RECOVERED PAPER MARKET IN 2010

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The following text and tables provide a summary of developments within the recovered paper sector in 2010. As always, some figures have been subject to modifications by official sources and, in some cases, to consistent change (particularly with respect to the Far East). However, the trends are reasonably reliable.

Traditionally, we start with paper and board production, the first link in the chain for the materials we produce and the final destination for our recovered paper.

Table 1 Global production of paper and board (tonnes)

	2009	2010
Asia	157 196 000	169 709 000
Europe	101 445 000	106 995 000
North America	84 470 000	88 636 000
Latin America	19 400 000	20 294 000
Africa	4 189 000	4 345 000
Australasia	4 000 000	3 930 000
Total	**370 700 000**	**3 93 909 000**

The downward trend observed in the previous two years was reversed in 2010 for the whole sector (notwithstanding a few symptoms of economic weakness), but with more concrete results in Asia. The following table reflects per-capita consumption of paper and board products around the world:

Table 2 Apparent per capita consumption of paper and board (tonnes)

	Population 2009	Population 2010	Apparent per-capita consumption 2010 (kg)
Asia	4 096 983 000	4 153 060 000	40
Africa	1 004 266 000	1 027 778 000	7.8
Europe	741 240 000	750 940 000	142
North America	343 993 000	347 363 000	234.8
Latin America	591 679 000	597 037 000	45.5
Australasia	33 503 000	33 873 000	135
Total	**6 811 664 000**	**6 910 051 000**	**57**

In 2009, per-capita consumption of paper and board had averaged 54.4kg. The following year, the industry was well on the way to recovering to the level of 2008 (57.7kg) although was still some way short of the 59.2kg of 2007. In evaluating the picture, the increase in the world population should also be noted.

Given economic uncertainties, the 6.25% progress in 2010 must be considered significant.
As in previous reports, the figures expressed refer to resident citizens; with regard to Europe, the number of people not originating in European countries but now living there is calculated at around 30 million. Data for Europe include the traditional Western countries as well as Eastern European nations such as those previously belonging to the Soviet Union. Meanwhile, the Middle East and Turkey have been incorporated into the figures for Asia.

The following tables break down paper and board production into key segments, thereby casting further light on the consumption and production of recovered fibre:

Table 3 World production of packaging and board (tonnes)

	2009	**2010**
Asia	85 856 000	93 489 000
North America	44 928 000	47 760 000
Europe	43 647 000	48 534 000
Latin America	11 250 000	11 380 000
Australasia	2 315 000	2 504 000
Africa	2 200 000	2 576 000
Total	**190 196 000**	**206 243 000**

Table 4 World production of graphic and printing (tonnes)

	2009	**2010**
Asia	54 836 000	57 620 000
Europe	38 557 000	47 315 000
North America	29 580 000	30 027 000
Latin America	4 944 000	4 960 000
Australasia	1 285 000	1 128 000
Africa	1 207 000	1 230 000
Total	**130 409 000**	**142 280 000**

Table 5 World production of tissues (tonnes)

	2009	2010
Asia	8 873 000	9 648 000
North America	7 830 000	7 938 000
Europe	7 062 000	7 641 000
Latin America	3 153 000	3 166 000
Australasia	294 000	293 000
Africa	502 000	505 000
Total	**27 714 000**	**29 191 000**

Table 6 World production of other and special papers (tonnes)

	2009	2010
Asia	9 989 000	9 943 000
North America	2 340 000	2 446 000
Europe	4 195 000	4 619 000
Latin America	421 000	387 000
Australasia	4 000	--
Africa	39 000	81 000
Total	**16 988 000**	**17 476 000**

The following table shows the leading paper and board producing countries of the world as well as their apparent domestic consumption (ie, production + import – export):

Table 7 Production and consumption of paper and board (tonnes)

