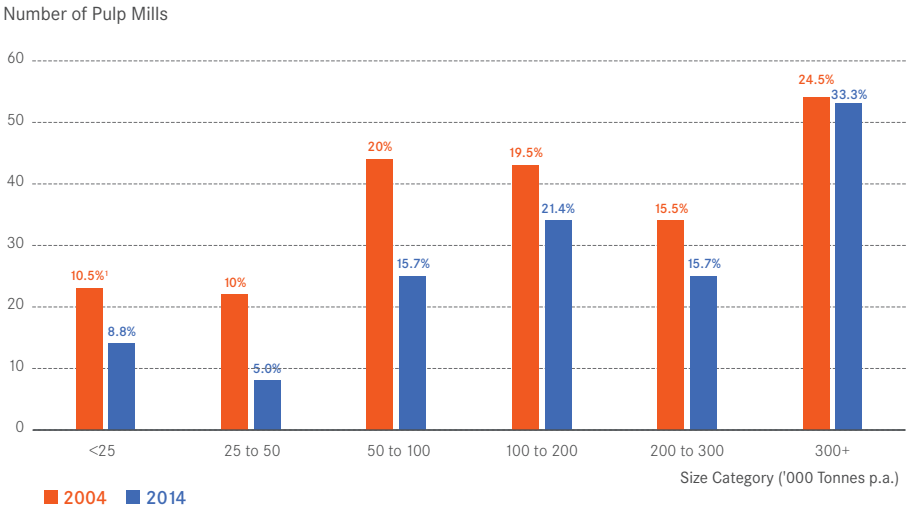


Paper & Board Consumption = Production + Imports from outside CEPI - Exports to outside CEPI  
UM = Uncoated Mechanical - CM = Coated Mechanical - UW = Uncoated Woodfree - CW = Coated Woodfree  
CB = Carton Board - W = Wrappings - OPP = Other Paper & Board for Packaging  
S&H = Sanitary and Household

<sup>1</sup> of which Integrated Pulp 23.4 Million Tonnes

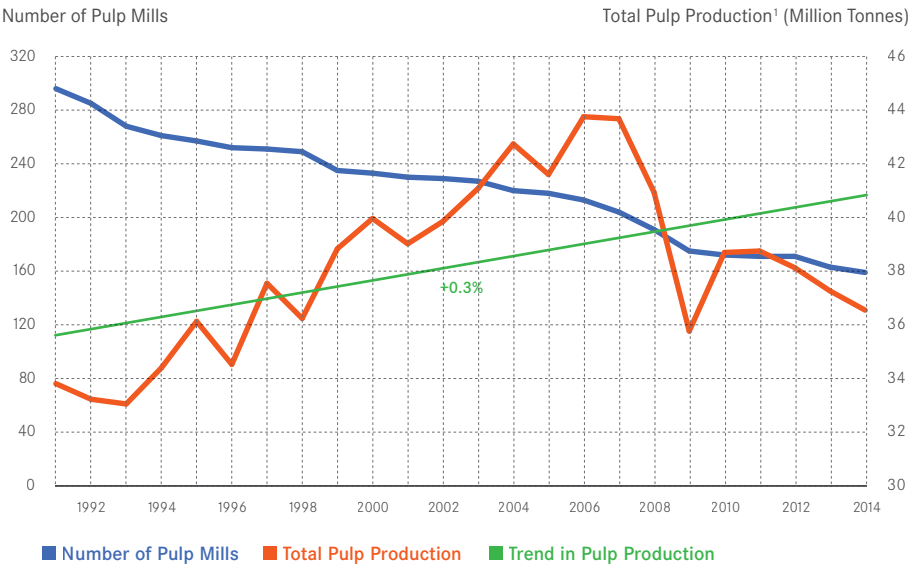
# Pulp – Industry Structure

## Number of CEPI Pulp Mills by Volume in 2004 and 2014



<sup>1</sup> Total Pulp = Market Pulp + Integrated Pulp

## Number of CEPI Pulp Mills and Total Pulp Production <sup>1</sup>



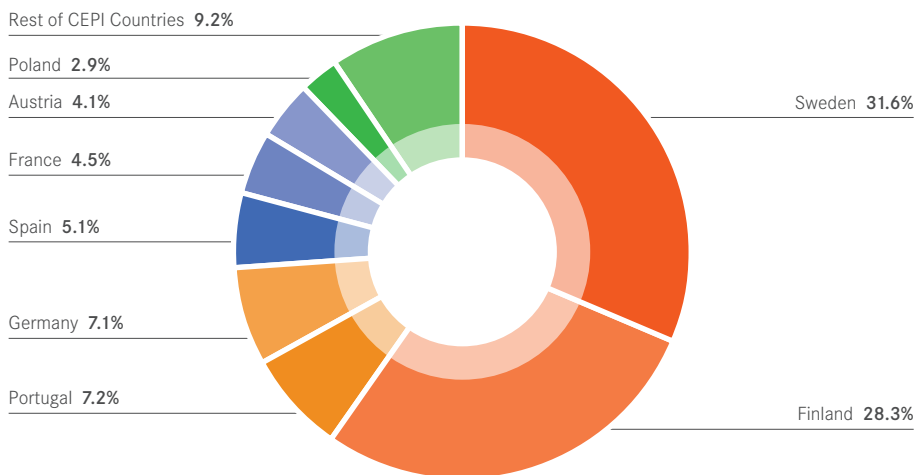
<sup>1</sup> Total Pulp = Market Pulp + Integrated Pulp

# Pulp – Production and Consumption

## CEPI Total Pulp<sup>1</sup> Production and Consumption

'000 Tonnes	PRODUCTION			CONSUMPTION		
	2013	2014	% Change 2014/2013	2013	2014	% Change 2014/2013
<b>Mechanical &amp; Semi-Chemical</b>	10 360	10 109	-2.4	10 499	10 186	-3.0
Sulphite Pulp	1 683	1 696	0.8	1 394	1 428	2.4
Sulphate Pulp	25 043	24 568	-1.9	29 018	29 076	0.2
<b>Chemical Pulp</b>	26 726	26 264	-1.7	30 412	30 504	0.3
<b>Total Woodpulp</b>	37 087	36 373	-1.9	40 911	40 690	-0.5
<b>Other Pulp</b>	176	172	-2.4	288	361	25.5
<b>Total Pulp<sup>1</sup></b>	<b>37 263</b>	<b>36 545</b>	<b>-1.9</b>	<b>41 198</b>	<b>41 051</b>	<b>-0.4</b>

## CEPI Total Pulp<sup>1</sup> Production by Country in 2014



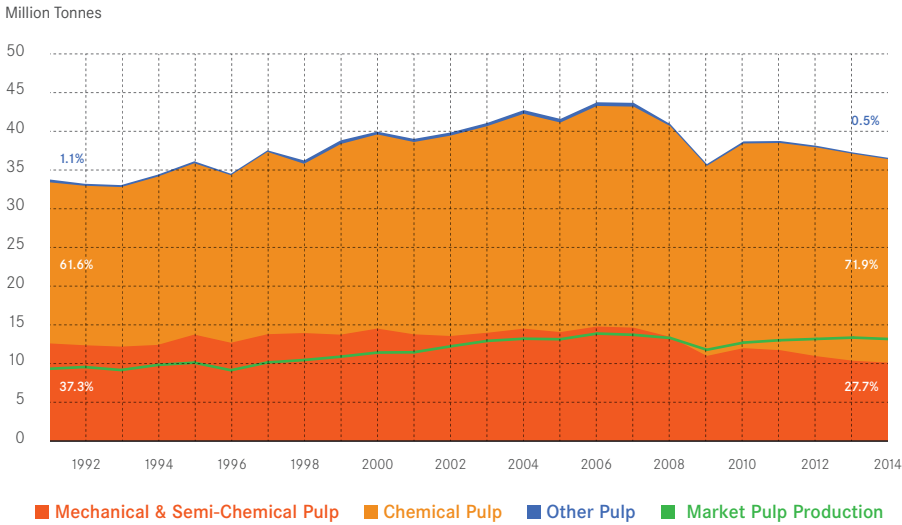
Total Pulp Production: 36.5 Million Tonnes

<sup>1</sup> Total Pulp = Market Pulp + Integrated Pulp

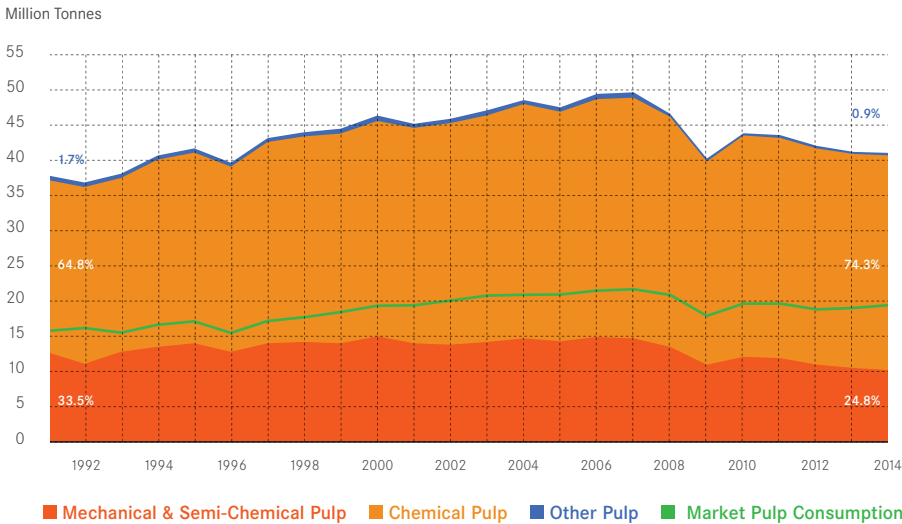


# Pulp – Production and Consumption by Grade

## CEPI Total Pulp<sup>1</sup> Production by Grade and Market Pulp Production



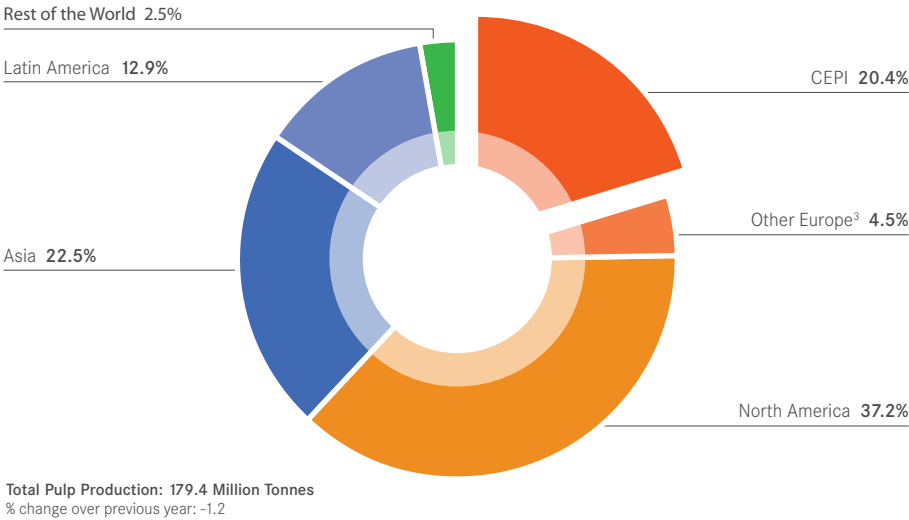
## CEPI Total Pulp<sup>1</sup> Consumption by Grade and Market Pulp Consumption



