



European Paper Industry hits new record in recycling



The recycling rate in Europe¹ has reached 54.6%, a considerable increase from 53.8% in 2004. In absolute values this represents an increase of 1.2 million tonnes compared to 2004. The total amount of recovered paper utilised for papermaking in 2005 was 47.3 million tonnes. Including European recovered paper recycled in third countries, the recycling rate is 62.6%.

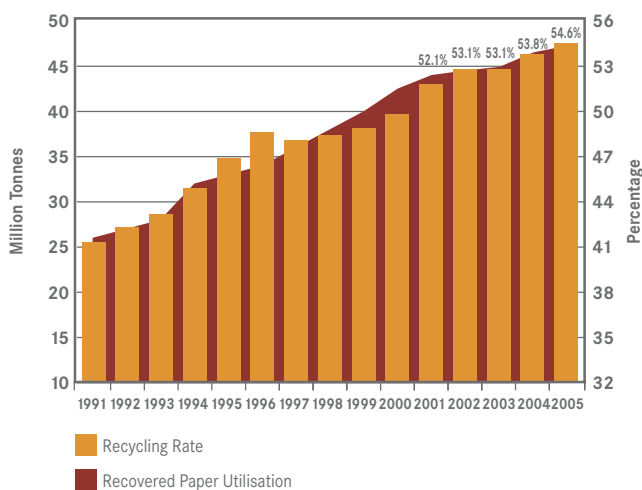
Collection of recovered paper increased even more than its utilisation, which led to increased exports of recovered paper, particularly to Asia. CEPI has further improved the knowledge on global trade flows.

Continuous increase in the recycling rate

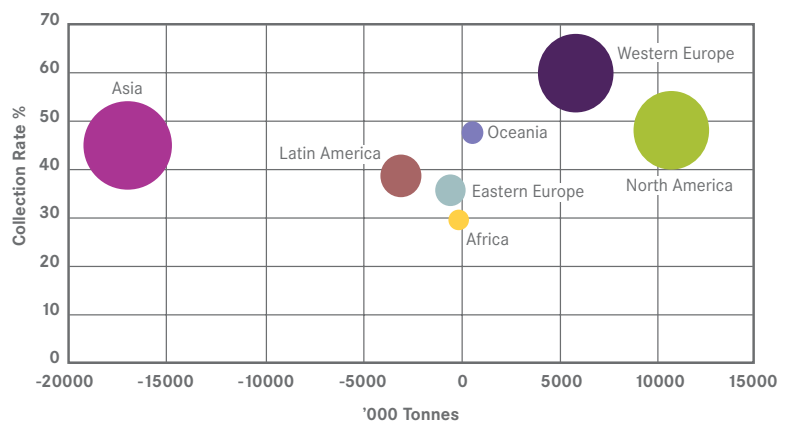
Recovered paper utilisation showed again increase (+2.6%, +1.2 million tonnes, 47.3 million tonnes in 2005) and this at a faster rate than the increase in paper production (+0.3% to 99.3 million tonnes).

Utilisation of recovered paper in packaging papers in 2005 was increasing fast (+4.2%). Also utilisation in graphic papers grew faster (+2.8%) than the average (+2.6%). The share of recovered paper in the paper industry's raw material utilisation increased from 41% in 2004 to 41.6% in 2005 and is now almost as much utilised as virgin fibres (42%).

Recovered Paper Utilisation and Recycling Rate in CEPI Countries



Global Development of Collection Rate vs. Net Trade - 2004



The size of each bubble indicates the RP total collection in each region.

