RECOVERED PAPER MARKET IN 2012

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Bureau of International Recycling
Paper Division

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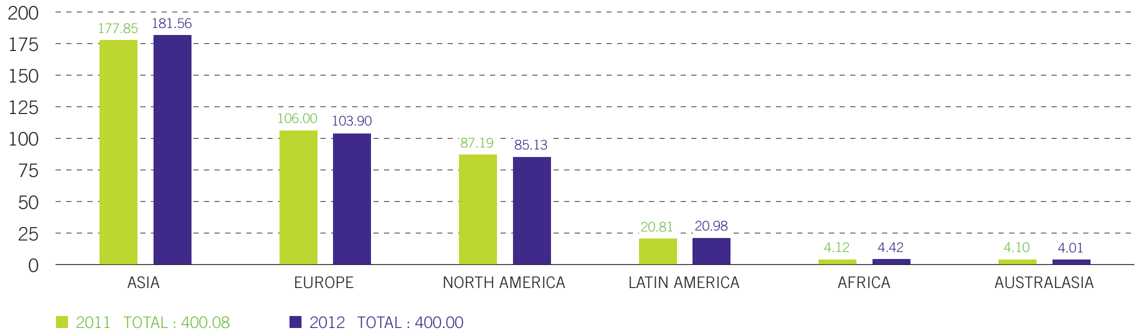
In the following market review, the information and tables have been kept to the same order as in previous reports for an easier understanding and comparison of developments in our sector. As always, it should be noted, official sources have modified some of the data reported for 2011.

We begin with paper and board production, the first link in a chain that ends with raw materials being returned to producers.

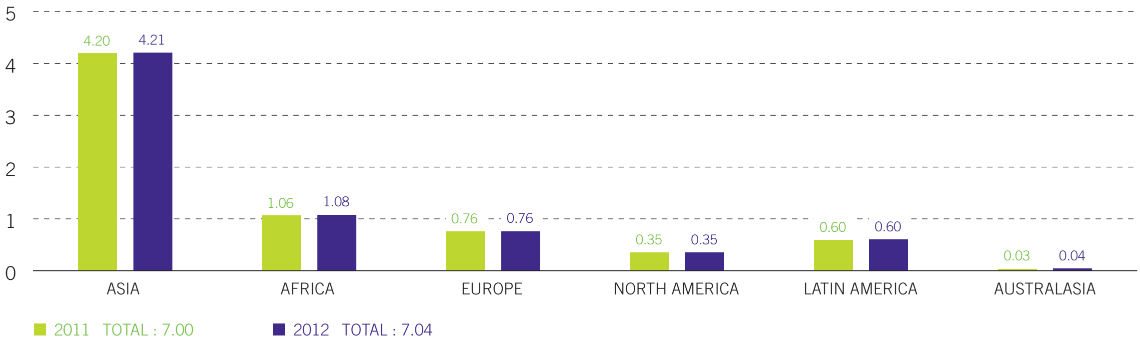
WORLD PRODUCTION OF PAPER AND BOARD (MILLION TONNES)



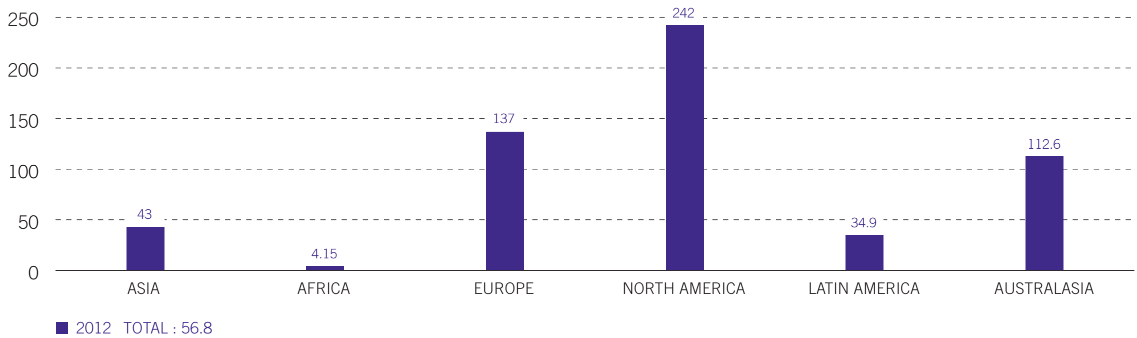
Global data suggest relative stability with a decline limited to just 0.02%, but the detail reveals constant progress in Asian production and an evident contraction in the Western World, thus confirming the on-going economic pressures in the respective areas. The figures for Asia also include Turkey and the Middle East although the overall production increase in this region is clearly due in large part to China.