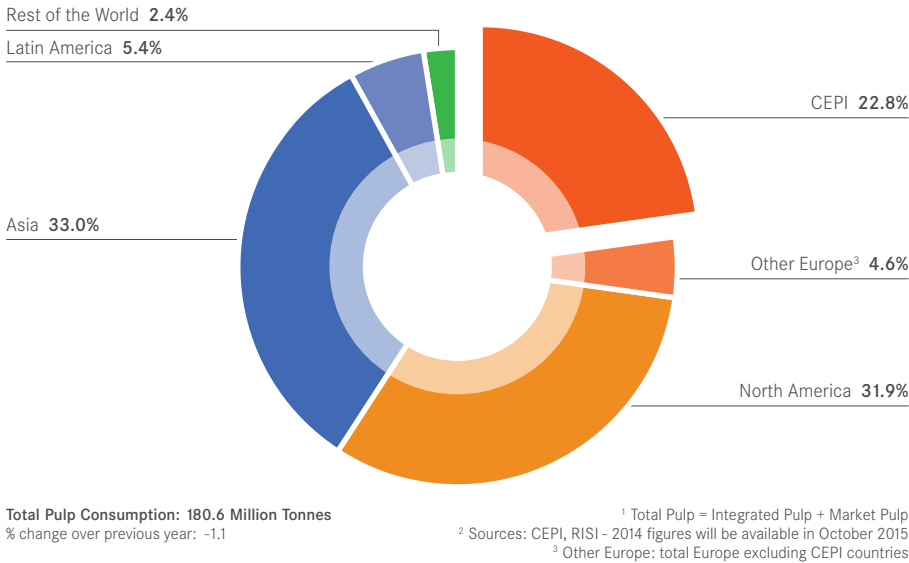
<sup>1</sup> Total Pulp = Market Pulp + Integrated Pulp

# Pulp – Production and Consumption – Global View

## World Total Pulp<sup>1</sup> Production by Region in 2013<sup>2</sup>



## World Total Pulp<sup>1</sup> Consumption by Region in 2013<sup>2</sup>



# Pulp – Exports and Imports

## CEPI Exports of Market Pulp to Other Regions

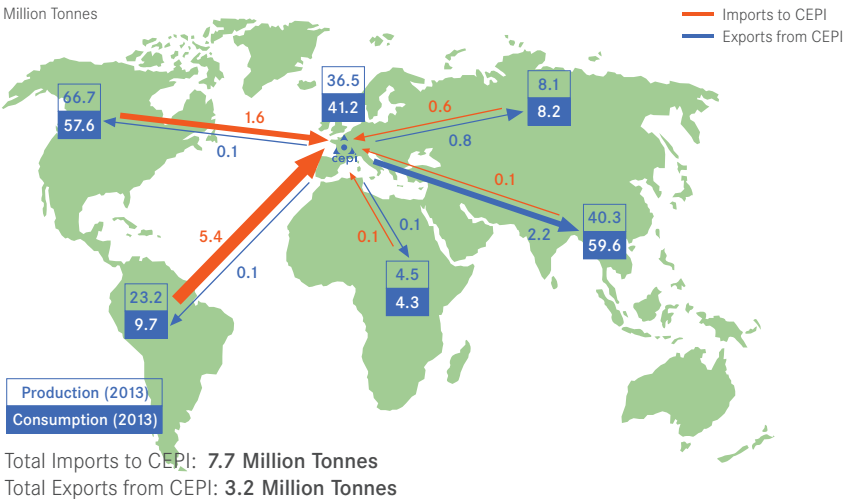
'000 Tonnes	2000	2005	2010	2013	2014	% Share of Total	% Change 2014/2013
Other Europe <sup>1</sup>	724	674	719	807	<b>791</b>	24.4	-2.0
North America	104	187	62	60	<b>46</b>	1.4	-23.7
Latin America	6	20	49	73	<b>65</b>	2.0	-11.3
Asia	412	1 076	1 595	2 689	<b>2 200</b>	67.9	-18.2
Rest of the World	86	114	142	156	<b>137</b>	4.2	-12.4
<b>Total</b>	<b>1 332</b>	<b>2 071</b>	<b>2 567</b>	<b>3 785</b>	<b>3 239</b>	<b>100.0</b>	<b>-14.4</b>

## CEPI Imports of Market Pulp from Other Regions

'000 Tonnes	2000	2005	2010	2013	2014	% Share of Total	% Change 2014/2013
Other Europe <sup>1</sup>	657	615	480	638	<b>608</b>	7.8	-4.7
North America	4 623	3 891	2 292	1 965	<b>1 578</b>	20.4	-19.7
Latin America	1 916	2 825	4 733	4 972	<b>5 378</b>	69.4	8.2
Asia	272	197	134	69	<b>97</b>	1.3	40.2
Rest of the World	456	433	81	77	<b>83</b>	1.1	8.9
<b>Total</b>	<b>7 924</b>	<b>7 961</b>	<b>7 721</b>	<b>7 721</b>	<b>7 745</b>	<b>100.0</b>	<b>0.3</b>

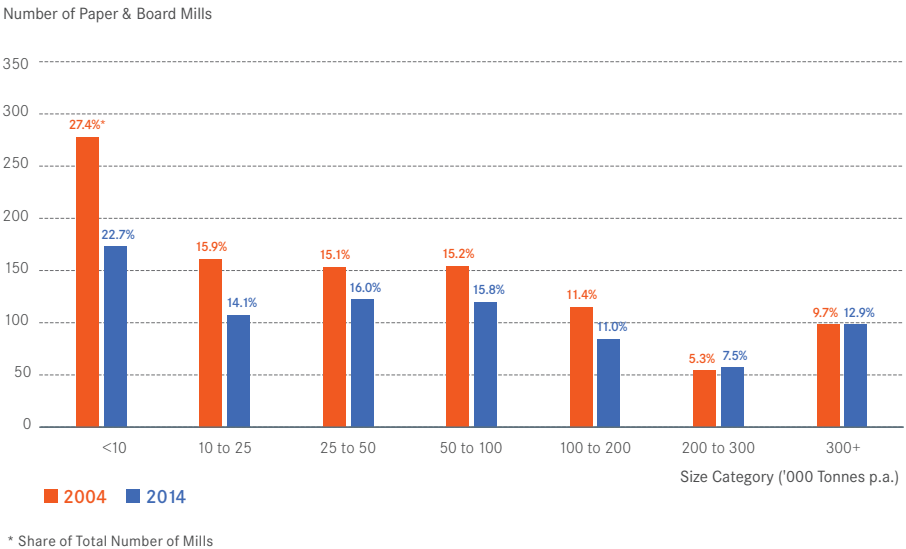
<sup>1</sup> Other Europe: total Europe excluding CEPI countries