Source: Jaakko Pöyry Consulting

¹ CEPI countries, see page 2

Utilisation & Collection

Key Figures on Paper Recycling in CEPI Countries in 2005

	Paper and Board			Recovered Paper and Board						Utilisation rate %	Collection rate %	Recycling rate %
	Prod. '000 Tonnes	Cons.* '000 Tonnes	Trade balance** '000 Tonnes	Utilisation		Trade balance**		Collection*				
				'000 Tonnes	% 05/04	'000 Tonnes	% 05/04	'000 Tonnes	% 05/04			
AUSTRIA	4,950	2,034	2,916	2,260	5.6%	-838	-1.6%	1,422	5.7%	45.7%	69.9%	111.1%
BELGIUM	1,897	3,724	-1,827	876	-4.9%	1,352	11.4%	2,228	4.2%	46.2%	59.8%	23.5%
CZECH REPUBLIC	990	1,366	-376	480	7.4%	164	32.3%	644	12.8%	48.5%	47.1%	35.1%
DENMARK	370	1,375	-1,005	400	-2.4%	424	0.0%	824	-1.2%	108.1%	59.9%	29.1%
FINLAND	12,391	1,134	11,257	599	-19.1%	192	242.9%	791	-0.6%	4.8%	69.8%	52.8%
FRANCE	10,332	10,827	-495	5,953	0.2%	639	31.2%	6,592	2.7%	57.6%	60.9%	55.0%
GERMANY	21,679	20,143	1,536	14,354	8.6%	709	-35.1%	15,063	5.5%	66.2%	74.8%	71.3%
HUNGARY	569	833	-264	377	0.0%	40	42.9%	417	5.6%	66.3%	50.1%	45.3%
IRELAND	0	444	-444	0	-	346	16.9%	346	0.9%	-	77.98%	0.0%
ITALY	9,999	11,538	-1,539	5,488	0.3%	304	155.5%	5,792	3.9%	54.9%	50.2%	47.6%
NETHERLANDS	3,471	3,470	1	2,462	3.4%	48	-20.0%	2,510	2.9%	70.9%	72.3%	71.0%
NORWAY	2,223	880	1,343	441	-7.7%	180	34.3%	621	1.3%	19.8%	70.6%	50.1%
POLAND	2,802	3,556	-754	1,041	6.3%	207	31.0%	1,248	9.9%	37.2%	35.1%	29.3%
PORTUGAL	1,602	1,183	419	310	4.4%	286	101.4%	596	35.8%	19.4%	50.4%	26.2%
SLOVAK REPUBLIC	850	458	392	211	1.4%	20	185.7%	231	7.4%	24.8%	50.4%	46.1%
SPAIN	5,697	7,390	-1,693	4,617	3.2%	-296	45.9%	4,321	10.1%	81.0%	58.5%	62.5%
SWEDEN	11,737	2,109	9,628	2,020	0.2%	-473	12.1%	1,568	4.5%	17.2%	74.3%	95.8%
SWITZERLAND	1,752	1,671	81	939	-3.1%	305	56.4%	1,244	6.9%	53.6%	74.4%	56.2%
UNITED KINGDOM	6,033	12,491	-6,458	4,507	-2.6%	3,283	27.3%	7,790	8.1%	74.7%	62.4%	36.1%
TOTAL CEPI	99,344	86,626	12,718	47,335	2.6%	6,892	32.4%	54,248	5.7%	47.6%	62.6%	54.6%

Notes

* Paper and Board Consumption = Domestic Deliveries + Imports

Some of the figures reported here have been adjusted by the National Associations, using the formula: Consumption = Production + Imports - Exports.

These figures have been used to calculate recovered paper collection rate and recycling rate.

** Negative tonnage means net importer. Negative percentage evolution means decreased surplus or increased deficit.

The total figure for CEPI recovered paper trade balance differs from the figure in the fibre flow chart because of adjustments made by some countries to eliminate re-exports from their figures

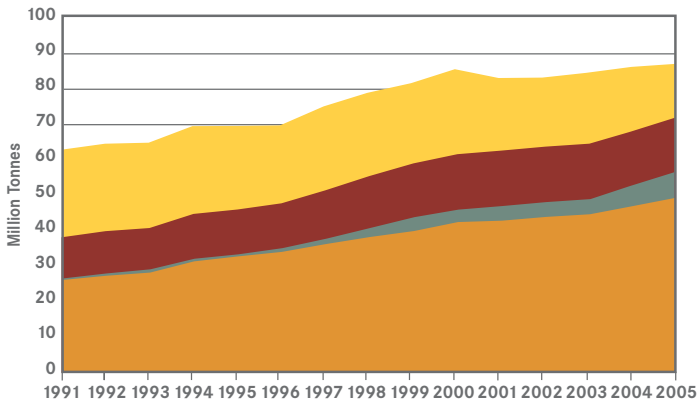
Evolution of Recovered Paper Utilisation in Europe