WORLD PAPER AND BOARD CONSUMPTION BY REGION

POPULATION (BILLION)*



APPARENT PER-CAPITA CONSUMPTION (KG)*

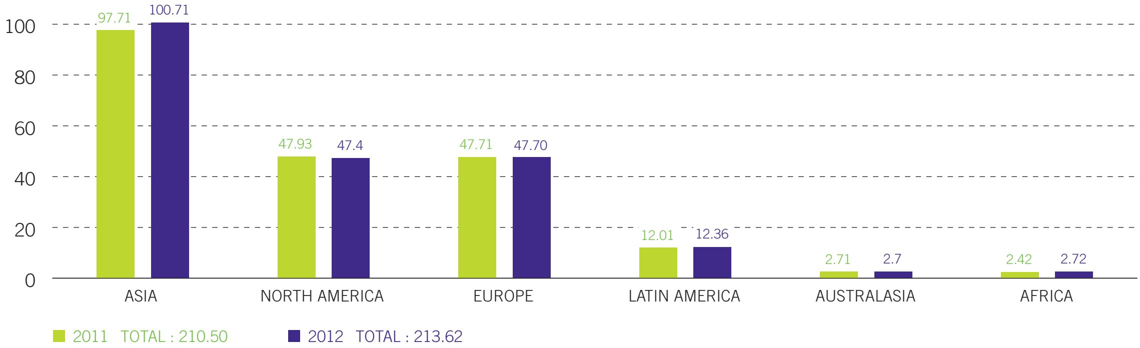


With global per capita consumption averaging 56.8kg in 2012, the record remains the 59.2kg recorded in 2007.

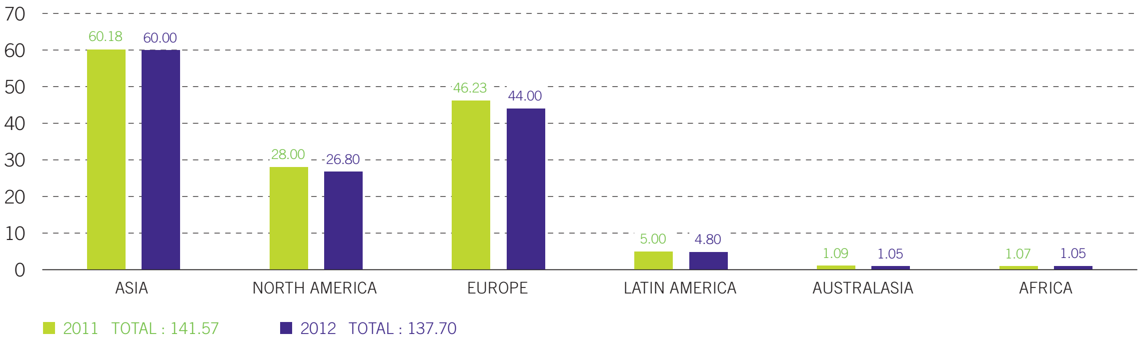
The modest global production increase in 2012 was balanced by the simultaneous growth in the world's population. The population figures expressed above are estimates for the end of 2012 and, in the case of Europe, relate to resident citizens. Foreigners and migrants make up more than 32m people and the data for the region include not only the traditional Western nations but also the Eastern European countries that were part of the old Soviet Union. As mentioned earlier, the data for Turkey and the Middle East are incorporated into the figures for Asia.

* Figures are expressed to two decimal places.

WORLD PRODUCTION OF PACKAGING AND BOARDS (MILLION TONNES)*

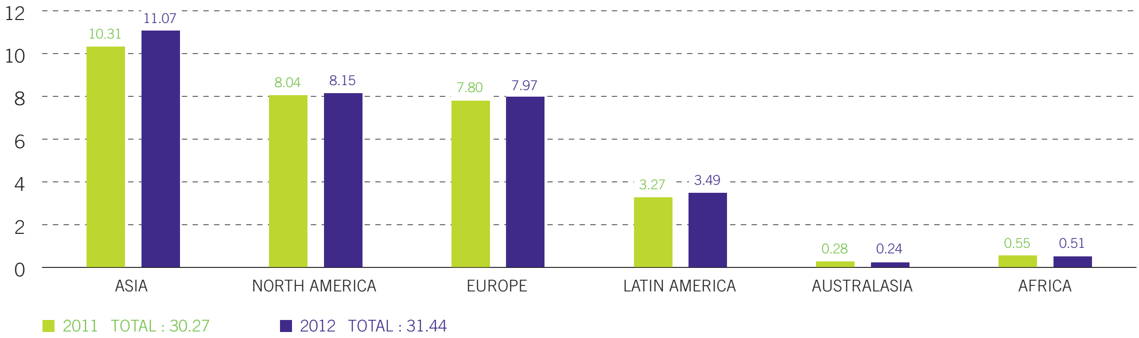


WORLD PRODUCTION OF GRAPHIC AND PRINTING (MILLION TONNES)*

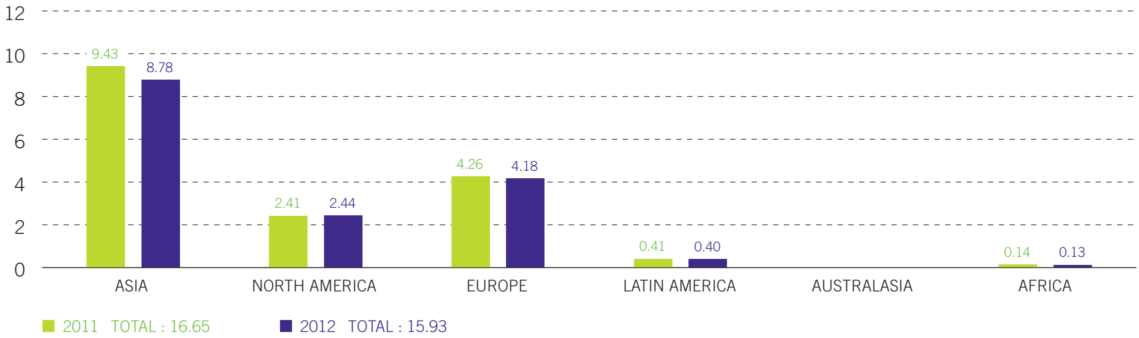


* Figures are expressed to two decimal places.

