

September 2011

sustainability

REPORT



ASPAPPEL
Paper, naturally

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REPORT

Letter from the Chairman



Once again, this third edition of the Sustainability Report stands as transparent evidence of the Spanish Pulp and Paper sector's commitment to the social, economic and environmental facets that uphold sustainability.

The data and information contained in this document corresponds to a difficult period marked by the impact of the economic crisis on the sector's business. However, more than ever, the future depends on sectors like the paper industry that are based on natural cycles. We are convinced that economic recovery will be born from sectors that are committed to economic and environmental efficiency, as well as being able to anticipate the demands of consumers with competitively priced and environmentally sustainable products.

On the basis of this conviction, the sector develops its vision of sustainability as a determined contribution by paper and the companies that make it to improving living standards and sustainable development through sustainable forest management, clean manufacturing processes and the continuous recycling of their products.

We are an industry committed to eco-efficiency, which generates wealth from the standpoint of unwavering commitment to sustainability. A sector with a clear vocation to playing a key role in the emerging bio-economy based on the efficient use of renewable and low carbon resources - the economy of the future.

The intention of this report is to provide the most complete information about the work carried out by the industry since the last edition in 2008 and to assess the degree to which objectives set out therein have been accomplished and how the various indicators have evolved. We also hope to address the concerns and demands that our stakeholders made clear to us in a prior consultation process.

Finally, this edition also sets a series of objectives and actions for the coming three years. In short, it is a means of ensuring that both stakeholders and the society at large are aware of the true scope of our industry's business.

The report presented here maintains the four lines of action used in the previous reports: sustainable forest management, efficient and responsible manufacturing processing, leadership in recycling and recovery, generation of wealth and contribution to living standards.

To prepare this report, we have taken data about the various indicators from companies in the sector, which enables us to provide a comprehensive, sector-wide perspective, which is precisely where the pioneering nature of this report lies. Moreover, once again we have sought the views of stakeholders to focus our goals and activities.

This year we have gone one step further, by adopting GRI methodology, with Bureau Veritas verification, and have been awarded a GRI B+ rating, which stands as testimony of the accuracy and reliability in the design and contents of this Report.

As this Report shows, continuous improvement and the application of the best available technologies represent the sector's permanent commitment; and that is now our main challenge - to maintain and enhance the achievements already attained.

A handwritten signature in black ink, appearing to read 'Florentino Nespereira'. The signature is stylized and somewhat cursive, with a large loop at the end.