'000 Tonnes	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	% change 2005/2004
AUSTRIA	1,184	1,272	1,274	1,405	1,442	1,537	1,642	1,732	1,787	1,943	1,890	1,900	1,992	2,141	2,260	5.6%
BELGIUM	286	288	273	341	313	361	448	526	570	606	605	602	671	921	876	-4.9%
CZECH REPUBLIC	315	149	144	250	252	261	247	319	324	366	393	379	386	447	480	7.4%
DENMARK	307	315	351	388	385	395	410	415	405	387	377	377	400	410	400	-2.4%
FINLAND	443	532	547	566	526	575	609	633	696	685	698	702	688	740	599	-19.1%
FRANCE	3,367	3,524	3,777	4,062	4,163	4,192	4,455	4,834	5,279	5,774	5,571	5,705	5,781	5,943	5,953	0.2%
GERMANY	6,420	6,742	6,995	8,160	8,599	8,888	9,457	9,917	10,228	10,992	11,526	12,038	12,449	13,219	14,354	8.6%
HUNGARY	280	256	241	277	280	286	283	310	299	350	350	349	370	377	377	0.0%
IRELAND	38	39	40	43	43	43	44	46	46	47	47	47	47	47	0	-100.0%
ITALY	3,576	3,720	3,805	4,130	4,219	4,302	4,362	4,541	4,642	5,057	5,098	5,257	5,288	5,474	5,488	0.3%
NETHERLANDS	1,896	2,003	2,017	2,137	2,119	2,106	2,301	2,266	2,375	2,414	2,321	2,372	2,376	2,380	2,462	3.4%
NORWAY	174	180	178	226	246	240	256	288	294	329	439	456	456	478	441	-7.7%
POLAND	425	425	430	430	437	535	688	663	717	778	818	843	908	979	1,041	6.3%
PORTUGAL	339	352	245	270	300	315	322	352	364	393	361	326	324	297	310	4.4%
SLOVAK REPUBLIC	165	146	112	140	193	180	187	222	250	277	266	283	251	208	211	1.4%
SPAIN	2,222	2,274	2,315	2,435	2,690	2,774	3,032	3,396	3,609	3,875	4,196	4,371	4,442	4,474	4,617	3.2%
SWEDEN	1,038	1,198	1,289	1,408	1,428	1,502	1,652	1,760	1,834	1,816	1,832	1,861	1,926	2,015	2,020	0.2%
SWITZERLAND	582	660	701	798	875	948	1,032	1,082	1,111	1,146	1,109	1,089	1,059	969	939	-3.1%
UNITED KINGDOM	2,954	3,055	3,294	3,677	3,997	4,323	4,618	4,654	4,753	4,882	4,612	4,610	4,542	4,625	4,507	-2.6%
TOTAL CEPI	26,011	27,130	28,028	31,143	32,507	33,763	36,045	37,956	39,583	42,117	42,509	43,567	44,356	46,144	47,335	2.6%

Source: CEPI 10 year statistic document + anndata2005

Poland: source PPI before 2001, CEPI estimates for 1995, 1996 and 2000

Evolution of Paper Consumption and Recovery in CEPI Countries



- Other Recycling/Recovery or Final Disposal
- Non Recoverable*
- Recovered Paper Net Trade
- Recycling in Paper Mills

* Volumes that are not collectable nor recyclable for technical reasons

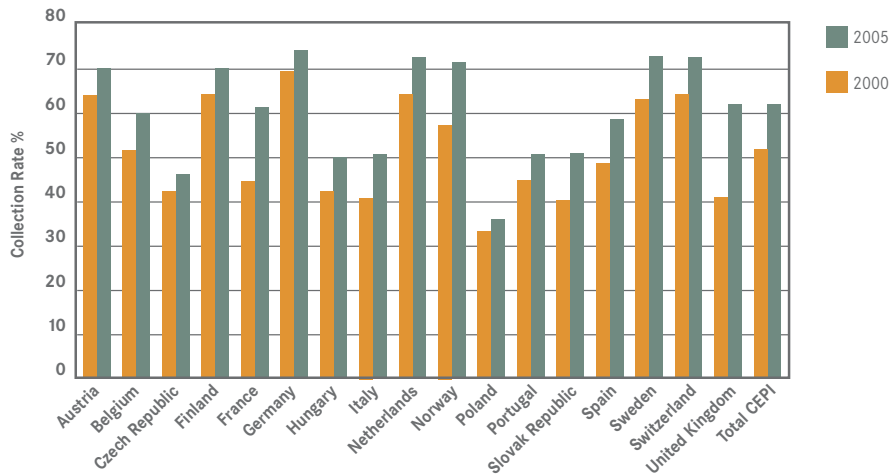
Collection increases by 5.7%

In 2005 an extra 2.9 million tonnes (+5.7%) of recovered paper was collected. Collection rate, which compares used paper collection to paper and board consumption reached 62.6% after 59.8% in 2004. Bearing in mind that 19 per cent of the total paper and board products put on the market are not collectable and/or recyclable for technical reasons (archives, wall papers, hygiene papers, etc.), this record is even more impressive.