WORLD PRODUCTION OF TISSUE (MILLION TONNES)*



WORLD PRODUCTION OF OTHER AND SPECIAL PAPERS (MILLION TONNES)*



* Figures are expressed to two decimal places.

MAIN PRODUCERS AND CONSUMERS OF PAPER AND BOARD (TONNES)

	Production 20121	% change 2011/12	Apparent consumption 2012*	% change 2011/12
China	102 500 00	3.3	100 290 000	2.8
USA	74 375 000	-0.9	71 820 000	-0.7
Japan	23 083 000	-2.0	27 783 000	-1.0
Germany	22 630 000	-0,3	19 718 000	-1.6
Sweden	11 417 000	0.8	1 900 000	-2.9
South Korea	11 334 000	-1.3	9 158 000	-3.3
Canada	10 750 000	-11.1	5 980 000	-23.0
Finland	10 694 000	-5.6	1 090 000	-5.4
Brazil	10 260 000	1.0	10 067 000	2.5
Indonesia	10 249 000	2.5	6 850 000	4.4
India	10 240 000	4.6	11 762 000	2.5
Italy	8 664 000	-5.0	9 922 000	-6.8
France	8 100 000	-5.5	9 307 000	-4.9
Russia	7 797 000	8.2	6 796 000	4.6
Spain	6 177 000	-0.4	5 989 000	-5.9
Austria	5 005 000	2.1	2 075 000	-5.0
Mexico	4 763 000	1.3	7 440 000	4.9
Thailand	4 443 000	0.4	4 432 000	3.6
UK	4 416 000	1.7	10 095 000	-2.6
Taiwan	4 122 000	2.4	4 056 000	-0.5

**Apparent consumption = production + imports – exports.*

Production progress could be noted in a number of other countries, including Vietnam (+7.6%), South Africa (+7.5%), Turkey (+3.7%) and Saudi Arabia (+39%) while substantial reductions were seen in, among other nations, Norway (-19.9%), Denmark (-18.3%), Greece (-10%), Switzerland (-8.6%), Belorussia (-8%), the Netherlands (-3.9%) and Belgium (-2.3%).

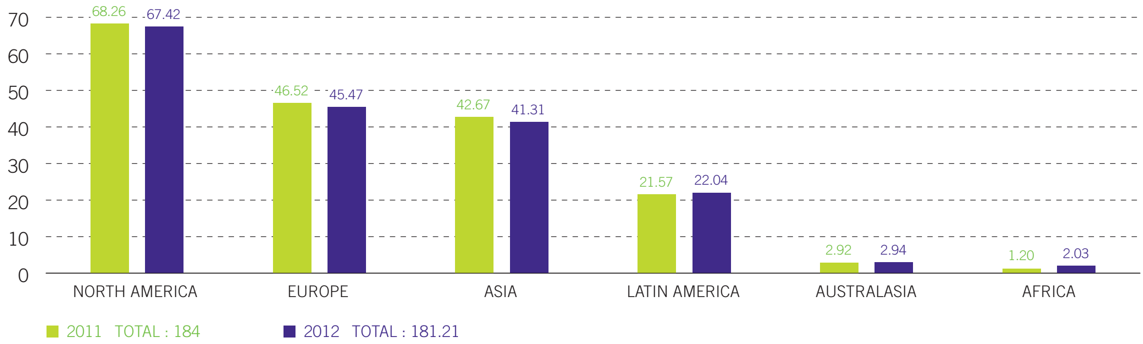
VIRGIN FIBRES

As in previous reports, the figures in the tables below cover all grades, including chemical, semi-chemical, mechanical and non-conventional. This final category enjoys production and consumption consistency in some areas, and so the figures are expressed separately for a better understanding of the situation.

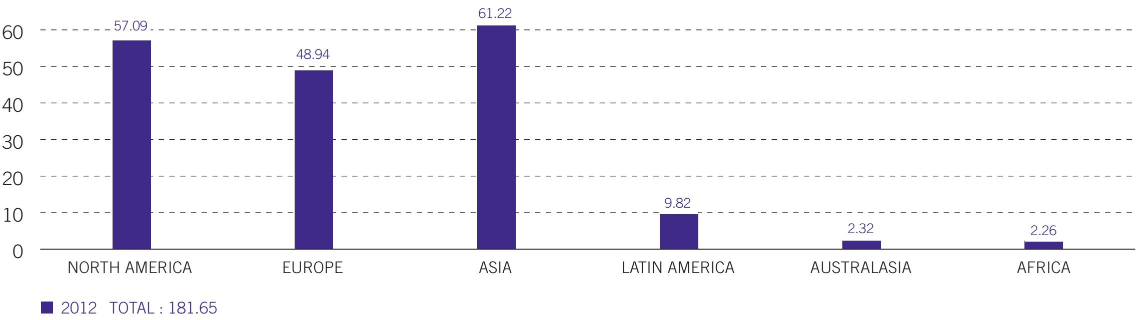
The following graphs contain revisions to take account of official amendments to some of the data for 2011.