## CEPI Trade Flows of Market Pulp in 2014

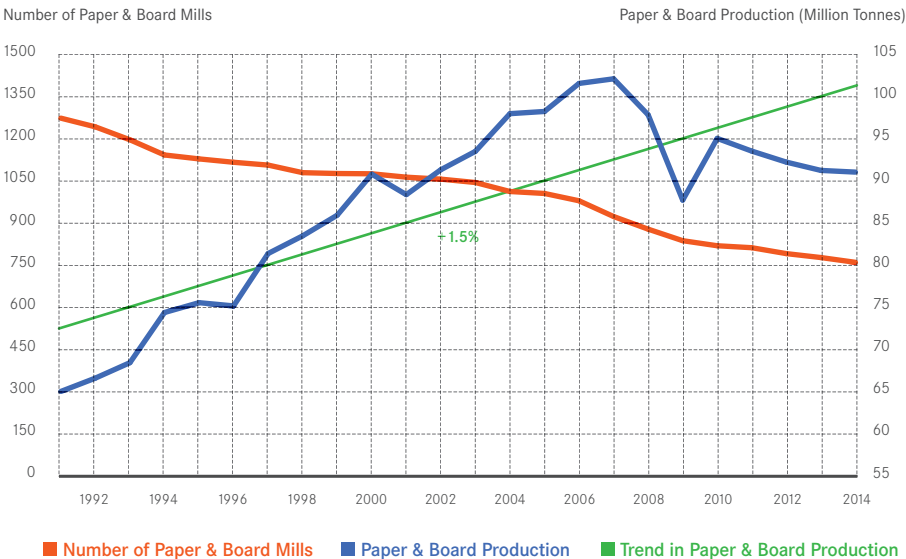


# Paper & Board – Industry Structure

## Number of CEPI Paper & Board Mills by Volume in 2004 and 2014



## Number of CEPI Paper & Board Mills and Paper & Board Production

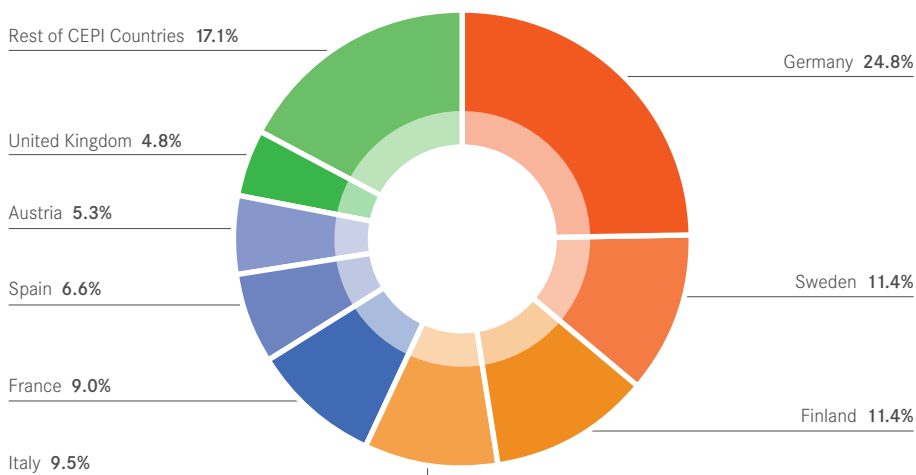


# Paper & Board – Production and Consumption

## CEPI Paper & Board Production and Consumption

'000 Tonnes	PRODUCTION			CONSUMPTION		
	2013	2014	% Change 2014/2013	2013	2014	% Change 2014/2013
<b>Newsprint</b>	8 157	7 594	-6.9	7 255	7 061	-2.7
Uncoated Mechanical	5 871	5 634	-4.0	4 843	4 646	-4.1
Coated Mechanical	7 439	7 050	-5.2	5 172	5 143	-0.5
Uncoated Woodfree	8 957	9 108	1.7	7 175	7 247	1.0
Coated Woodfree	7 667	7 536	-1.7	5 163	5 083	-1.5
Other Graphic Papers	29 934	29 328	-2.0	22 353	22 119	-1.0
<b>Total Graphic Papers</b>	<b>38 091</b>	<b>36 922</b>	<b>-3.1</b>	<b>29 608</b>	<b>29 180</b>	<b>-1.4</b>
<b>Sanitary and Household</b>	<b>6 972</b>	<b>7 001</b>	<b>0.4</b>	<b>6 700</b>	<b>6 702</b>	<b>0.0</b>
<b>Case Materials</b>	<b>25 633</b>	<b>26 204</b>	<b>2.2</b>	<b>24 167</b>	<b>24 879</b>	<b>2.9</b>
<b>Carton Board</b>	<b>8 588</b>	<b>8 546</b>	<b>-0.5</b>	<b>5 658</b>	<b>5 721</b>	<b>1.1</b>
<b>Wrappings</b>	<b>4 021</b>	<b>4 235</b>	<b>5.3</b>	<b>2 901</b>	<b>3 123</b>	<b>7.7</b>
Other Paper & Board for Packaging	4 183	4 267	2.0	3 873	3 833	-1.0
<b>Total Packaging Papers</b>	<b>42 424</b>	<b>43 251</b>	<b>1.9</b>	<b>36 599</b>	<b>37 556</b>	<b>2.6</b>
<b>Other Paper &amp; Board</b>	<b>3 780</b>	<b>3 892</b>	<b>3.0</b>	<b>3 512</b>	<b>3 642</b>	<b>3.7</b>
<b>Total Paper &amp; Board</b>	<b>91 268</b>	<b>91 067</b>	<b>-0.2</b>	<b>76 419</b>	<b>77 080</b>	<b>0.9</b>

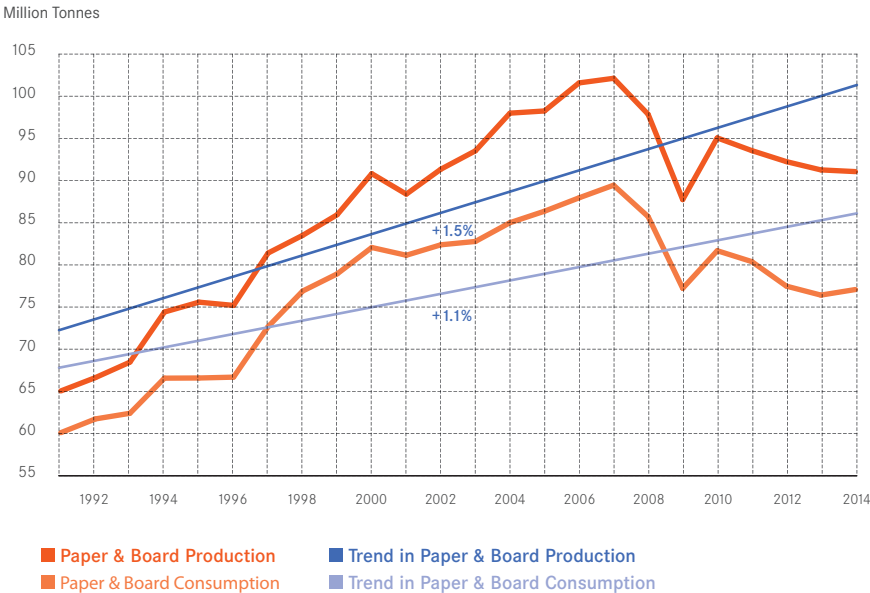
## CEPI Paper & Board Production by Country in 2014



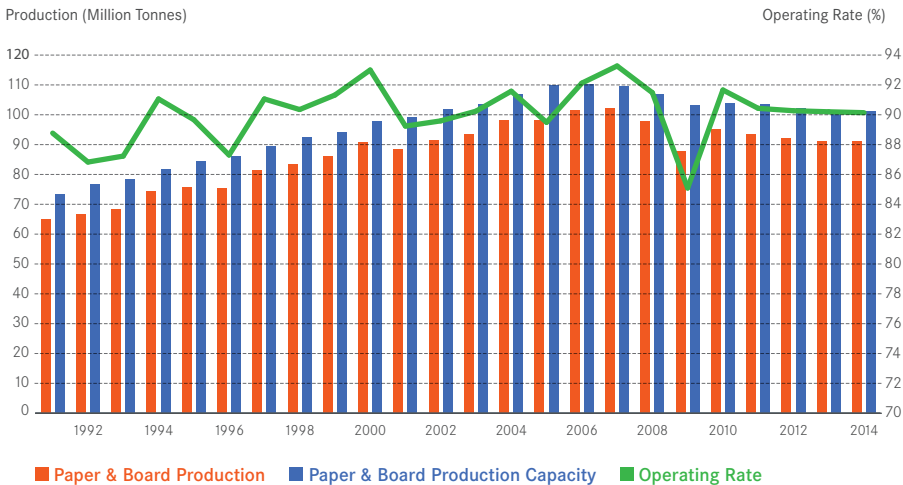
Total Paper & Board Production: 91.1 Million Tonnes

# Paper & Board – Production and Production Capacity

## CEPI Paper & Board Production and Consumption

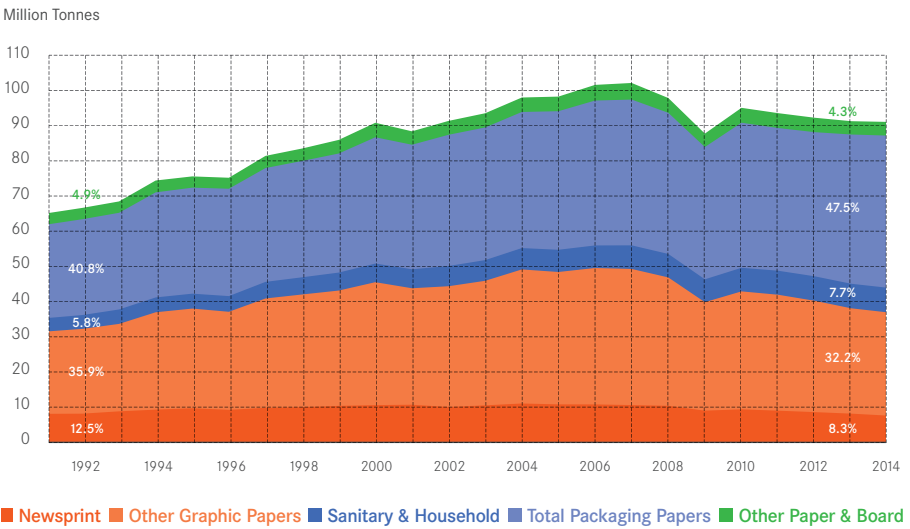


## CEPI Paper & Board Production and Capacity

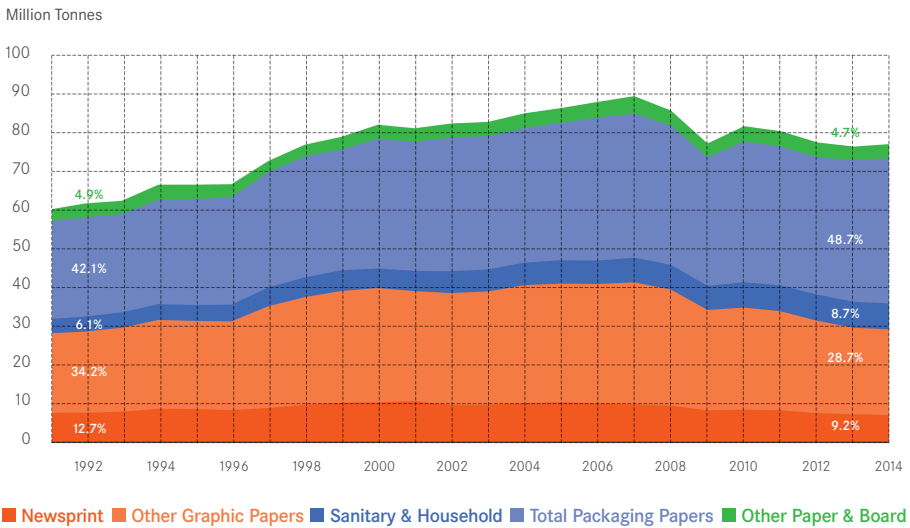


# Paper & Board – Production and Consumption by Grade

## CEPI Paper & Board Production by Grade

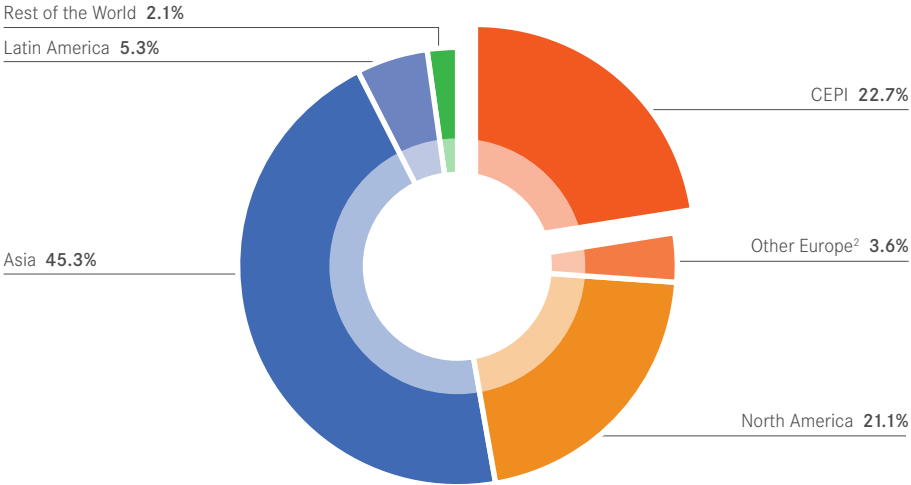


## CEPI Paper & Board Consumption by Grade



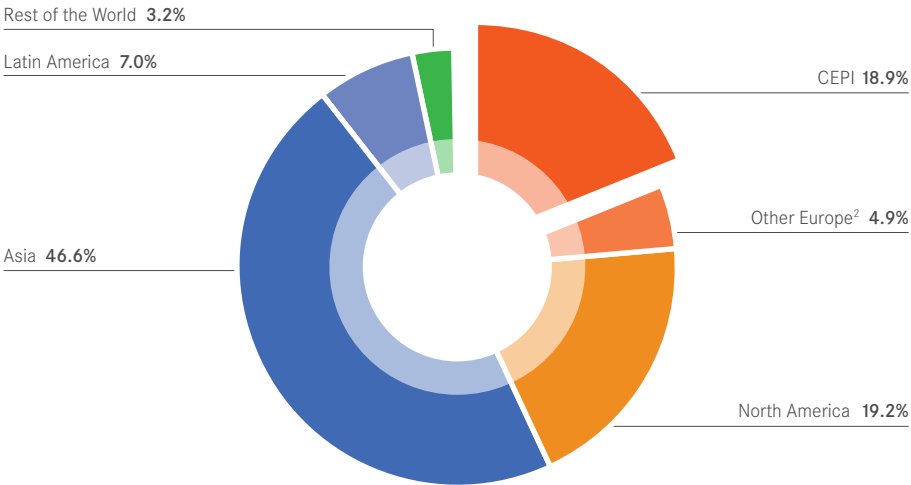
# Paper & Board – Production and Consumption Global View