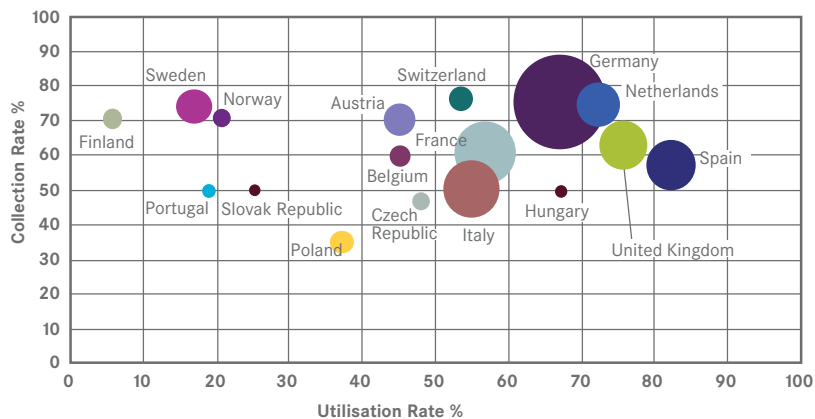
Whereas in The Netherlands, Norway, Germany, Sweden and Switzerland the collection rate is above 70% and reaching its limits, countries with lower collection rates are catching up rapidly: United Kingdom +8.2%, Poland +10%, Spain +10%, Czech Republic +12.8% and Portugal +35% since 2004.

At European level, roughly 50% of the collected volumes come from trade and industry sources, 40% from households and the remaining 10% from offices. Collection from households and offices has increased by 5% each. As household collection consists of numerous small sources this continues creating pressure on the costs and the quality of recovered paper.

Evolution of the Collection Rate by Country in 2000 and 2005



Recovered Paper Collection Rate, Utilisation Rate and Utilisation in CEPI Countries in 2005



For instance: UK has a collection rate of 62.4%, a utilisation rate of 74.7% and consumed 4.5 million tonnes of recovered paper in 2005.

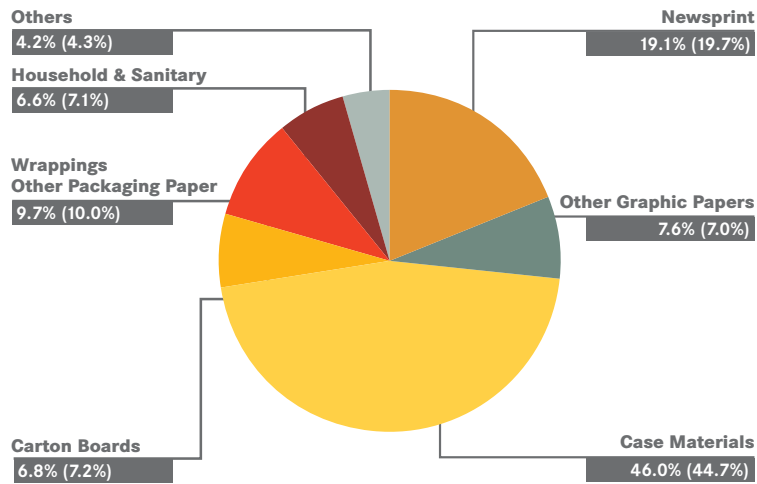
Paper and board packaging remains the EU champion

Packaging grades use 62.5% of the total volumes of recovered paper. A large part of this was used in Case Materials: 20,6 million tonnes, which represents 46% of total recovered paper utilisation.

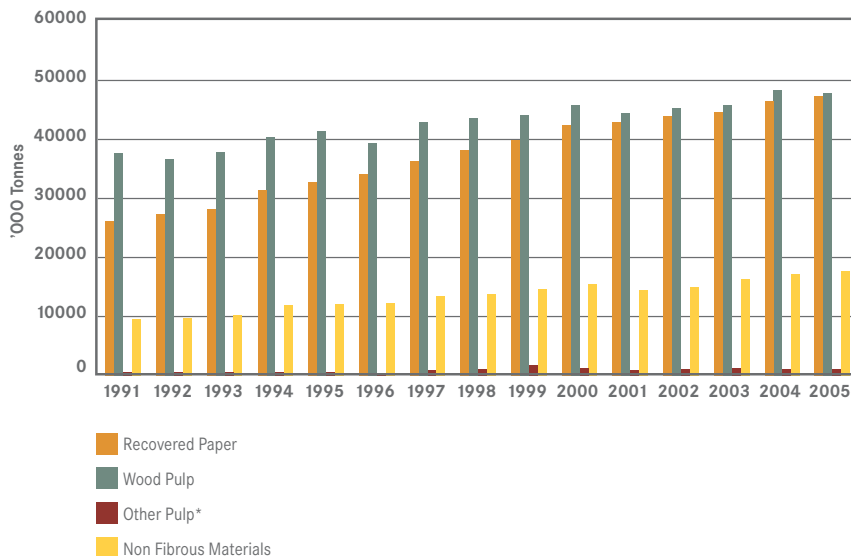
Paper and board packaging are also recycled to a high degree: according to CEPI estimates 77% of all paper and board packaging was recycled in 2005.