GLOBAL VIRGIN FIBRES PRODUCTION AND CONSUMPTION

PRODUCTION (MILLION TONNES)*



APPARENT CONSUMPTION (MILLION TONNES)*

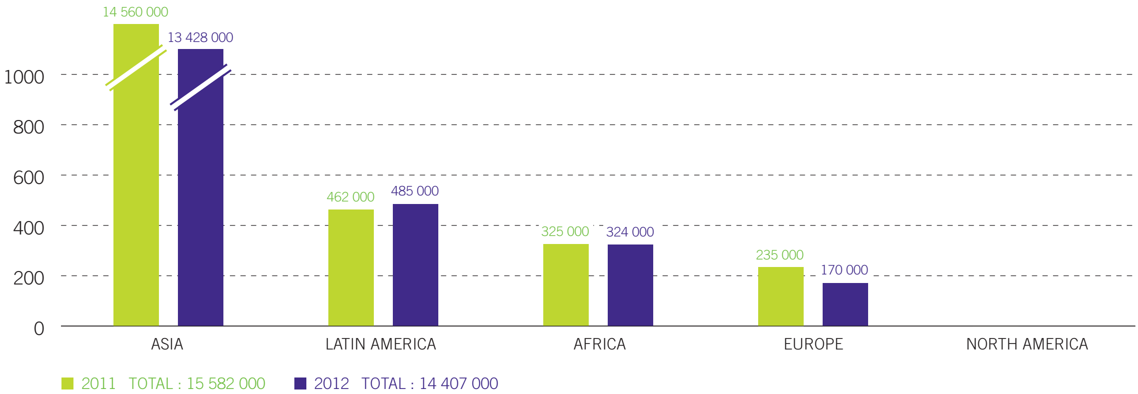


* Figures are expressed to two decimal places.

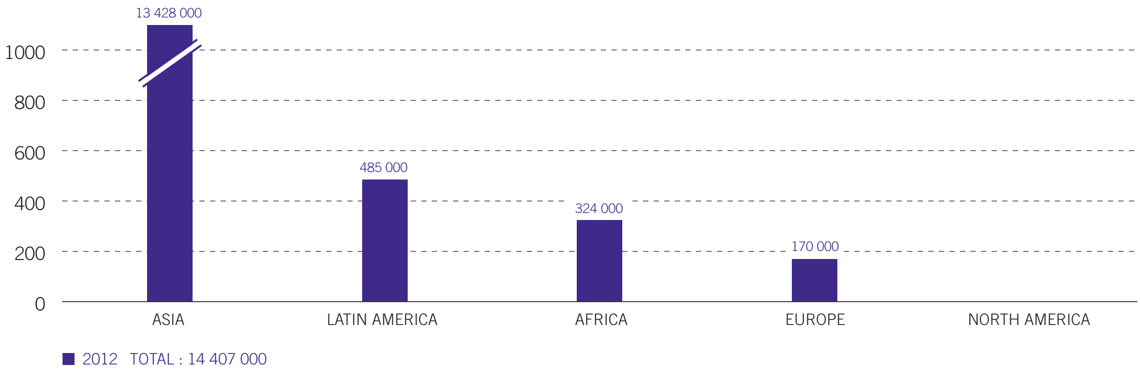
The overall drop in production equates to 2 721 000 tonnes (-1.48%). The global totals also include non-wood pulps that are typical of Asia, the details for which are expressed below.

NON-WOOD PULP PRODUCTION AND CONSUMPTION (TONNES)

PRODUCTION (TONNES)



APPARENT CONSUMPTION (TONNES)



In 2012, the major producer was once again China on 13 342 000 tonnes, all of which was consumed domestically. The overall production decline was 7.5%. Official data suggest all volumes were absorbed in their respective areas of production because the materials are more economic and are used in the production of some special papers.

WORLD'S LEADING PRODUCERS OF WOOD FIBRES (TONNES)

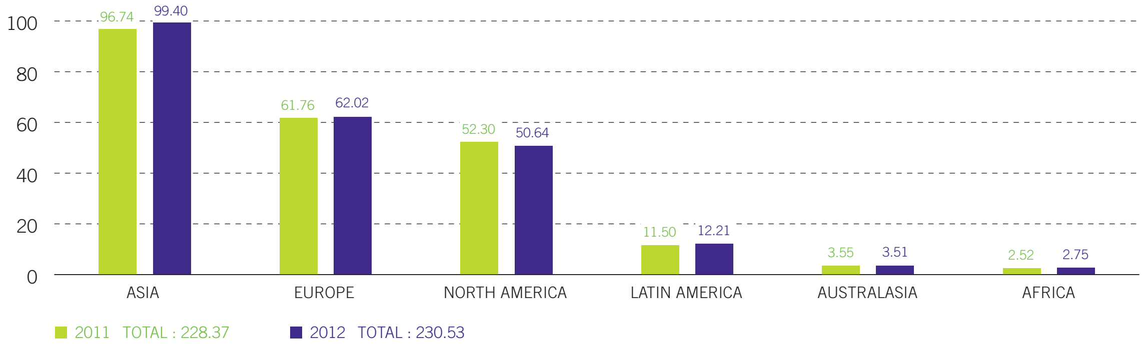
	Production 2012	% change 2011/12	Apparent consumption 2012
USA	50 350 000	0.7	49 100 000
China	18 197 000	-7.5	32 980 000
Canada	17 083 000	-6.7	7 790 000
Brazil	14 075 000	1.4	6 055 000
Sweden	11 672 000	-1.6	9 195 000
Finland	10 237 000	-1.2	8 136 000
Japan	8 640 000	-4.2	9 990 000
Russia	7 520 000	0.9	5 670 000
Indonesia	6 710 000	1.1	4 485 000
Chile	5 155 000	5.7	720 000
India	4 093 000	2.2	4 870 000
Germany	2 636 000	-3.2	6 177 000
Portugal	2 464 000	0.4	1 436 000
Spain	1 980 000	-0.3	1 900 000
France	1 815 000	-3.0	3 075 000
Austria	1 725 000	-0.6	1 946 000
South Africa	1 615 000	2.3	1 514 000
New Zealand	1 503 000	0.1	637 000
Australia	1 435 000	1.0	1 680 000

Output declines were recorded by some minor producers in 2012, including Norway (-33%) and the Czech Republic (-12%), whereas Vietnam posted year-on-year growth of 41%.