	Production 2010	% change 09\10	Apparent consumption 2010	% change 09\10
China	92 600 000	7.3	91 655 000	7.1
USA	75 850 000	5.9	27 245 000	4.9
Japan	27 289 000	3.9	27 870 000	2.2
Germany	23 120 000	10.8	19 763 000	7.1
Canada	12 790 000	-1.2	6 290 000	- 3
Finland	11 790 000	11.2	1 475 000	0
Sweden	11 410 000	4.4	2 010 000	0
South Korea	11 120 000	6.2	9 426 000	12
Indonesia	9 950 000	6.3	6 100 000	5.5

Brazil	9 796 000	3.9	9 506 000	9
India	9 222 000	6	10 775 000	9.2
Italy	9 145 000	8.2	10 829 000	9.4
France	8 830 000	6	9 225 000	4
Russia	7 600 000	2.8	6 560 000	11.3
Spain	6 192 000	9	6 506 000	4.8
Austria	5 010 000	8.7	2 167 000	13
Mexico	4 750 000	3.4	7 260 000	10
Thailand	4 650 000	4.9	4 764 000	9.6
UK	4 300 000	0.2	10 515 000	1.5
Taiwan	3 955 000	2.2	4 024 000	14

Despite the general economy uncertainty, progress down the road to recovery is evident if we compare the figures of the past year.

Other evidence of progress worthy of note includes:

	Production	**Consumption**
Netherlands	+9.6	+5.3
Belgium	+9	+2.9
Poland	+11.8	+10.6
South Africa	+11.8	+16.5
Turkey	+11	+17.4

The same trends have also been ascertained for other minor producers such as Egypt, Saudi Arabia and Vietnam.

The following table reflects virgin fibre production and consumption in the key regions of the world. The figures incorporate all the grades, ie chemical, semi-chemical, mechanical and also non-conventional.

Table 8 Virgin fibre production and consumption (tonnes)

	Production 2009	**Production 2010**	**Apparent consumption 2010**
North America	65 415 000	67 780 000	57 641 000
Europe	43 580 000	46 706 000	51 822 000
Asia	42 210 000	45 002 000	45 096 000*
Latin America	21 470 000	21 075 000	9 885 000
Australasia	2 755 000	2 900 000	2 900 000
Africa	2 320 000	2 122 000	3.950 000
Total	**177 750 000**	**185 585 000**	**171 294 000**

* Asian production and consumption totals is 60 076 000 tonnes if we consider 15 700 000 tonnes of local non-conventional pulps (bamboo, jute, etc.)

Table 9 Production of pulp (tonnes)

	Production 2010	% change 09\10	Apparent consumption 2010
USA	49 243 000	1.9	46 696 000
China	22 042 000	5.9	32 396 000
Canada	18 536 000	8.5	9 335 000
Brazil	14 062 000	2.4	6 080 000
Sweden	11 877 000	3.5	9 186 000
Finland	10 598 000	16.7	8 810 000
Japan	9 393 000	10.4	10 680 000
Russia	7 420 000	3.1	5 754 000
Indonesia	6 280 000	5.1	4 600 000
Chile	4 114 000	-17.6	770 000
India	3 930 000	3.4	4 507 000
Germany	2 762 000	8.7	6 995 000
Portugal	2 250 000	3.1	1 310 000
France	1 922 000	7.4	3 452 000
Spain	1 900 000	8.6	1 830 000
Austria	1 701 000	10.7	1 947 000
South Africa	1 680 000	-3.2	1 606 000

As shown in previous tables, the figures confirm the general improvement of the whole sector, and the volume of **merchant pulp** is always estimated at between 35 and 40m tonnes. The production increases in 2010 were generally running parallel with upturns in local consumption. Modernisation of production plants starting in 2009 had an evident effect also on the prices of virgin fibre.

RECOVERED PAPER

The following tables show developments in our branch.

Table 10 Recovered paper collections (tonnes)

	2009	**2010**
Asia	84 224 000	93 953 000
Europe	60 890 000	61 535 000
North America	49 670 000	51 045 000
Latin America	10 264 000	10 930 000
Australasia	3 370 000	3 500 000
Africa	2 075 000	2 460 000
Total	**210 493 000**	**223 423 000**

After the drop-off of 2009, recovered paper collections achieved an increase of 6.2% in 2010.