## Paper & Board Production by Region in 2013<sup>1</sup>



Total Paper & Board Production: 402.6 Million Tonnes  
% change over previous year: 0.8

## Paper & Board Consumption by Region in 2013<sup>1</sup>



Total Paper & Board Consumption: 403.6 Million Tonnes  
% change over previous year: 0.7

<sup>1</sup> Sources: CEPI, RISI - 2014 figures will be available in October 2015  
<sup>2</sup> Other Europe: total Europe excluding CEPI countries



# Paper & Board – Exports and Imports

## CEPI Exports of Paper & Board to Other Regions

'000 Tonnes	2000	2005	2010	2013	2014	% Share of Total	% Change 2014/2013
Other Europe <sup>1</sup>	6 090	6 825	7 349	7 428	<b>7 188</b>	37.5	-3.2
North America	2 283	2 802	2 055	2 000	<b>1 957</b>	10.2	-2.2
Latin America	874	1 194	1 879	1 863	<b>1 774</b>	9.3	-4.8
Asia	2 933	4 742	5 099	5 267	<b>5 193</b>	27.1	-1.4
Rest of the World	1 707	2 229	2 783	3 091	<b>3 053</b>	15.9	-1.2
<b>Total</b>	<b>13 887</b>	<b>17 793</b>	<b>19 164</b>	<b>19 649</b>	<b>19 164</b>	<b>100.0</b>	<b>-2.5</b>

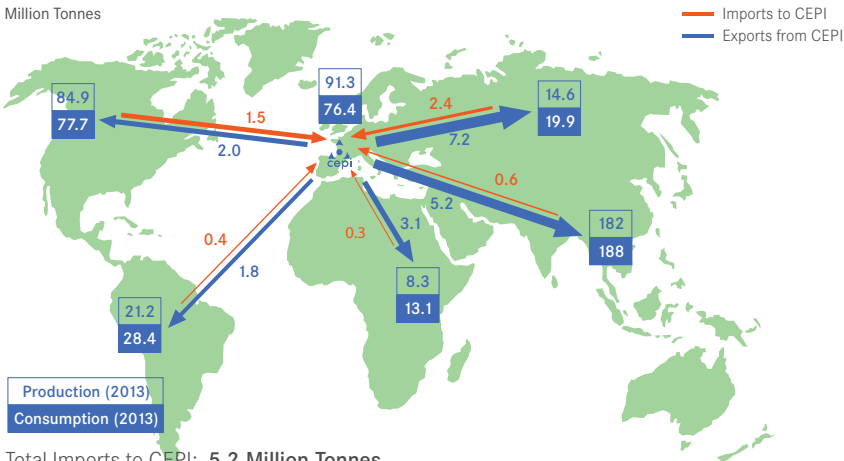
## CEPI Imports of Paper & Board from Other Regions

'000 Tonnes	2000	2005	2010	2013	2014	% Share of Total	% Change 2014/2013
Other Europe <sup>1</sup>	3 318	2 727	2 525	2 165	<b>2 417</b>	46.7	11.6
North America	2 191	1 915	1 829	1 440	<b>1 507</b>	29.1	4.6
Latin America	198	498	498	387	<b>359</b>	6.9	-7.2
Asia	332	394	625	540	<b>581</b>	11.2	7.5
Rest of the World	344	369	307	268	<b>313</b>	6.0	16.8
<b>Total</b>	<b>6 383</b>	<b>5 903</b>	<b>5 783</b>	<b>4 800</b>	<b>5 177</b>	<b>100.0</b>	<b>7.9</b>

<sup>1</sup> Other Europe: total Europe excluding CEPI countries

## CEPI Trade Flows of Paper & Board in 2014

Million Tonnes



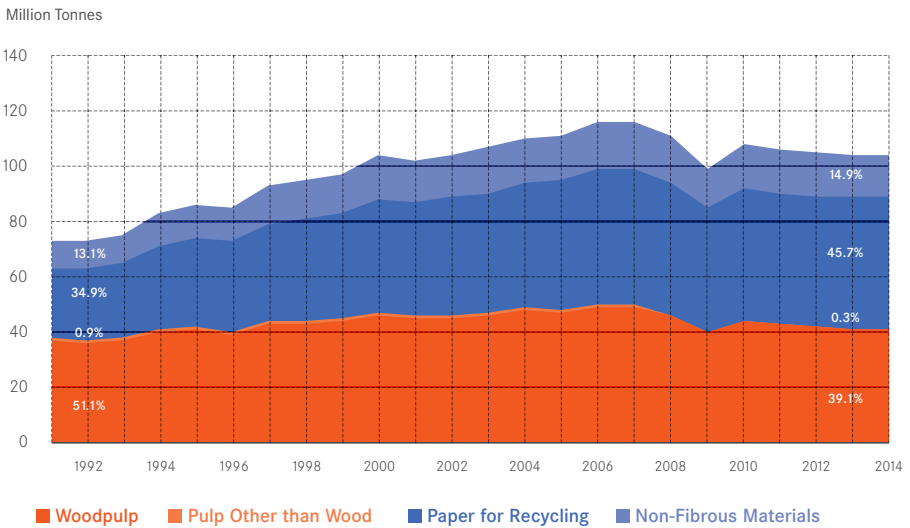
Total Imports to CEPI: 5.2 Million Tonnes  
Total Exports from CEPI: 19.2 Million Tonnes

# Raw Materials Summary

## CEPI Raw Materials Consumption

'000 Tonnes	1991	2000	2005	2010	2013	2014	% Share of Total	% Change 2014/2013
Woodpulp	37 162	45 619	46 861	43 533	40 911	40 690	39.1	-0.5
Pulp other than Wood	653	758	631	316	288	361	0.3	25.5
Paper for Recycling	25 360	40 922	46 745	48 122	47 534	47 546	45.7	0.0
Non-Fibrous Materials	9 504	15 545	16 496	16 163	15 434	15 451	14.8	0.1
<b>Total Raw Materials</b>	<b>72 679</b>	<b>102 844</b>	<b>110 733</b>	<b>108 134</b>	<b>104 166</b>	<b>104 047</b>	<b>100.0</b>	<b>-0.1</b>

## CEPI Raw Materials Consumption



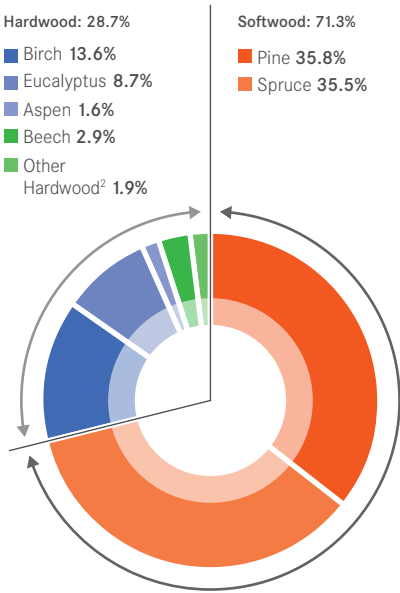
# Wood – Consumption by Species

## CEPI Wood Consumption

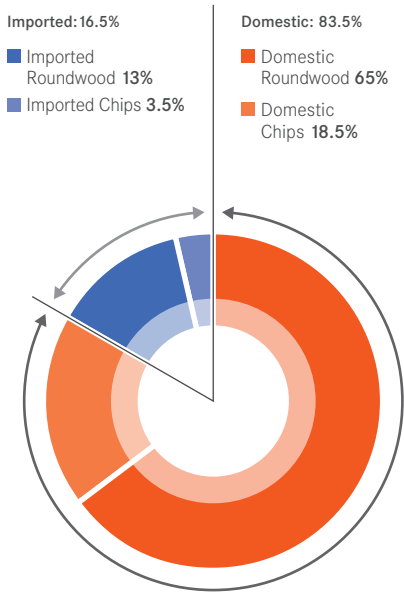
'000 m³	1991	2000	2005	2010	2013	2014	% Share of Total	% Change 2014/2013
Softwood Roundwood	65 240	72 372	74 415	76 641	73 723	72 510	49.4	-1.6
Softwood Chips	24 623	35 673	37 628	34 141	33 655	33 028	22.5	-1.9
<b>Total Softwood</b>	<b>89 863</b>	<b>108 046</b>	<b>112 043</b>	<b>110 782</b>	<b>107 378</b>	<b>105 538</b>	<b>71.9</b>	<b>-1.7</b>
Hardwood Roundwood	28 963	38 542	39 914	36 635	38 429	38 603	26.3	0.5
Hardwood Chips	1 447	1 505	1 423	1 483	2 105	2 556	1.7	21.4
<b>Total Hardwood</b>	<b>30 410</b>	<b>40 048</b>	<b>41 337</b>	<b>38 119</b>	<b>40 533</b>	<b>41 159</b>	<b>28.1</b>	<b>1.5</b>
<b>Total Roundwood</b>	<b>94 204</b>	<b>110 915</b>	<b>114 329</b>	<b>113 276</b>	<b>112 152</b>	<b>111 113</b>	<b>75.7</b>	<b>-0.9</b>
<b>Total Chips</b>	<b>26 070</b>	<b>37 179</b>	<b>39 051</b>	<b>35 625</b>	<b>35 760</b>	<b>35 583</b>	<b>24.3</b>	<b>-0.5</b>
<b>Total Wood</b>	<b>120 274</b>	<b>148 093</b>	<b>153 380</b>	<b>148 901</b>	<b>147 911</b>	<b>146 696</b>	<b>100.0</b>	<b>-0.8</b>