The global merchant pulp total for 2012 is estimated at 35-38m tonnes.

RECOVERED PAPER

RECOVERED PAPER COLLECTIONS (MILLION TONNES)



The overall collection total climbed a very modest 0.945% when compared to the previous year, but a decline in some areas was compensated by the increase recorded by Asian countries as well as by some progress in Europe and in Latin America.

RECOVERED PAPER CONSUMPTION IN 2012 (TONNES)

	Collection	**Imports**	**Exports**	**Apparent consumption**
Asia	99 398 000	39 220 000	7 740 000	130 878 000
Europe	62 020 000	17 553 000	25 220 000	54 353 000
North America	50 640 000	1 680 000	22 390 000	29 930 000
Latin America	12 210 000	1 925 000	1 025 000	13 110 000
Australasia	3 510 000	3 000	1 647 000	1 866 000
Africa	2 750 000	36 000	193 000	2 593 000
Total	**230 528 000**	**60 417 000**	**58 215 000**	**232 730 000**

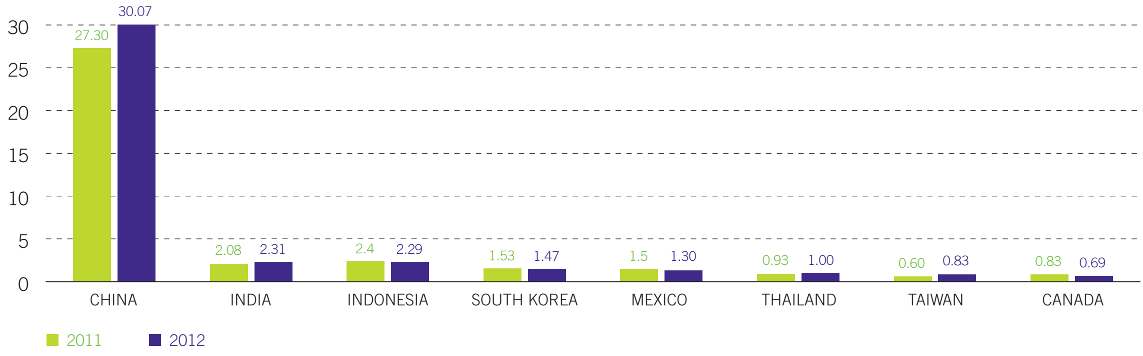
Apparent recovered paper consumption increased in 2012 by something more than 6m tonnes (or 2.7%) when compared to the previous year whereas collections increased by only 0.96%. The difference between collection and consumption is explained by the erosion of stocks by consumers.

LEADING COLLECTORS AND CONSUMERS OF RECOVERED PAPER (TONNES)

	Collections 2011	Collections 2012	% change	2012 Consumption	% change
USA	47 800 000	46 300 000	-3.2	26 300 000	-3.0
China	43 200 000	44 700 000	3.7	75 000 000	6.2
Japan	21 300 000	21 700 000	1.5	16 800 000	-1.0
Germany	15 270 000	15 300 000	0.2	16 200 000	0.8
South Korea	9 200 000	8 800 000	-1.3	9 600 000	-4.1
UK	8 035 000	8 160 000	1.5	3 800 000	1.5
France	7 180 000	7 330 000	2.1	5 040 000	-2.0
Italy	6 300 000	6 230 000	-1.2	4 650 000	-8.0
Spain	4 700 000	4 550 000	-2.9	5 070 000	-0.5
Canada	4 420 000	4 400 000	-0.9	2 635 000	-14.3
Brazil	4 360 000	4 470 000	2.5	4 450 000	2.3
Mexico	3 680 000	3 930 000	6.8	4 755 000	1.4
Indonesia	3 350 000	3 595 000	7.2	5 900 000	2.6
India	3 155 000	3 400 000	7.7	5 700 000	8.9
Taiwan	3 120 000	3 060 000	-1.9	3 820 000	4.9
Netherlands	2 480 000	2 550 000	2.8	2 140 000	-0.9
Russia	2 390 000	2 615 000	9.6	2 235 000	7.2
Belgium	2 125 000	1 880 000	-11.6	1 150 000	-10.0
Thailand	2 620 000	2 667 000	1.9	3 635 000	3.6
Austria	1 435 000	1 450 000	1.3	2 400 000	-1.4
Switzerland	1 312 000	1 160 000	-11.6	948 000	-5.2