In the main Western countries, where the pressure for collections was, as today, strongly connected to political and ecological arguments, the reduction in collection volumes in 2009 was not too severe even in function of the European Declaration and of the targets there commonly subscribed. In the event, surpluses easily found their way to some of the new plants elsewhere on the same continent (into Hungary, for example) as well as in the direction of the Far East.

The following table expresses apparent recovered paper consumption (collection + imports - exports) in the main regions of the world:

Table 11 Recovered paper consumption in 2010 (tonnes)

	Collection	**Imports**	**Exports**	**Apparent consumption**
Asia	93 953 000	33 372 000	7 568 000	119 803 000
Europe	61 535 000	15 225 000	23 995 000	53 276 000
North America	51 045 000	1 750 000	20 730 000	31 438 000
Latin America	10 930 000	2 170 000	718 000	12 392 000
Australasia	3 500 000	3 000	165 000	1 850 000
Africa	2 460 000	30 000	113 000	2 375 000
Total	**223 423 000**	**52 550 000**	**53 289 000**	**221 134 000**

As mentioned, collection resumed its upward course in 2010 by increasing 6.2% year on year, while consumption climbed 6.8% in comparison to 2009 after a period of decline across the whole industrial branch and all elements of the chain.

Table 12 Leading collectors and consumers of recovered paper (tonnes)

	Collection 2009	Collection 2010	% change	Consumption	% change
USA	45 400 000	46 760 000	3	27 995 000	8
China	34 500 000	41 543 000	19	66 315 000	6.2
Japan	21 660 000	21 640 000	-0.1	17 310 000	3
Germany	15 400 000	15 600 000	0.9	16 274 000	10
UK	8 170 000	8 035 000	-1.5	3 762 000	-1.5
South Korea	8 170 000	9 030 000	10.4	10 090 000	13
France	6 970 000	7 020 000	0.6	5 276 000	5.6
Italy	6 200 000	6 136 000	1.9	5 193 000	9.3
Spain	4 625 000	4 570 000	-1.2	5 105 000	11.1
Canada	4 257 000	4 290 000	0.8	3 445 000	-8
Brazil	3 890 000	4 120 000	6	4 135 000	6.1
Mexico	3 300 000	3 554 000	7.4	4 710 000	4.2
Indonesia	3 100 000	3 407 000	9.5	5 800 000	8
Taiwan	2 880 000	2 940 000	2	3 444 000	1.3
India	2 518 000	3 045 000	21.1	4 997 000	4.2
Netherlands	2 160 000	2 540 000	17.6	2 005 000	10.3
Russia	2 140 000	2 282 000	6.7	2 080 000	6.4
Belgium	1 880 000	1 880 000	0	1 252 000	14.9
Thailand	1 860 000	1 950 000	5	2 940 000	5.2
Austria	1 540 000	1 590 000	2.4	2 480 000	8.3
Switzerland	1 318 000	1 300 000	-1.4	847 000	-1.3

Quite remarkable is the conspicuous increase of 19% in Chinese collection volumes compared to a 7.3% increase in the country's domestic paper and board production. A similar trend emerged in India, followed by South Korea and Indonesia, whereas Japan remained practically stationary. Consumption increased by 19.7% in Poland and by 19% in Turkey whereas the Czech Republic recorded a reduction of 4.3%.

The USA remained the largest exporter after following up a total of 19 075 000 tonnes in 2009 with 18 815 000 tonnes in 2010. The imbalance between domestic collection and consumption volumes is largely reflected in export quantities. The landscape is comparable to virgin fibres. Also in relation to recovered paper, producer countries are normally the main consumers of their own production.

The following tables add more detail to this picture:

Table 13 Major importers of recovered paper (tonnes)

	2009	2010
China	27 900 000	24 775 000
Indonesia	2 290 000	2 413 000
India	2 180 000	1 950 000
Mexico	1 450 000	1 470 000
South Korea	1 090 000	1 328 000
Canada	1 310 000	1 058 000
Thailand	970 000	1 025 000
Taiwan	563 000	570 000

The countries mentioned above are in practice only importers. It should be noted that Mexico and Canada share a border with the USA and therefore reap evident rewards from their geographic positions and sectoral connections with their neighbours. The European situation is by definition more complex owing to the common borders among the countries and their respective economies and industries.