## Share in CEPI Wood Consumption in 2014

### By Species¹



### By Origin

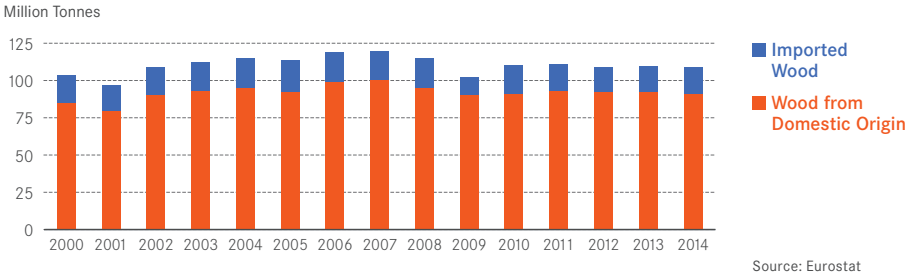


Total Wood Consumption: 146.7 Million m³

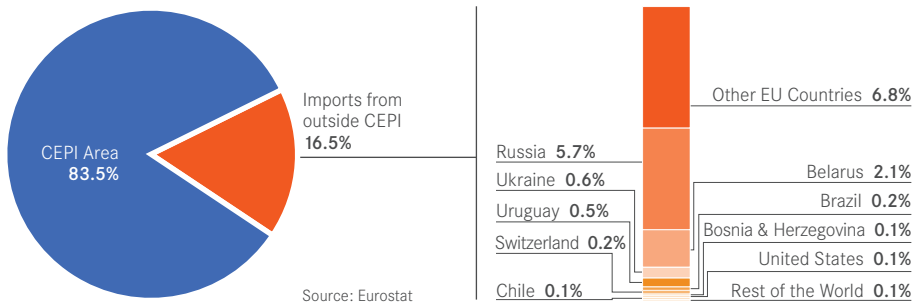
¹ Based on a sample representing 90% of total CEPI consumption  
 ² Other Hardwood = hornbeam, ash, maple, accacia, quercus-cerris, oak, alder, poplar, willow, chesnut.

# Wood – Trade Flows and Wood Origin

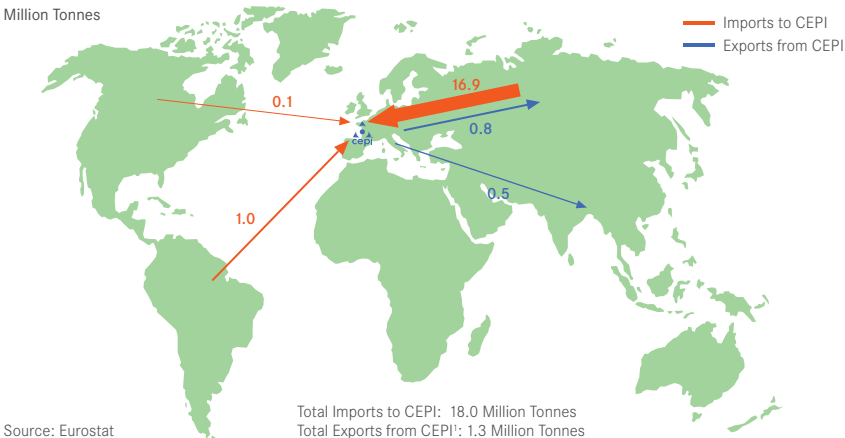
## CEPI Wood Consumption by Origin



## CEPI Wood Consumption Origin in 2014



## CEPI Trade Flows of Wood in 2014



<sup>1</sup> Norway is not included in exports

# Paper for Recycling – Utilisation by Sector

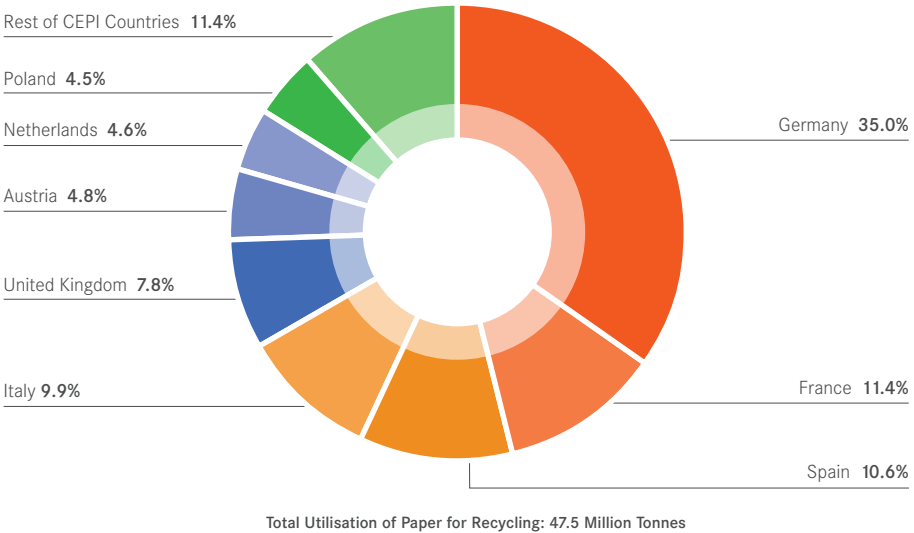
## CEPI Utilisation of Paper for Recycling by Sector in 2014

'000 Tonnes Paper Sector	GRADES OF PAPER FOR RECYCLING							
	A Mixed Grades	B Corrugated and Kraft	C Newspapers & Magazines	D High Grades	E Total Use of Paper for Recycling	F Utilisation by Sector¹ %	G Total P&B Production	E:G Utilisation Rate² %
Newsprint	25	0	7 163	55	7 244	15.2	7 594	95.4
Other Graphic Papers	154	18	2 766	706	3 643	7.7	29 328	12.4
<b>Total Graphic Papers</b>	<b>179</b>	<b>18</b>	<b>9 929</b>	<b>761</b>	<b>10 887</b>	<b>22.9</b>	<b>36 922</b>	<b>29.5</b>
Case Materials	4 829	18 551	265	835	24 480	51.5	26 204	93.4
Carton Board	1 725	533	157	855	3 270	6.9	8 546	38.3
Wrappings, Other Pack.	1 858	1 932	150	473	4 413	9.3	8 501	51.9
<b>Total Packaging Papers</b>	<b>8 412</b>	<b>21 017</b>	<b>572</b>	<b>2 163</b>	<b>32 163</b>	<b>67.6</b>	<b>43 251</b>	<b>74.4</b>
Sanitary and Household	298	103	582	1 916	2 899	6.1	7 001	41.4
Other Paper & Board	255	1 049	126	166	1 597	3.4	3 892	41.0
<b>Total Paper &amp; Board</b>	<b>9 144</b>	<b>22 187</b>	<b>11 208</b>	<b>5 006</b>	<b>47 546</b>	<b>100.0</b>	<b>91 067</b>	<b>52.2</b>
<b>Share of Total</b>	<b>19.2%</b>	<b>46.7%</b>	<b>23.6%</b>	<b>10.5%</b>	<b>100.0%</b>			

¹ Utilisation by sector: total use of paper for recycling in a sector as % of the total paper for recycling used by the industry

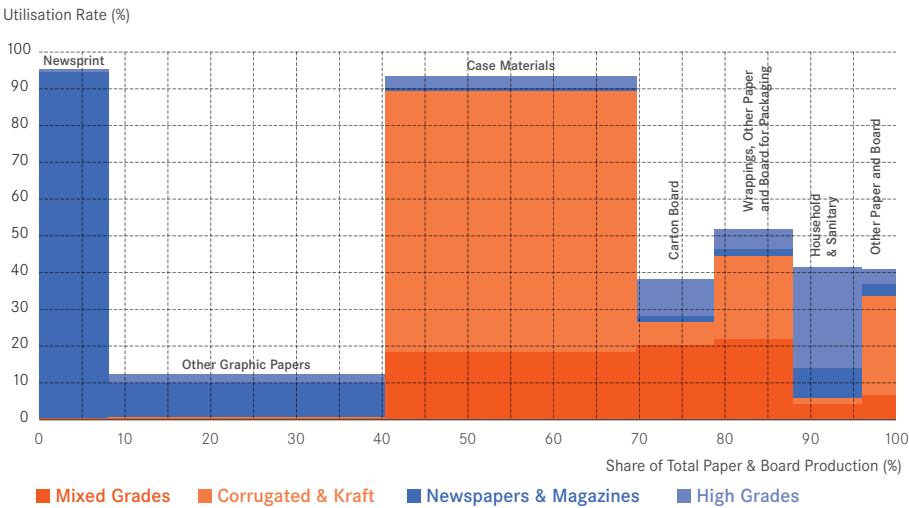
² Utilisation rate: use of paper for recycling in a sector as % of total paper & board production in that sector

## CEPI Utilisation of Paper for Recycling by Country in 2014



# Paper for Recycling – Utilisation by Sector and by Grade

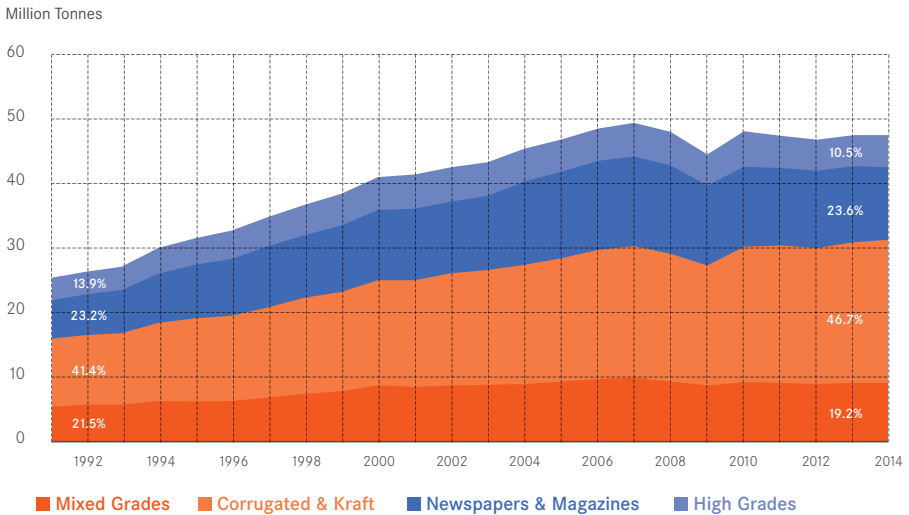
## CEPI Utilisation of Paper for Recycling by Sector in 2014



For instance: case materials represent 29% of total paper and board production, have an utilisation rate of 93% and use 51.5% of total paper for recycling volumes used by the industry.