According to the European Commission², the volume of paper and board packaging recycled is equivalent to more than half of all the packaging materials recycled in the EU. Thus the paper industry has been an essential contributor to the Packaging and Packaging Waste Directive targets.

Recovered Paper Utilisation by Sector in CEPI Countries in 2005 (and 2004)



Raw Material Utilisation in Papermaking in CEPI Countries



* Other pulp: other than wood pulp

² http://ec.europa.eu/environment/waste/pdf/1997_2002.xls

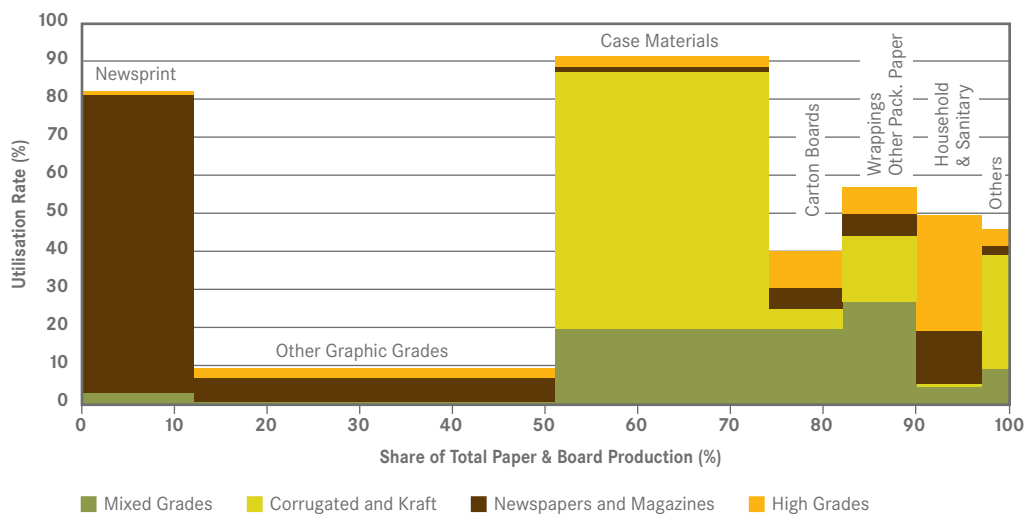
Graphic papers utilisation of recovered paper slightly increasing

In 2005 the utilisation rate of recovered paper for Newsprint reached 82.4% after 79.9% in 2004. Other graphic grades utilised 3.3 million tonnes of recovered paper, an increase of 9.4% since 2004. Overall utilisation of recovered paper in graphic grades reached 12.7 million tonnes after 12.3 million tonnes in 2004.

However, the fresh fibres in magazines and other high grades are constantly needed for renewing the recovered fibre wealth. They therefore have an important role in the sustainable functioning of the paper loop.

The utilisation rate for household and sanitary papers has decreased, to 49% in 2005. Utilisation of recovered paper in these grades is still high but is driven by consumers' choice for non-recycled tissue papers.