Table 14 Main recovered paper movements involving Western Europe (tonnes)

	Global imports		Global exports	
	2009	2010	2009	2010
Germany	3 156 000	3 625 000	3 795 000	2 904 000
Netherlands	3 064 000	3 008 000	3 225 000	3 342 000
Belgium	1 634 000	1 489 000	2 425 000	2 120 000
Austria	1 190 000	1 332 000	448 000	438 000
Spain	923 000	1 198 000	950 000	665 000
France	783 000	884 000	2 756 000	2 625 000
Sweden	892 000	1 072 000	320 000	395 000
Italy	414 000	494 000	1 860 000	1 615 000
Switzerland	95 000	140 000	550 000	590 000
UK	103 000	118 000	4 452 000	4 390 000

These additional data help to complete the picture:

Table 15

	Exports in 2009 (tonnes)	Exports in 2010 (tonnes)
Ireland	467 000	354 000
Portugal	422 000	430 000
Czech Republic	410 000	477 000
Poland	360 000	390 000
Greece	363 000	315 000

In Asia, exchanges of recovered paper are relatively consistent as a function of local systems of collection. The main exporters in the region are as follows (expressed in tonnes):

Table 16

	2009	2010
Japan	4 914 000	4 375 000
Hong Kong	1 036 000	1 200 000
Singapore	626 000	740 000

Clearly, Japan is one of the leading players in the export market and has no problem in moving much of its surplus to China.

The evidence suggests that 2010 saw a partial recovery from the contraction in paper and board production - and in the connected activities and chains - seen at the end of 2008 and in 2009. However, recovered paper collection activities remained under pressure in all of the Western countries despite the positive ecological and political drivers. The consistent reductions witnessed in 2009 were reversed, and despite collection progress in China and India, substantial opportunities remained for exporters of recovered paper to these destinations, thus avoiding the build-up of surplus material that could have led to local problems and to the compromising of Western collection systems' efficiencies.

It is not easy to evaluate the quantities of **merchant recovered paper** but these should be between 45 and 55m tonnes.

For the fifth consecutive year, generation and consumption of recovered paper greatly exceeded consumption of virgin fibres of around 35m tonnes but the indispensable need for fresh fibres remains, of course, constant.

Production of paper and board in the year 2000 totalled 323 296 000 tonnes and per-capita consumption averaged 53.8kg. By 2010, the production total had climbed to 393.917.000 tonnes while consumption per head has got 57.7kg. Comparing these same two years, pulp production went from 188 756 000 tonnes to 185 585 000 tonnes while production of recovered papers soared from 152 922 000 tonnes to 223 423 000 tonnes.

With mills having mastered its use, recovered paper has become a fundamental raw material for them. Quality demands have increased in parallel, creating the need for more advanced systems of collection and sorting to produce the results required by the major operators in the sector and by the companies that have invested in new plants.

Management of recovered paper stocks is not always easy because it is different from other recyclables, requiring structures and covered buildings in order to help obtain the level of quality required. Such costly operational necessities can represent a risk given the fluctuating demand for finished paper and board. A reduction in demand for such products (which leads to lower volumes of recovered paper) is connected not only to the state of domestic economies but also to such factors as holidays and seasonality in agricultural production.

Another factor not always given sufficient consideration is the evaluation by consumers of quantities of **materials on the way**, with special reference to the shipment of recovered papers to the Orient. Average transportation times have been consistently longer of late as many shipping companies have opted to reduce the speed of their vessels to conserve fuel.

Furthermore, there is a constant trend among consuming mills to keep their raw material stocks as low as possible at their financial year-ends.

These factors often result in a fragile and see-sawing demand for recovered paper which is reflected in prices. In 2010, prices increased as a function of renewed demand, thus putting collections on a more solid base.