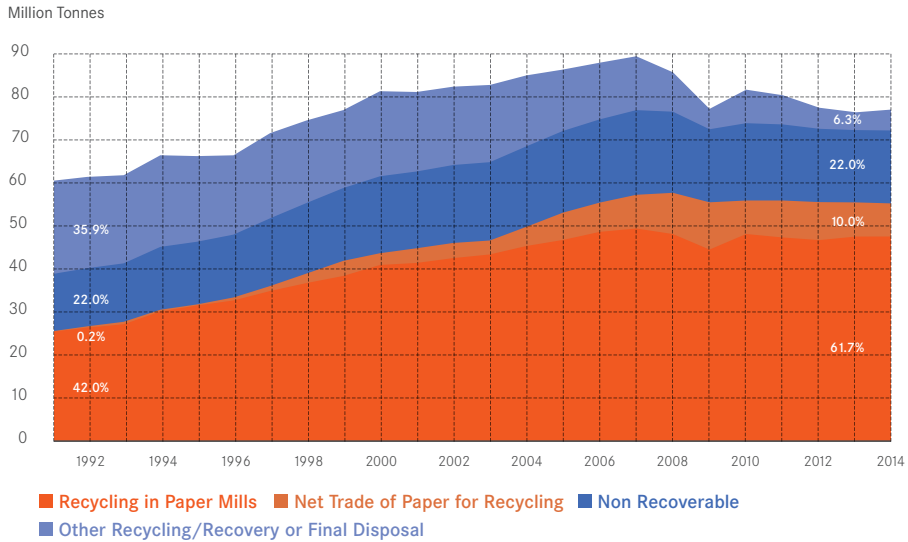
**Important Note:** Paper for recycling is composed of fibres but also unusable materials – non-paper components as well as paper and board detrimental to production. The share of unusable materials depends on the actual sorting and collection of used paper. It varies according to grades of paper for recycling and countries. The volume of recycled fibres actually used to produce new paper is therefore lower than the volume of paper for recycling considered. The utilisation rate compares utilisation of paper for recycling to paper & board production.

## CEPI Utilisation of Paper for Recycling by Grade

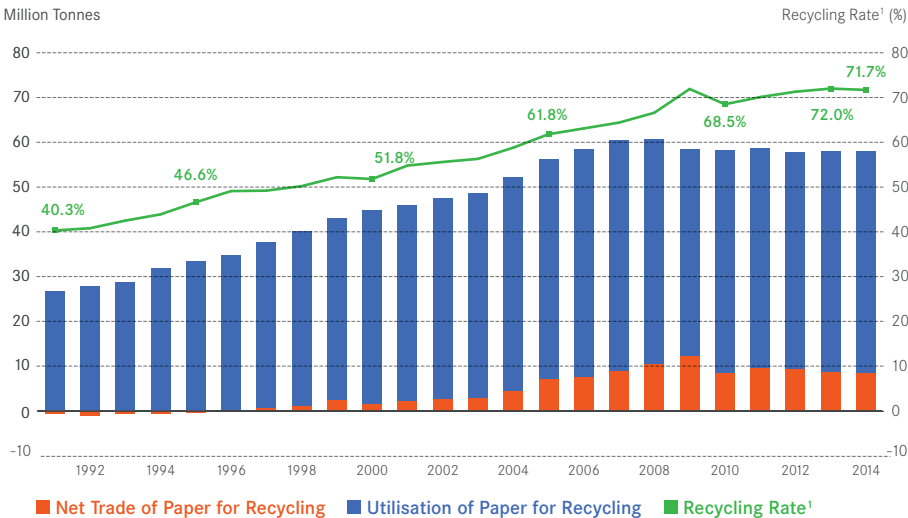


# Paper for Recycling – Utilisation and Recycling Rate

## Evolution of CEPI Paper & Board Consumption and Recycling



## Utilisation, Net Trade and Recycling Rate<sup>1</sup> of Paper for Recycling in Europe<sup>2</sup>



<sup>1</sup> Recycling Rate = "Utilisation of Paper for Recycling + Net Trade of Paper for Recycling ", compared to Paper & Board Consumption

<sup>2</sup> EU-28 countries plus Norway and Switzerland

# Paper for Recycling – Exports and Imports

## CEPI Exports of Paper for Recycling to Other Regions

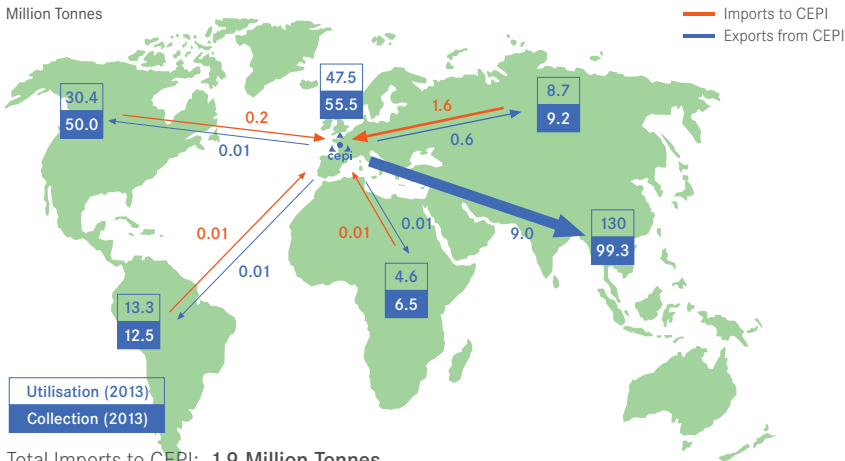
'000 Tonnes	2000	2005	2010	2013	2014	% Share of Total	% Change 2014/2013
Other Europe <sup>1</sup>	676	444	373	574	575	6.0	0.2
North America	47	22	27	4	5	0.1	15.1
Latin America	7	5	21	11	13	0.1	14.0
Asia	2 894	7 087	9 157	9 393	8 952	93.7	-4.7
Rest of the World	127	140	14	37	13	0.1	-64.3
Total	3 751	7 698	9 592	10 019	9 557	100.0	-4.6

## CEPI Imports of Paper for Recycling from Other Regions

'000 Tonnes	2000	2005	2010	2013	2014	% Share of Total	% Change 2014/2013
Other Europe <sup>1</sup>	735	1 131	1 596	1 806	1 626	86.9	-10.0
North America	264	199	184	217	216	11.5	-0.7
Latin America	0	4	3	13	9	0.5	-31.9
Asia	9	0	6	25	7	0.4	-71.5
Rest of the World	7	9	8	17	14	0.8	-15.9
Total	1 015	1 343	1 796	2 078	1 872	100.0	-9.9

<sup>1</sup> Other Europe: total Europe excluding CEPI countries

## CEPI Trade Flows of Paper for Recycling in 2014



Total Imports to CEPI: 1.9 Million Tonnes  
Total Exports from CEPI: 9.6 Million Tonnes

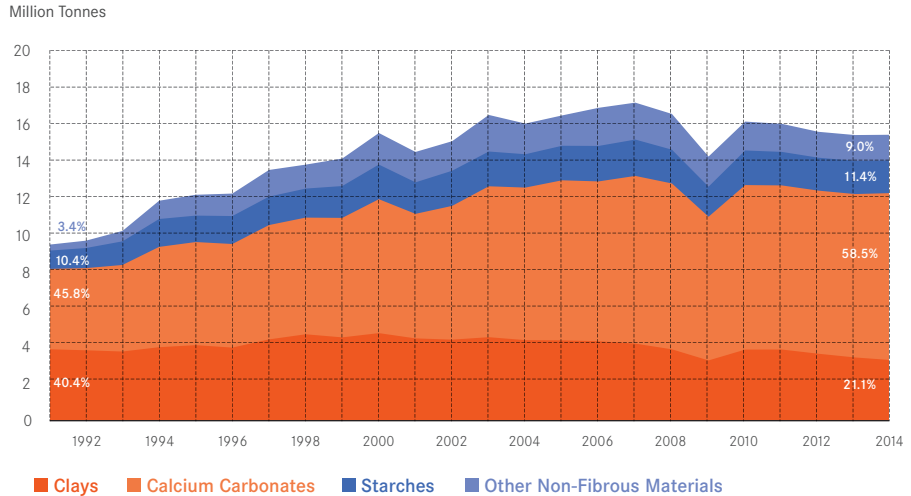


# Non-Fibrous Materials

## CEPI Non-Fibrous Materials Consumption

'000 Tonnes	1991	2000	2005	2010	2013	2014	% Share of Total	% Change 2014/2013
Clays (coating and filler)	3 842	4 716	4 323	3 825	3 399	<b>3 255</b>	21.1	-4.3
Calcium Carbonates (coating and filler)	4 349	7 247	8 662	8 903	8 842	<b>9 040</b>	58.5	2.2
Starches (native and modified)	989	1 874	1 869	1 871	1 800	<b>1 761</b>	11.4	-2.2
Other Non-Fibrous Materials	324	1 708	1 642	1 564	1 393	<b>1 395</b>	9.0	0.2
<b>Non-Fibrous Materials</b>	<b>9 504</b>	<b>15 545</b>	<b>16 496</b>	<b>16 163</b>	<b>15 434</b>	<b>15 451</b>	<b>100.0</b>	<b>0.1</b>

## CEPI Non-Fibrous Materials Consumption



# Energy – Energy and Electricity Consumption

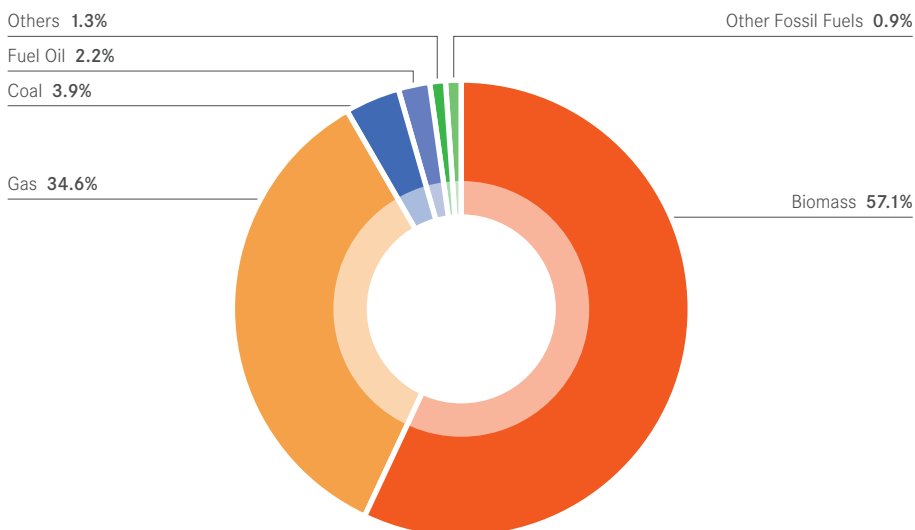
## CEPI Primary Energy and Electricity Consumption<sup>1</sup>