Recovered Paper Utilisation by Sector in CEPI Countries in 2005



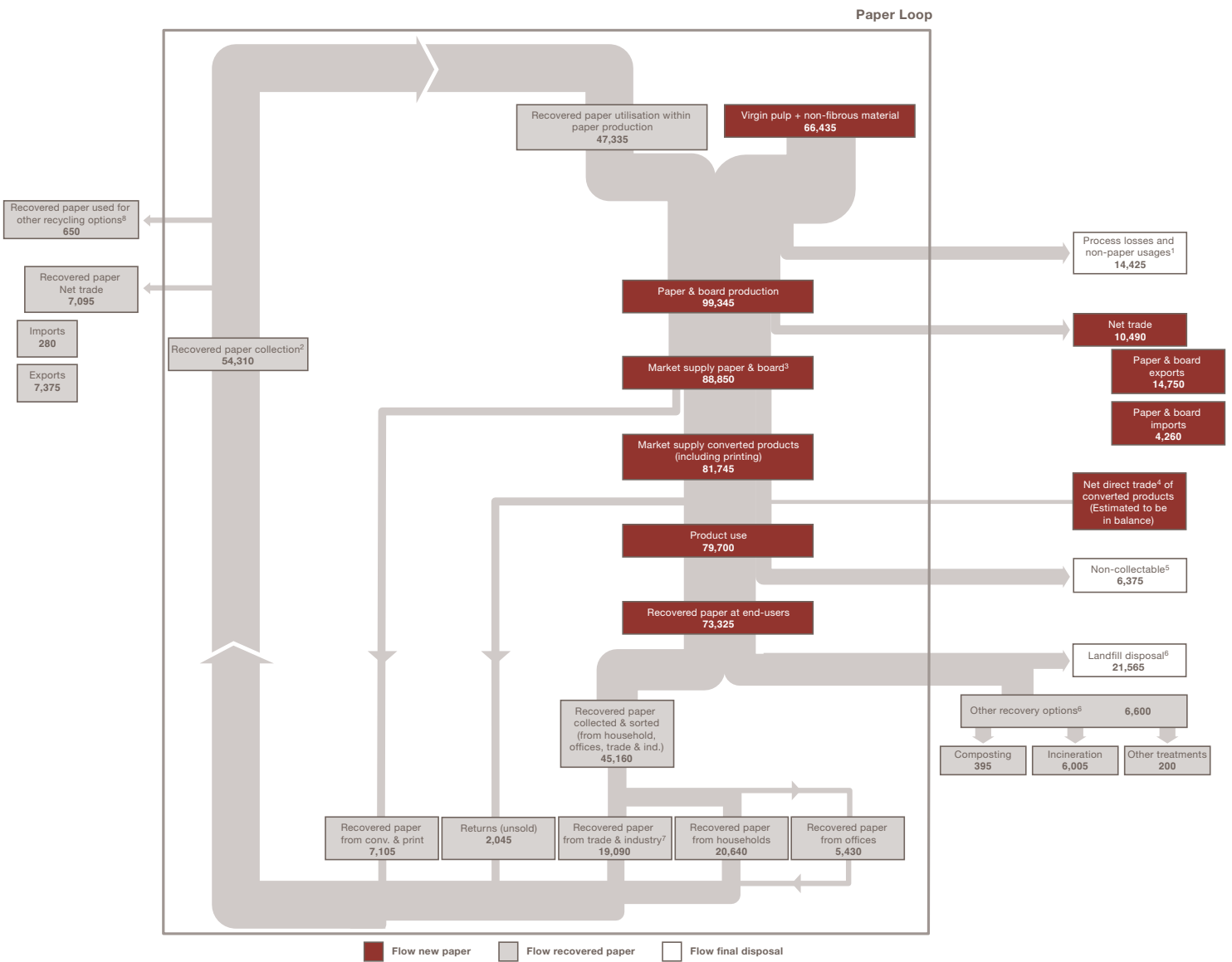
2005 Recovered Paper Grades

Paper Sector	A Mixed Grades '000 Tonnes	B Corrugated and Kraft '000 Tonnes	C Newspapers & Magazines '000 Tonnes	D High Grades '000 Tonnes	E=A+B+C+D Total Use of Recovered Paper '000 Tonnes	F Utilisation by Sector* %	G Total Paper Production '000 Tonnes	E:G Utilisation Rate** %
Newsprint	317	-	8,626	98	9,041	19.1	10,972	82.4
Other Graphic Papers	144	83	2,433	948	3,608	7.6	38,058	9.5
Total Newsprint + O.G.P.	461	83	11,059	1,046	12,649	26.7	49,030	25.8
Case Materials	4,747	16,031	310	676	21,764	46.0	23,721	91.7
Carton Boards	1,623	419	420	763	3,225	6.8	8,018	40.2
Wrappings, Other Pack. Paper	2,155	1,386	473	564	4,578	9.7	7,993	57.3
Total Packaging Papers	8,525	17,836	1,203	2,003	29,567	62.5	39,732	74.4
Household & Sanitary	297	39	883	1,915	3,134	6.6	6,288	49.8
Others	399	1,289	112	185	1,985	4.2	4,294	46.2
Total	9,682	19,247	13,257	5,149	47,335	100.0	99,344	47.6
Share of Recovered Paper Grades	20.5%	40.7%	28.0%	10.9%	100.0%			

* Usage by sector: total use of recovered paper in a sector as % of the total recovered paper used by the industry.