Florentino Nespereira
Chairman of ASPAPEL

FORBES



page 04 Sustainability
is also transparency

Pulp & Paper sector Sustainability Indicators

page 15



page 18 Paper grows on trees...
and makes trees grow



page 30 The efficient MILL



page 46 Recycling: the challenge of
improving on success



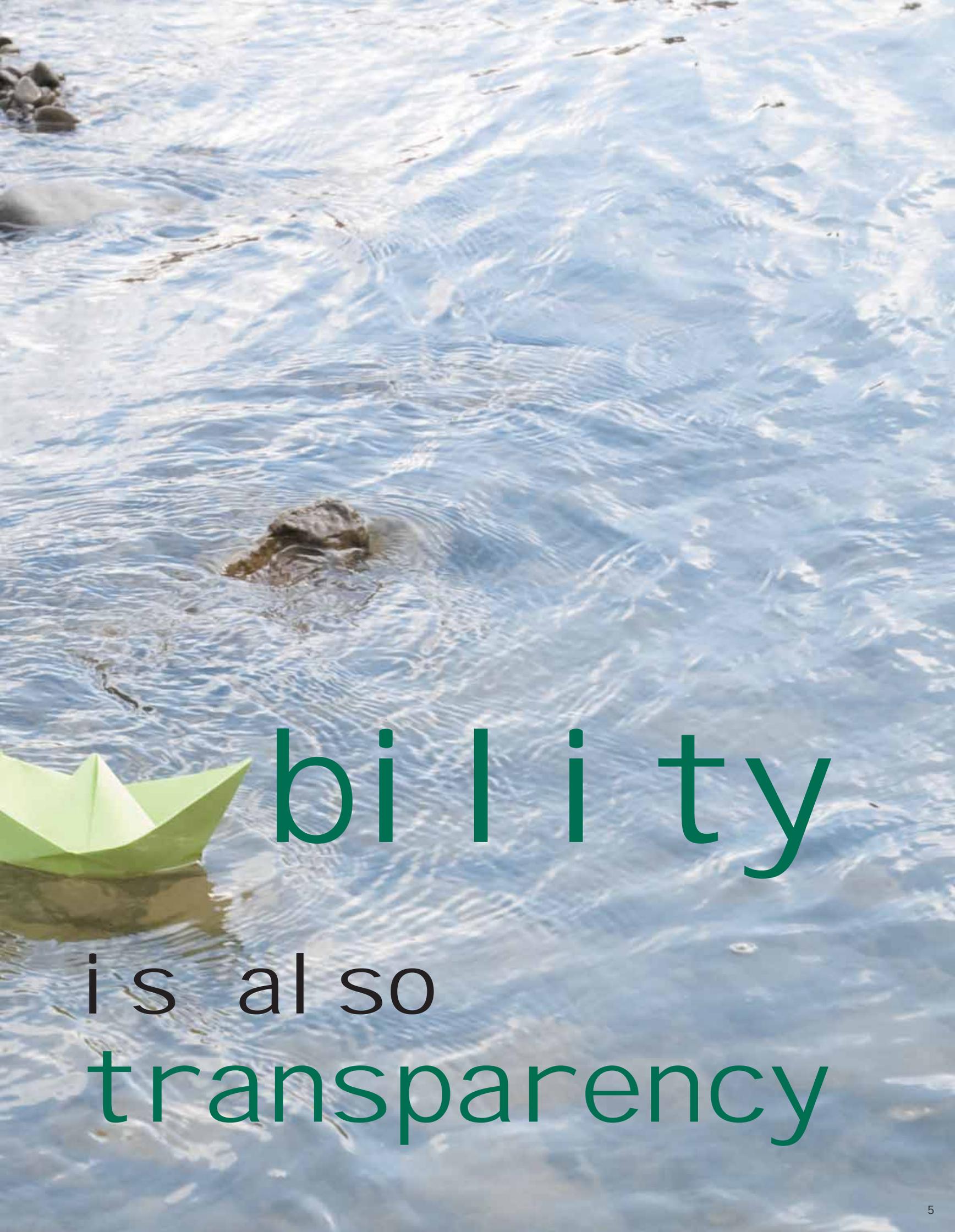
page 56 The Paper cycle,
the life cycle

page 69 Annex



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Sustaina



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Sustainability
is also transparency

The Pulp & Paper sector publishes its third

Sustainability Report

Paper, natural and innovative

Paper is a renewable and recyclable product. The paper cycle starts with wood growing in plantations of fast-growing species, which are large CO₂ sinks. The harvested wood provides the cellulose fibre from which paper is made. Once used, this paper is recycled as many times as possible and at the end of the cellulose fibre's lifetime, residues are put to further use in agriculture or as a raw material for other industries (ceramics, cement, insulation materials, mouldings...) and finally as biomass for bio-fuels. Thus, optimal use of a natural and renewable resource such as wood is achieved, the paper cycle becomes a closed loop and a very significant contribution to efficient resource usage and waste reduction is provided.

There are over 500 varieties of paper, of which more than 150 did not even exist just thirty years ago. Every day, we resort to using paper-based products on endless occasions to satisfy our most varied needs - to protect and transport the things we buy, we use paper and board packaging; to communicate, to acquire information at work or in our leisure activities, in our personal hygiene or when cooking and eating For all these things, we use paper-based products.

Apart from the most widely-known types of paper (printing & writing, wrapping and sanitary papers), many other papers appear in our daily lives: the filter in our coffee machines, the filter paper for our tea bags, the sandpaper for our nail files, the paper bag in the vacuum cleaner, security papers (banknotes, identity documents, certificates...), metallic paper labels on beer bottles, all kinds of sticky labels ... not to mention other types of paper whose use we are not even aware of. For example, an automobile uses extreme strength papers in the head gasket, paper in the air and fuel filters, papers with friction applications in the brakes and transmission system ... and then electronic and computer equipment which also uses paper: electro-thermal paper for use in high-voltage cables and transformers; dielectric paperboard with insulating properties for meters, radio sets, transformers, electric motors, dynamos ...; paper for batteries; paper for printed circuit boards in computers ...



The Pulp & Paper sector - a natural cycle-based industry

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Behind all paper products lies an industry committed to sustainability, an industry based on a natural and renewable raw material that recycles its products on a massive scale. A leading sector in the production and use of biomass that reaps value from the residues of its raw materials and process waste.

The Spanish Pulp and Paper industry has a large and growing export capacity: half of its output is exported. By harvesting and using wood, a natural and renewable resource in which Spain has a great potential, it is a key sector for the industrial future of our country.

With 85 mills, the Spanish paper sector provides for over 17,000 direct jobs, most of which represent permanent employment of skilled workers, as well as generating indirect employment for over 85,000 people. The period 2007-2010 covered by this Report includes two especially difficult years for the sector worldwide (2008 and 2009), with very negative effects on the industry, as seen in the loss of production output and consumption and the closure of facilities, with serious consequences on employment and installed production capacity. At the time this Sustainability Report goes to press, the situation has still not returned to normal and the progress made in 2010, albeit positive, is based on comparisons with 2009, an especially negative year for the sector.