	1991	2000	2005	2010	2012	2013	Share of Total %	% Change 2013/2012
<b>Fuels Consumption (TJ)</b>	<b>929 863</b>	<b>1 141 232</b>	<b>1 268 995</b>	<b>1 281 746</b>	<b>1 194 764</b>	<b>1 159 470</b>	<b>100.0</b>	<b>-3.0</b>
of which:								
Gas (TJ)	259 593	404 946	489 425	489 565	434 531	401 679	34.6	-7.6
Fuel Oil (TJ)	129 461	90 914	67 454	37 856	27 305	25 251	2.2	-7.5
Coal (TJ)	113 867	59 304	48 314	53 280	42 958	45 297	3.9	5.4
Other Fossil Fuels (TJ)	10 134	19 052	19 714	14 529	11 279	10 521	0.9	-6.7
Biomass (TJ)	413 248	562 865	635 511	677 569	666 760	662 224	57.1	-0.7
Other (TJ)	3 560	4 151	8 602	8 948	11 932	14 497	1.3	21.5
<b>Net Bought Electricity (TJ)</b>	<b>205 852</b>	<b>246 864</b>	<b>228 050</b>	<b>202 945</b>	<b>184 537</b>	<b>179 367</b>		<b>-2.8</b>
<b>Total Primary Energy Consumption (TJ)</b>	<b>1 135 715</b>	<b>1 388 096</b>	<b>1 497 045</b>	<b>1 484 691</b>	<b>1 379 301</b>	<b>1 338 837</b>		<b>-2.9</b>
<b>Fraction of Biomass in Total Fuels Consumption</b>	<b>44.1%</b>	<b>49.1%</b>	<b>50.1%</b>	<b>52.9%</b>	<b>55.8%</b>	<b>57.1%</b>		<b>1.3</b>
Total Electricity Produced at Site (GWh)	29 416	41 930	50 462	56 780	53 797	51 704	50.9	-3.9
Purchased Electricity (GWh)	59 045	72 255	72 815	67 567	62 164	60 737	59.8	-2.3
Sold Electricity (GWh)	-1 864	-3 681	-9 468	-11 193	-10 904	-10 913	10.7	0.1
<b>Total Electricity Consumption (GWh)</b>	<b>86 527</b>	<b>110 424</b>	<b>113 874</b>	<b>113 137</b>	<b>105 057</b>	<b>101 528</b>	<b>100.0</b>	<b>-3.4</b>
<b>% of Electricity produced through CHP<sup>2</sup></b>	<b>88.0%</b>	<b>90.4%</b>	<b>94.4%</b>	<b>95.4%</b>	<b>96.4%</b>	<b>96.4%</b>		<b>0.0</b>

<sup>1</sup> Excluding Hungary, Romania & Slovenia – excluding Poland before 2003 – Figures for 2014 will be available in October 2015.

<sup>2</sup> CHP = Combined Heat and Power – compared to total on-site electricity generation.

## CEPI Fuels Consumption in 2013<sup>1</sup>



# Energy & Environment – Key Figures

## CEPI Key Figures on Energy & Environment<sup>1</sup>

	1991	2000	2005	2010	2012	2013	% Change 2013/2012	% Change 2013/1991
<b>Energy Consumption</b>								
Production of Market Pulp and Paper & Board ('000 Tonnes)	71 971	98 691	109 644	106 084	103 638	102 810	-0.8	42.8
Specific Primary Energy Consumption (Tj/kt)	15.78	14.07	13.65	14.00	13.31	13.02	-2.2	-17.5
Specific Electricity Consumption (MWh/kt)	1.20	1.12	1.04	1.07	1.01	0.99	-2.6	-17.9
<b>CO<sub>2</sub> Emissions<sup>2</sup></b>								
Absolute (Mega Tonnes)	39.05	41.94	42.85	37.45	34.55	33.20	-3.9	-15.0
Specific (kt CO <sub>2</sub> / kt of product)	0.54	0.42	0.38	0.35	0.33	0.32	-3.2	-41.5
<b>Indirect CO<sub>2</sub> Emissions</b>								
Absolute (Mega Tonnes)	13.88	14.33	12.47	11.59	9.60	9.80	2.0	-29.4
Specific (kt CO <sub>2</sub> / kt of product)	0.19	0.15	0.11	0.11	0.09	0.10	2.8	-50.6
<b>Water Specific Emissions</b>								
BOD (kg / t of product)	4.65	1.69	1.03	0.88	0.86	0.85	-1.7	-81.7
COD (kg / t of product)	23.36	9.08	6.60	6.38	6.18	5.94	-3.8	-74.6
AOX (kg / t of product)	0.433	0.049	0.031	0.032	0.029	0.026	-9.8	-93.9
<b>Air Specific Emissions</b>								
SO <sub>2</sub> (kg SO <sub>2</sub> / t of product)	1.37	0.42	0.33	0.24	0.18	0.18	-0.3	-86.8
NO <sub>x</sub> (kg NO <sub>x</sub> / t of product)	1.31	0.90	0.83	0.85	0.79	0.81	2.7	-38.0

<sup>1</sup> Excluding Hungary, Romania & Slovenia - excluding Poland before 2003 - Figures for 2014 will be available in October 2015.

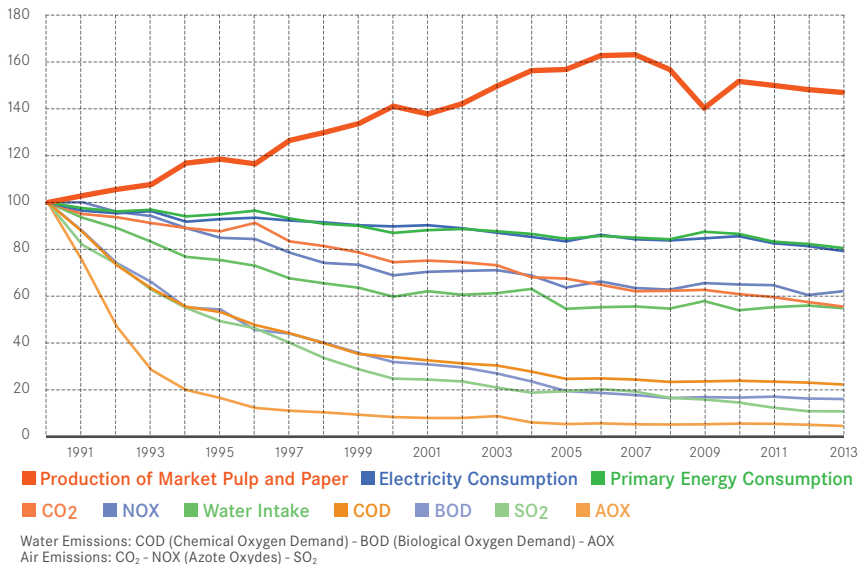
<sup>2</sup> Including all CEPI countries from 2005

**Note:** Direct CO<sub>2</sub> Emissions are the fossil emissions produced by the pulp and paper mills and connected energy plants.

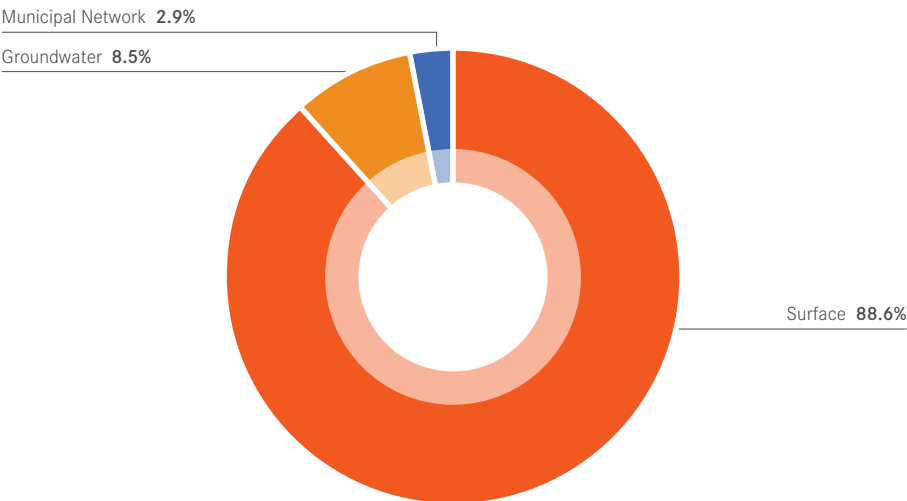
# Environment – Environmental Impact and Water

## Evolution of Environmental Impacts of the CEPI Pulp and Paper Industry

Index of Specific Values (1990 = 100)



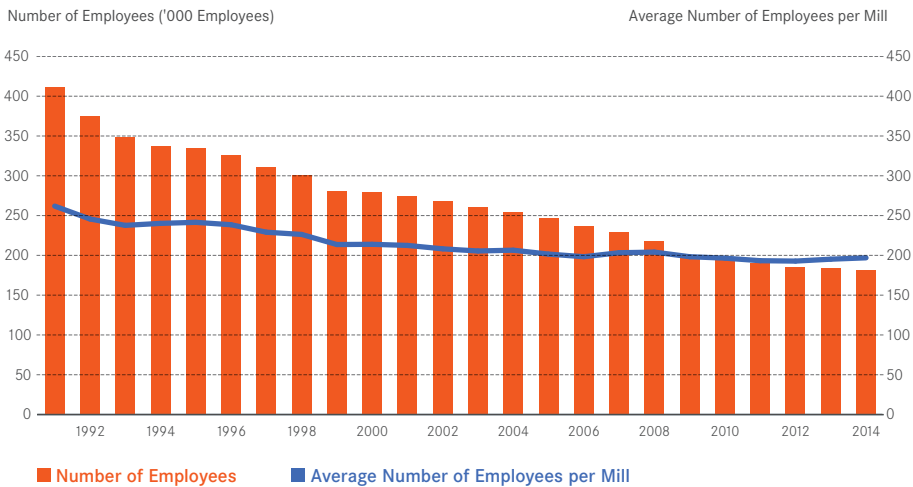
## Sources of Water Intake in 2013<sup>1</sup>



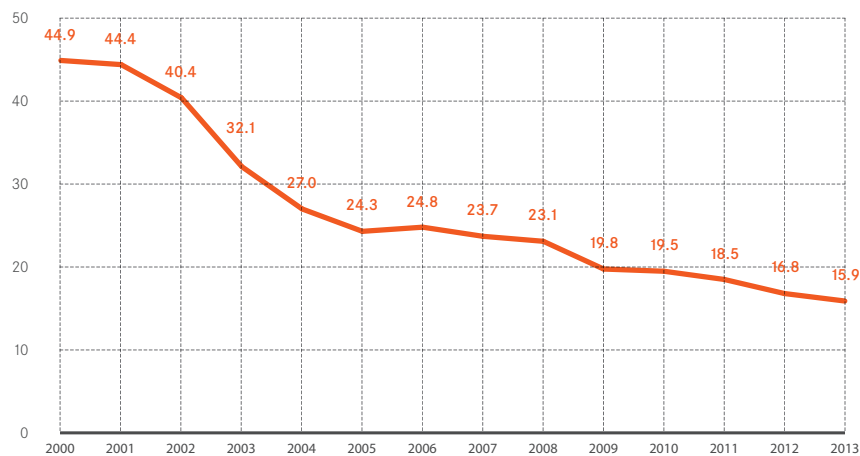
<sup>1</sup> Excluding Hungary, Romania & Slovenia – excluding Poland before 2003  
Figures for 2014 will be available in October 2015.