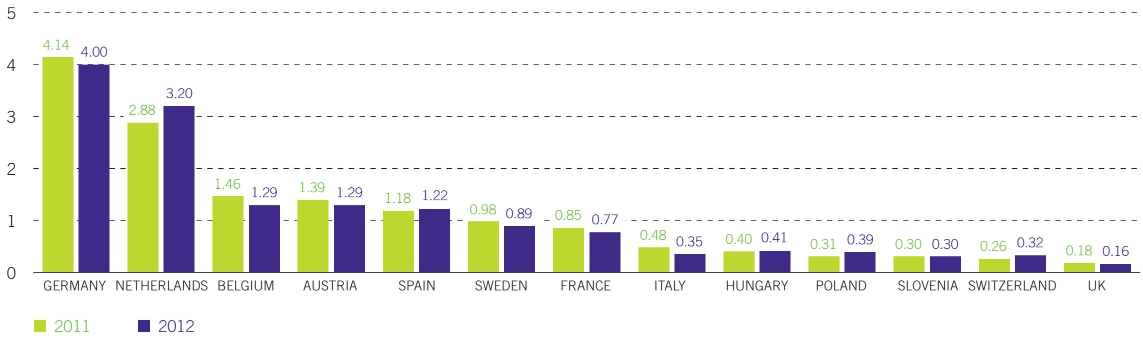
The drop in consumption noted for 2011 was focused mainly on the Western economies and this trend continued in 2012, diverging from the modest increase in recovered paper collections and often linked to a reduction in municipal waste and of waste in general within certain countries. Meanwhile, nations in other regions made encouraging progress.

MAJOR IMPORTERS OF RECOVERED PAPER (MILLION TONNES)

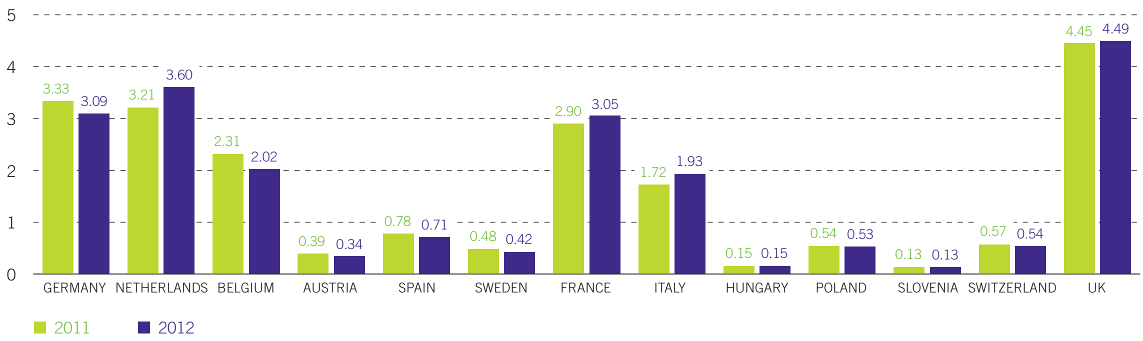


MAIN RECOVERED PAPER MOVEMENTS INVOLVING WESTERN EUROPE

GLOBAL IMPORTS (MILLION TONNES)

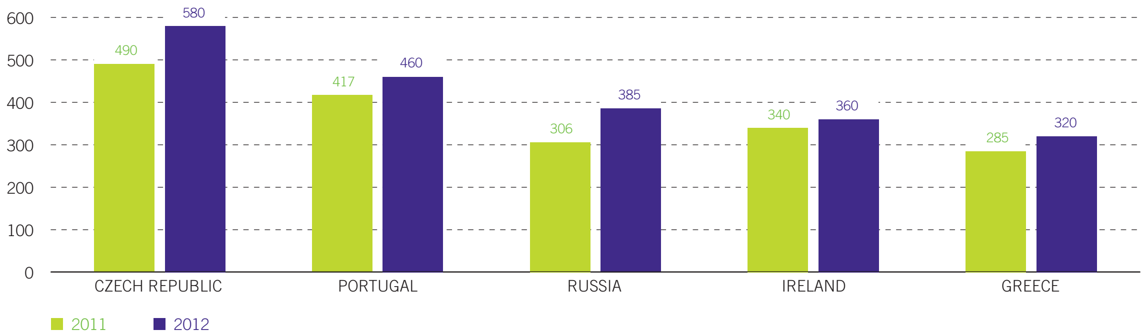


GLOBAL EXPORTS (MILLION TONNES)



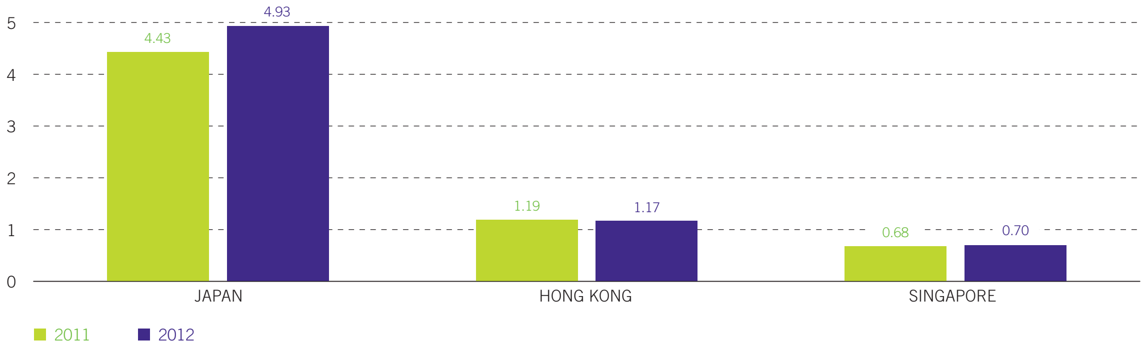
It appears evident that some countries are largely places of transit owing to their geographic locations and sea port infrastructures. Also worthy of note are the following recovered paper export totals for 2012 (in tonnes):