As always, consideration must also be given to the quantities that it is effectively possible to recover - the source of frequent misunderstandings among people outside of the profession. By definition, recoverable volumes of recovered paper are connected to paper and board production, but it is always necessary to understand that some final paper products have to be excluded from the recovery equation, such as hygiene and toilet products, wallpaper and similar products used in buildings, several types of food packaging and special packages. Experts estimate that such products can equate to nearly 20% of paper and board production, depending on the specific area. And it should not be forgotten that, in several emerging countries, some paper products escape recycling as they are used at the domestic level for packaging food, etc.

Proper evaluation of such factors reveals that some countries are already near to the limit of what can be fruitfully recovered without risking a reduction in quality.

Perspectives on the Far East

China

In 2010, the great majority of paper and board production continued to be absorbed by the local market, resulting in a per-capita consumption increase to 68kg. In parallel to this, collection and recovery activity is growing; although progress is being made, material from domestic collections is often inferior in quality to recovered paper imported from other regions which is the subject of strict controls at the ports. The bulk grades account for the great majority of recovered paper imported into China, which also buys in minor quantities of the news grades. The leading supplier remained the USA in 2010 with a 41% share, followed by Europe on 27% and Japan on 13%.

India

Progress in India continues but at a slower speed due to the different political structures, and because paper and board enterprises - and those connected to them - are relatively small and depend on private capital. Per-capita consumption increased to 9.2kg in 2010 (developments are expressed in greater detail in Tables 7, 12 and 13).

Indonesia

A recovery has taken place since the decline of 2009 and developments affecting the country are reflected in Tables 7, 12 and 13. Indonesia remains the second-largest importer of recovered paper in volume terms although supply patterns can be irregular.

Japan

Japan remains well balanced when comparing the situation in 2010 to that of 2009, with the vast majority of its regular exports of recovered paper going to China, for whom Japan is the third-largest supplier after the USA and Europe.

Price patterns

Prices of recovered paper showed some decline at the beginning of 2010 but a more stable situation then developed. The market was influenced by uncertainties surrounding some of the world's economies. Domestic demand influenced local as well as export flows at different times of the year, allowing in any case a continuation of the investments in sorting facilities and collection systems, as required by the "end of waste" push in Europe. There was a reasonable continuity of demand for material provided this was of an **assured quality**.

Definitions and Rules

The European Recovered Paper Association (one of the BIR's daughter bodies), led by Merja Helander, and other professional associations in the sector, continued their work towards presenting the European Commission with a proposal for a more useful set of operating rules and definitions for the business. Happily, the fruit of this labour is the new European Declaration on Paper Recycling, issued together with CEPI, which has finally been presented by the Commission to the European Parliament, providing a road-map for the coming years. As a consequence, new and coherent rules concerning the definite nature of recovered paper will be clarified such that movements and exports of this category of secondary raw materials should avoid henceforth the different and confusing interpretations that have often haunted the activities of the sector as well as the free trade of its products.

A quick glance at 2011

Although a full review of the current year is not possible at this stage, some trends have emerged.

The start-up of new paper and board production units - and not only in the Orient - has confirmed the vitality of the sector. The beginning of the year brought some uncertainty in demand for our commodities but the situation later stabilised. The tsunami in Japan temporarily reduced the country's capacities in terms of production and exports although a balance now appears to have returned.

Weakness and uncertainty in some of the major economic regions resulting from, for example, serious problems in the banking sector, have yet to be fully resolved. Prices of finished paper and board products (which naturally impact on recovered paper values) have been affected by an excess of production compared to actual consumption.
With possible reflects of consistent settling down within the year.

Once more, important challenges lie ahead that will have a significant influence on our sector. However, it can be said with certainty that recovered paper now represents a fundamental commodity for the paper and board industry and will remain an important presence in this sphere of activity.

With this, I send my greetings to all operators in the industry and express my thanks to the trade magazines which are always providing market updates and regular information on our sector. Their work is appreciated and welcome, as well as very useful and supportive of our entire branch.

Giampiero Magnaghi