# Social Affairs – Employment and Accidents

## CEPI Employment Evolution



## CEPI Accident Rate<sup>1</sup>



<sup>1</sup> Accident rate: Number of accidents (fatal and non-fatal) x 1000/number of employees (absence of more than 3 days)  
Figures for 2014 will be available in October 2015  
Includes Austria, Finland, France, Germany, Italy, Netherlands, Norway, Portugal, Spain, Sweden, United Kingdom

# Glossary

## PULP

**Pulp Consumption:** Production + Imports from outside CEPI - Exports to outside CEPI

### Pulp Grades:

**Mechanical - Stone groundwood:** pulp produced by grinding wood into relatively short fibres.

CEPI Harmonised Code is 923 000 000

**Thermo-mechanical:** pulp produced in a thermo-mechanical process where wood particles are softened by steam before entering a pressurised refiner. CEPI Harmonised Code is 923 400 000

**Semi-chemical:** pulp produced in a two-stage process which involves partial digestion with chemicals, followed by mechanical treatment in a disc refiner. CEPI Harmonised Code is 921 000 000

**Chemical - Sulphite:** pulp produced by cooking wood chips in a pressure vessel in the presence of bisulphite liquor. CEPI Harmonised Code is 922 200 000

**Chemical - Sulphate (or kraft):** pulp produced by cooking wood chips in pressure vessels in the presence of a sodium hydroxide (soda) liquor. CEPI Harmonised Code is 922 100 000

**Other Pulp:** Pulp produced from fibres other than wood, such as sugar cane bagasse, wheat straw, kenaf, cotton rags and hemp.

## PAPER

**Paper and Board Consumption:** Production + Imports from outside CEPI - Exports to outside CEPI

### Paper Grades:

**Newsprint:** paper mainly used for printing newspapers. CEPI Harmonised Code is 100 000 000.

**Uncoated mechanical:** paper suitable for printing or other graphic purposes where less than 90% of the fibre furnish consists of chemical pulp fibres. CEPI Harmonised Code is 211 000 000.

**Uncoated woodfree:** paper suitable for printing or other graphic purposes, where at least 90% of the fibre furnish consists of chemical pulp fibres. CEPI Harmonised Code is 231 000 000.

**Coated papers:** all paper suitable for printing or other graphic purposes and coated on one or both sides with minerals such as china clay (kaolin), calcium carbonate, etc.

CEPI Harmonised Code for Coated Mechanical is 212 000 000 and for Coated Woodfree is 232 000 000.

**Sanitary and Household:** This covers a wide range of tissue and other hygienic papers for use in households or commercial and industrial premises. CEPI Harmonised Code is 700 000 000.

**Case materials:** papers and boards mainly used in the manufacture of corrugated board. Included are kraftliner, testliner, semi-chemical fluting, and waste-based fluting (Wellenstoff). Also known as containerboard, corrugated case materials, cardboard, linerboard or corrugating medium. CEPI Harmonised Code is 300 000 000.

**Carton board:** made from virgin and/or recovered fibres, mainly used in cartons for consumer products. Also known as solid board, folding box board, boxboard or carrier board. CEPI Harmonised Code is 400 000 000.

**Wrappings (up to 125 g/m<sup>2</sup>):** papers whose main use is wrapping or packaging made from any combination of virgin or recovered fibres, bleached or unbleached. Included are sack kraft, other wrapping krafts, sulphite and grease-proof papers. CEPI Harmonised Code is 500 000 000.

**Other papers mainly for packaging purposes:** this category embraces all paper and board mainly for packaging purposes other than those listed above. CEPI Harmonised Code is 600 000 000.

**Other paper and board:** includes cigarette papers and filter papers, as well as gypsum liners and special papers for waxing, insulating, roofing, asphaltting, and other specific applications or treatments. CEPI Harmonised Code is 800 000 000.

## PAPER FOR RECYCLING

**Collection:** utilisation plus exports minus imports of paper for recycling.

**Utilisation rate:** percentage of paper for recycling utilisation compared to the total paper & board production.

**Important Note:** Paper for recycling is composed of fibres but also unusable materials - non-paper components as well as paper and board detrimental to production. The share of unusable materials depends on the actual sorting and collection of used paper. It varies according to paper for recycling grades and countries. The volume of recycled fibres actually used to produce new paper is therefore lower than the volume of paper for recycling considered. The utilisation rate compares utilisation of paper for recycling to paper & board production

**Recycling rate:** "utilisation of paper for recycling + net trade of paper for recycling", compared to paper & board consumption

**Utilisation by sector:** total utilisation of paper for recycling in a sector as percentage of the overall utilisation of paper for recycling.

# CEPI National Associations Contact Details

## **Austria**

### **AUSTROPAPIER**

Vereinigung der Österreichischen Papierindustrie  
Gumpendorfer Straße 6  
A-1061 Vienna  
T +43 1 588 86 0  
F +43 1 588 86 222  
austropapier@austropapier.at  
www.austropapier.at

### **Belgium COBELPA**

Association des Fabricants de Pâtes, Papier et Cartons de Belgique  
Vereniging van de Belgische Fabrikanten van Papierdeeg, Papier en Karton  
Louizalaan 306 Avenue Louise  
B-1050 Brussels  
T +32 2 646 64 50  
F +32 2 646 82 97  
general@cobelpa.be  
www.cobelpa.be

### **Czech Republic ACPP**

Association of the Czech Pulp and Paper Industry  
U Uranie 954/18  
CZ-170 00 Praha 7  
T +420 602 244 825  
acpp@acpp.cz  
www.acpp.cz

### **Finland FFIF**

Finnish Forest Industries Federation  
Snellmaninkatu 13  
FIN-00170 Helsinki  
PO Box 336  
FIN-00171 Helsinki  
T +358 9 132 61  
name.surname@forestindustries.fi  
www.forestindustries.fi

## **France**

### **COPACEL**

Union Française des Industries des Cartons, Papiers et Celluloses  
23 - 25 rue d'Aumale  
F-75009 Paris  
T +33 1 53 89 24 00  
F +33 1 53 89 24 01  
contacts@copacel.fr  
www.copacel.fr

### **Germany**

#### **VDP**

Verband Deutscher Papierfabriken  
Adenauerallee 55  
D-53113 Bonn  
T +49 228 267 050  
F +49 228 267 05 62  
info@vdp-online.de  
www.vdp-online.de

### **Hungary**

Federation of the Hungarian Printers and Paper Makers  
Bartók Béla út 41.  
H-1114 Budapest  
T +36 1 350 77 28  
F +36 1 350 77 27  
office@fedprint.hu  
www.fedprint.hu

### **Italy**

#### **ASSOCARTA**

Associazione Italiana fra gli Industriali della Carta, Cartoni e Paste per Carta  
Bastioni di Porta Volta 7  
I-20121 Milano  
T +39 02 290 03 018  
F +39 02 290 03 396  
assocarta@assocarta.it

Viale Pasteur 8-10

I-00144 Roma  
T +39 06 591 91 31  
F +39 06 591 08 76  
assocarta@assocarta.it  
www.assocarta.it

### **The Netherlands**

#### **Royal VNP**

Vereniging van Nederlandse Papier- en kartonfabrieken  
Kruisweg 761  
NL-2132 NE Hoofddorp  
PO Box 731  
NL-2130 AS Hoofddorp  
T +31 20 654 30 55  
F +31 20 654 30 64  
info@vnp.nl  
www.vnp.nl

## **Norway**

### **Norsk Industri**

Middelthunsgate 27  
PO Box 7072 Majorstuen  
N-0306 Oslo  
T +47 23 08 88 00  
F +47 23 08 88 98  
post@norskindustri.no  
www.norskindustri.no

### **Poland**

#### **SPP**

Association of Polish Papermakers  
Pl. Komuny Paryskiej 5A  
PO Box 200  
PL-90-007 Łódź  
T +48 42 630 01 17  
F +48 42 632 43 65  
info@spp.pl/sp@spp.pl  
www.spp.pl

ul. Al. Jerozolimskie 44,  
room 1126  
PL-00-024 Warszawa  
T +48 22 433 61 20  
F +48 22 433 61 20  
biuro@spp.pl

### **Portugal**

#### **CELPA**

Associação da Indústria Papeleira  
Rua Marquês de Sá da Bandeira 74-2º  
P-1069 - 076 Lisboa  
T +351 21 761 15 10  
F +351 21 761 15 11  
celpa@celpa.pt  
www.celpa.pt

### **Romania**

#### **ROMPAP**

The Patronizing Organization for Romanian Pulp and Paper Industry  
Piata Walter Maracineanu 1-3  
Intr. 2, Et. 2, Cam. 177-178  
RO-Sector 1 Bucharest  
T +40 21 315 01 62  
F +40 21 315 00 27  
pich\_rompap@yahoo.com

### **Slovenia**

Chamber of Commerce and Industry of Slovenia  
Paper and Paper Converting Association  
Dimičeva 13, SI-1504 Ljubljana  
Slovenia  
T +386 1 5898 274  
F +386 1 5898 100  
M +386 41 316 901  
petra.prebil.basin@gzs.si  
www.gzs.si

## **Slovak Republic**

### **ZCPP SR**

Slovak Pulp and Paper Industry Association  
Tichá 30  
SK-974 04 Banská Bystrica  
T +421 48 412 37 76  
F +421 48 412 37 76  
info@paper.sk  
www.paper.sk

### **Spain**

#### **ASPAPEL**

Asociación Española de Fabricantes de Pasta, Papel y Cartón  
Avenida de Baviera 15  
E-28028 Madrid  
T +34 91 576 30 03  
F +34 91 577 47 10  
aspapel@aspapel.es  
www.aspapel.es

### **Sweden**

#### **SFIF**

Swedish Forest Industries Federation  
Storgatan 19  
PO Box 55525  
SE-102 04 Stockholm  
T +46 8 762 72 60  
F +46 8 611 71 22  
info@forestindustries.se  
www.forestindustries.se

### **United Kingdom**

#### **CPI**

Confederation of Paper Industries  
1 Rivenhall Road  
Swindon  
Wiltshire SN5 78D  
UK  
T +44 1 793 88 96 00  
F +44 1 793 87 87 00  
cpi@paper.org.uk  
www.paper.org.uk



**CEPI aisbl**

**Confederation of European Paper Industries**

250 Avenue Louise, Box 80

B-1050 Brussels

Tel: +32 2 627 49 11 Fax: +32 2 646 81 37

mail@cepi.org

twitter: @EuropeanPaper

[www.cepi.org/topics/statistics](http://www.cepi.org/topics/statistics)