GLOBAL EXPORT (THOUSAND TONNES)



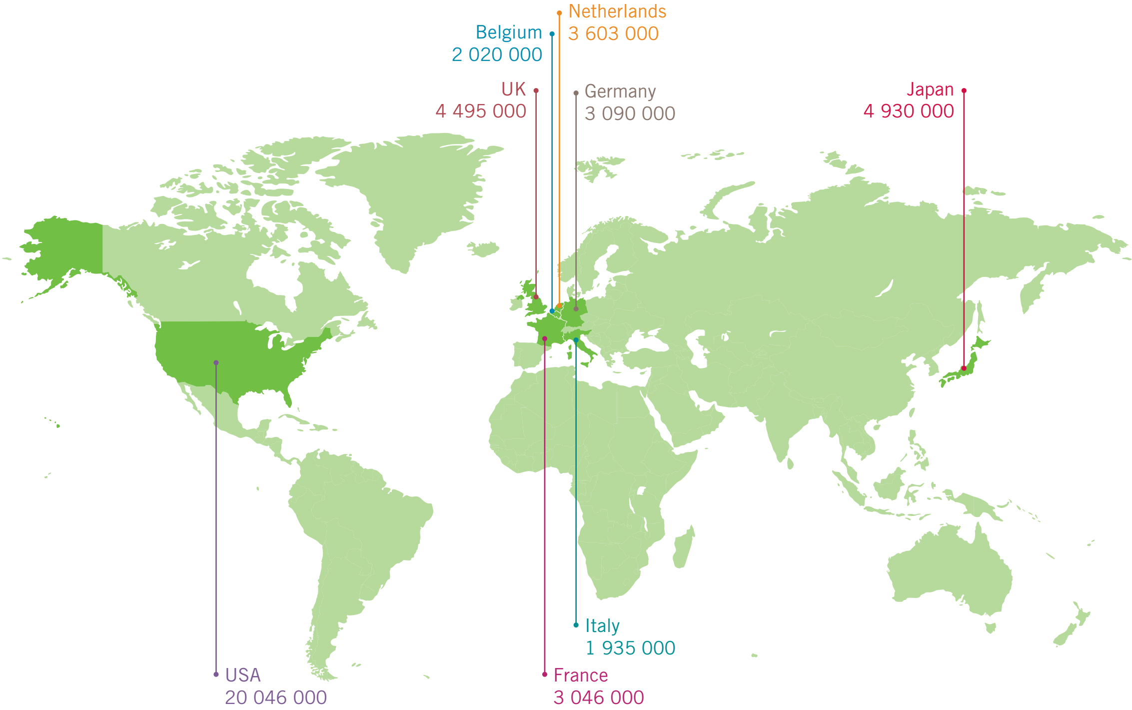
Some Asian countries are already well structured to produce significant surpluses of good-quality recovered paper which are exported mainly to China:

MAJOR ASIAN EXPORTERS OF RECOVERED FIBRE (MILLION TONNES)



For simplicity, below is a summary of the major recovered paper exporters.

WORLD'S MAJOR EXPORTERS OF RECOVERED PAPER (TONNES)



% CHANGE 2011/2012

USA	-4.2	Germany	-7.2
Japan	11.0	France	5.0
UK	0.7	Belgium	-12.0
Netherlands	12.2	Italy	12.2

The Far East is the major pole of attraction for the approximately 50-52m tonnes merchant recovered paper circulating globally each year. In effect, this region is absorbing the surpluses arising within the Western economies.

It is not easy to estimate quantities in transit that escape evaluation owing to the length of journey times to final consumers over water and also land. For economic and environmental reasons, shipping lines have delayed delivery times, while a new generation of major vessels entered service in 2012. The cost of the freight is an important factor given the scale of traffic and has an obvious influence on movements; the same applies to exports of products from the Far East.

Despite the stagnation of paper and board production, this has not significantly altered the consumption of recovered paper (232.7m tonnes) and of virgin fibres (181.2m tonnes) that account for, respectively, around 56% and 44% of the fibrous materials used by mills worldwide. Use of recovered paper is widespread and, for many mills, the dominant raw material in their production processes such that it has been the leading fibre source in volume terms for the last seven years in a row. At the same time, it should also be remembered that there is always a requirement for a complement of fresh fibre.

A proportion of recovered paper is destined for alternative applications, such as thermal insulation, asphalt cardboard and gypsum card panels. Owing to the reduction in building activity as a result of economic uncertainty in some areas, the volumes absorbed in this way are estimated to be around 600,000 tonnes per annum worldwide.

Recovered paper used for such purposes requires specific selection and preparation distinct from the normal paper and board industry circuits and so is not included in the above figures. And as always, it is not possible to evaluate the volumes of boxes and newspapers currently used in emerging countries for such domestic purposes as packaging vegetables and other foodstuffs sold in local markets that escape the collection infrastructure.

It is important to underline that some finished paper products do not enter the normal recycling circuits either, such as hygiene/toilet products, wallpaper, a great majority of papers used in food and liquid packaging, multi-layer papers and some special papers. Globally speaking, it is estimated that these products account for around 20% of total paper and board production.

It seems evident that some parts of the Western World are coming ever closer to the limits of what can be reasonably and beneficially recovered. Here, local collections have created a recovered paper surplus. In our report for 2011, it was underlined that volumes which could not be consumed in the areas of generation were absorbed in the expanding Asian market, thus providing a necessary commodity to these consumers while simultaneously alleviating problems of surplus in exporting regions.