** Utilisation rate: use of recovered paper in a sector as % of total paper production in that sector.

European Fibre Flow Chart 2005



N.B.: All the figures are rounded, some are estimates.

- 1 The non-paper usages include products such as absorbent and hygienic personal products made of fluff pulp.
- 2 The difference between recovered paper collection and recovered paper utilisation can be explained by trade, stock variations and some volumes destined to other material recycling options.
- 3 Is calculated as paper & board domestic deliveries + imports.
- 4 The trade of converted products as well as the trade of packaging surrounding traded goods (including manuals) has been estimated to be in balance.
- 5 To the amount of non-collectable paper & board has to be added the paper & board that are non-recyclable and which go to landfills and other recovery options. In total, this represents around 19% of the total paper & board volume put on the markets.
- 6 The volumes of paper & board going to landfill disposal and to other recovery options have been estimated with a consultant.
- 7 Returns unsold and recovered paper volumes from converters and printers should be taken into account when considering the "trade & industry" channel globally.
- 8 Around 75% of these volumes go to the construction and building sector according to a recent study. The remaining 25% go to other industries and activities such as the packaging industry and farming.

Recovered paper trade in Europe and global developments

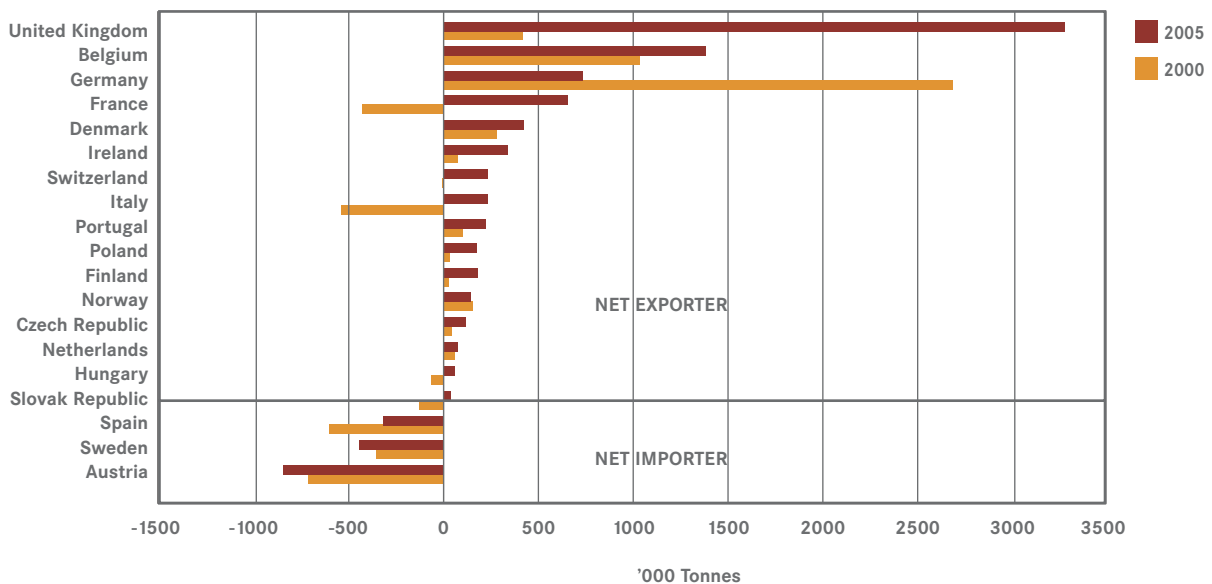
United Kingdom remains the biggest net exporter whereas Germany is approaching a balance between imports and exports. Italy and France continued increasing their net exports. Spain further decreased its deficit of recovered paper in 2005. Volumes traded within Europe increased from 6.9 in 2004 to 10 million tonnes in 2005.

CEPI countries continued to increase their exports to other regions. Net exports of recovered paper amounted to 7.1 million tonnes in 2005 compared to 5.2 million in 2004 (+36.5%).

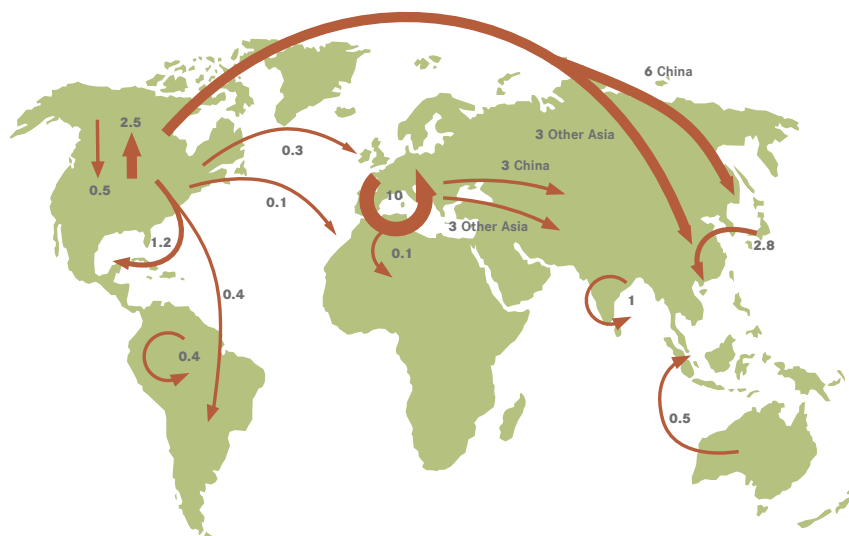
Despite the increasing exports to other regions in the world, the European market of recovered paper is relatively balanced compared to Asia (biggest net importer) and North America (biggest net exporter).

In 2000 CEPI countries exported less than half a million tonnes of recovered paper to China. By 2004 this had risen to 2.6 million tonnes and in 2005 there was a further increase to 4.5 million tonnes. Exports to China represented more than 60% of total recovered paper exports by CEPI countries in 2005.

Recovered Paper Trade Balance by Country in 2000 and 2005



Major Global Trade Flows of Recovered Paper - 2004



Total: 35 Million Tonnes
Source: Jaakko Pöyry Consulting

Glossary & Definitions:

- **Apparent collection** means utilisation plus exports minus imports of recovered paper.
- **Collection rate** means percentage of apparent collection compared to the total paper consumption*.
- **Recovered Paper (R.P.) Utilisation** means use of recovered paper as raw material to produce new products.
- **Recycling rate** means percentage of recovered paper utilisation compared to the total paper consumption**.
- **Utilisation by sector** means total use of recovered paper in a sector as a percentage of the overall recovered paper use.
- **Utilisation rate** means percentage of recovered paper utilisation compared to the total paper production.

Groups of Recovered Paper Grades:

According to the EN 643 European List of Standard Grades of Recovered Paper and Board, the following is the official paper grade listing:

Mixed Grades: 1.01, 1.02, 1.03, 5.01, 5.02, 5.03, 5.05

Corrugated and Kraft: 1.04, 1.05, 4.01, 4.02, 4.03, 4.04, 4.05, 4.06, 4.07, 4.08, 5.04

Newspapers and Magazines: 1.06, 1.07, 1.08, 1.09, 1.10, 1.11, 2.01, 2.02

High Grades: 2.03, 2.04, 2.05, 2.06, 2.07, 2.08, 2.09, 2.10, 2.11, 2.12, 3.01, 3.02, 3.03, 3.04, 3.05, 3.06, 3.07, 3.08, 3.09, 3.10, 3.11, 3.12, 3.13, 3.14, 3.15, 3.16, 3.17, 3.18, 3.19, 5.06, 5.07

* *i.e. recovered paper collected in a country but exported for recycling in another is included. Recovered paper imported from other countries and recycled in a country in question is not included.*

** *i.e. recovered paper utilisation in a country (collection minus exports plus imports) is compared to paper and board consumption of that particular country. The recycling rate in the European Declaration on Paper Recycling also takes into account the recycling of European Recovered Paper in third countries.*

Recycling issues at CEPI:

Jori Ringman – Recycling Director / +32 2 627 49 19 / j.ringman@cepi.org

Ulrich Leberle – Raw Materials Manager / +32 2 627 49 23 / u.leberle@cepi.org

Sophy Ashmead – Recycling Assistant / +32 2 627 49 13 / s.ashmead@cepi.org



This is the last edition of the Special Recycling Statistics Newsletter. From 2006, general recycling statistics can be found in CEPI Key Annual Statistics.

This document is available on request at mail@cepi.org or to download from www.cepi.org. Another free source of information is the Annual Report on the Declaration on Paper Recycling.

To provide more comprehensive statistical information, CEPI has developed the Annual Statistics Report.

To purchase the Annual Statistics Report, please see www.cepi.org.