In 2012, the quality requirements of Asian consumers became stricter owing to the delivery of some consignments that failed to reach the customers' standards, resulting in penalties for the specific suppliers. Achieving the correct level of recovered paper quality has long been a subject of discussion and debate, and this continued in 2012. There is a need for the removal of contaminants and of non-recyclable components given that collection streams vary and can require correspondingly different levels of care.

Structures and specific installations for the selection and separation of material never come free of charge and, in some cases, the costs can outweigh the benefits. In such circumstances, materials should be subjected to thermal recovery in appropriate plants rather than be introduced into the normal recycling loop.

The modern plants operated by paper producers and the constant introduction of new technologies allow some latitude, but it is obvious that consumers still require material that is as clean as logically possible. Tolerance limits were a source of debate and even confrontation during 2012.

Just to meet the standards required by consumers, collectors and recyclers continued with their investments in the latest, costly sorting systems. The end objective is an acknowledgement that recovered paper, when duly processed, can achieve the status of raw material and so avoid the erroneous confusion with waste which has so assisted the lobbying activities of vested interest groups.

In this context, we should also note the introduction of new types of contamination by producers of certain paper products, in the form of some inks, insoluble adhesives, wet-strength substances, etc. In some instances, these cannot be removed by recovered paper processors and are not identified by the paper producer.

FAR EAST

China

2012 brought reasonable continuity in the growth of the country's paper and board production (see page 6). Total output climbed 3.3% to make China the world's largest producer for the second time, in parallel with an increase in domestic per capita consumption to 74.7kg. In final quarter of 2012, a reduction in the production of paper and board of around 4m tonnes was decided, involving the closure of plants and machines that were causes of pollution or were no longer economic to operate.

Recovered paper collections increased by 3.7% and imports by 10.1% (see pages 11 and 12).

As always, the bulk grades made up the great majority, with OCC leading the way and followed by News and Mixed, whereas the high grades accounted for only 1-2%. The major overseas supplier was again the USA on around 14m tonnes, with Europe in second place on some 10m tonnes and Japan on a growth trend in third position. Controls applied to incoming material became more severe and led to penalties in some cases, in line with the general trend towards demanding higher-quality goods. This is something that should be considered to the advantage of the reputable operators within our profession.

Japan

The country has suffered similar problems to the Western economies and has been troubled by financial complications, albeit to a lesser extent owing to its monetary system. In 2012, paper and board production fell 2% while pulp production dropped by 4%. Per capita consumption in 2012 was 218kg. The solid domestic recovered paper collection system recorded a drop-off of just 1%, enabling increased exports of the surplus, mainly to China.

India

There has been constant progress, but at a gradual pace owing to the country's distinct political structure. In 2012, recovered paper collections increased by 7.7%, consumption by 8.9% and imports by 11% (see pages 11 and 12). India became the world's second-largest net importer (no exports). Per capita consumption of paper and board was 9.8kg.

Indonesia

Following a reduction in 2012, Indonesia dropped to third place in the league table of the world's largest recovered paper importers (again, no exports). This was compensated by an increase of 7.2% in collections and of 2.6% in usage; there was also a 1% increase in pulp production. Per capita consumption of paper and board was 27.5kg.

South Korea

In 2012, there were identical reductions of 1.3% in paper and board production and in collections of recovered paper. Recovered paper imports fell 4% while per capita consumption of paper and board amounted to 187kg.

Taiwan

In 2012, there was a 2.4% increase in paper and board production and a 38% surge in recovered paper imports, while collections dropped 1.9%. Per capita consumption of paper and board was 174kg.

PRICE

The volatility seen from time to time in recovered paper prices always depends on a multitude of factors, including fluctuations in the financial sector and the circumstances of end consumers. Sales prices and market demand for finished paper and board products have an immediate effect, of course, on corresponding raw materials.

Other factors include the dampening effect on collection of the weather and of holiday periods such as Christmas, Chinese New Year and Ramadan. An impact can also be felt on logistics and sea freight. Evidence suggests that clean, good-quality recovered paper will be the subject of more regular demand.

LEGISLATION AND RULES

During the course of 2012, work continued to clarify the status of recovered paper, with technical and legal definitions being a source of constant debate. Also crucial were moves and trends in both local and international legislation that often became complicated by confused interpretations about the nature of materials.

Impurity levels remained a point of discussion, as well as the time periods for claims, etc. Harmonisation of definitions and rules, it is argued, would be of benefit to all concerned parties given that this would avoid contradictions and the lobbying of vested interests. In this regard, the dialogue continued in 2012 between the European Recovered Paper Association (ERPA) and the Confederation of European Paper Industries (CEPI) to establish common rules. By the end of the year, no clear outcome had been achieved and the work continued into 2013.

CONCLUSIONS

The figures above provide a realistic picture of 2012 and of how political and economic factors influenced our branch of industry. Political changes in some major countries such as the USA and China created situations that would develop further in 2013.

Progress has not been helped by on-going conflicts in the Middle East and North Africa, as well as by the uncertain solutions to banking system crises; even within Europe, financial equilibrium has yet to be restored.

AUTHOR'S FOOTNOTE

As always, I offer my thanks and greetings to my colleagues in the sector whose work does so much to promote recycling and the recovered paper industry. And also, I salute the magazines and other publications which report on our industry and update us on latest relevant developments and issues.

Design by karakas

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