Pulp & Paper Sector - Spain - 2010

(in thousands tons)

| | |
|---|----------------|
| Paper and board | |
| Production | 6,193.4 |
| Consumption | 6,447.9 |
| Imports | 3,316.9 |
| Exports | 3,062.4 |
| Pulp | |
| Production | 1,864.9 |
| Consumption | 1,794.2 |
| Imports | 896.2 |
| Exports | 966.9 |
| Raw Materials | |
| Wood consumption (in thousands m ³ unbarbed) | 5,802.5 |
| Recovered paper consumption | 5,103.4 |
| Total sector turnover (in million Euros) | 4,160.0 |

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ASPAPEL, working for competitive and sustainable development

ASPAPEL (The Spanish Association of Pulp, Paper and Board Manufacturers) is a nationwide professional organisation that encompasses companies from the Pulp and Paper sector in Spain. Our member companies account for over 90% of the sector's entire output.

The **objective** of the association is to contribute to the competitive and sustainable development of its member companies and to promoting the public image of the sector, its companies and its products. To do so, it represents and defends the sector's interests before government agencies and other stakeholders, it designs and implements sector-wide strategies in issues that are a priority for the industry, and it carries out all kinds of activities aimed at making the sector better-known and better placed vis-à-vis its competitors in the global economy. Furthermore, it is a meeting point for member companies, where initiatives are carried out that help to

improve the image of paper and of the companies that make it.

ASPAPEL maintains close relations with government authorities in matters concerning forestry, the environment, energy, CO₂ emission rights, etc. Likewise, the association participates with several ministries and trade unions in the Industrial Observatory of the Pulp & Paper Sector with initiatives relating to competitiveness.

The Association's central offices are in Madrid, which facilitates its interaction with state and regional government authorities as well as its collaboration with other trade associations. Logistically, its location is conveniently equidistant for all member companies, who are spread out across all of Spain, although with greater density in certain areas.

The operating structure of ASPAPEL is designed to meet its needs, with



management bodies, committees and working groups for specific areas, in which companies from the sector participate. These committees and working groups design and present proposals for different activities to the management bodies.

The **team** consists of 16 professionals covering all priority areas of action (forestry, environment and energy, recycling, labour relations, occupational health and safety, communications...).

The top management body is the General Assembly, made up of representatives of all member companies. The assembly delegates on a smaller Board of Directors, on which the various types of company in the sector in terms of product, size, etc. are represented. The Board meets regularly and is responsible for managing the Association's daily operations. The members of the Board of Directors are unpaid. Both the General Assembly and the Board of Directors have a Chairman, elected from among the member companies, whose basic role is to represent the association and preside over meetings of the management bodies.

According to the association bye-laws and the number of representatives of member companies on each management body, no conflicts of interest should exist that may jeopardise or impede the Association from operating properly. In order to fulfil its purpose, ASPAPEL sets out a **three-yearly strategic plan** that defines the objectives for each issue and the means required to achieve them.

Decisions that may represent a commitment by the association with regard to certain matters and in the end its support of initiatives adopted by other national or international entities and which may be of interest as a way of achieving the association's objectives, have to be assessed and approved by the Boards of Directors.

ASPAPEL is a member of various European and Spanish organisations such as CEPI (Confederation of European Paper Industries), CEPIFINE (Confederation of European Fine Paper Industries), UTIPULP (European Association representing the Group of European Market Wood Pulp Users), CEOE (Confederación Española de Organizaciones Empresariales - Spanish Business Confederation), ACOGEN (Asociación Española de Cogeneración - Spanish Association of Cogeneration), etc.

Management approach

Financial aspects

ASPAPEL's business objective is to contribute to improving the competitiveness of Spain's pulp and paper sector and the companies that form part of it. Thus, it collects and distributes regular information about how the main parameters of the sector are developing, which enables individual companies to understand how the industry is running by type of product and country.

The Association has its own Statistics Service. Given that ASPAPEL represents over 90% of total Spanish output of pulp, paper and board, it is responsible for drawing up statistics about the sector, which it then distributes regularly to Spanish government agencies and the international organisms it belongs to (FAO, CEPI, etc.). Production statistics include monthly, quarterly and annual reports on output volumes by type of pulp and paper.

The pulp & paper sector has been especially sensitive to the economic downturn. In the period 2007-2010, paper production went down by an aggregate figure of 2.1%. The crisis was already noticeable in the year 2008, when paper output dropped by 4.5%, and again in 2009, with a reduction in production of 11.1%. Despite an increase in paper production in 2010 of 9.1%, the sector is still a long way from recovering the output levels that it enjoyed before the crisis.

The sector's turnover in 2010 reached a figure of 4,160 million Euros and despite the gain of more than 22% over the previous year, it is still at a similar level as it was at the beginning of the decade and 21% below the figure immediately prior to the crisis. As a consequence of the crisis, during the period 2007 - 2010, 3 pulp mills and 34 paper mills closed down, which together account for a drop in production capacity of 250,000 tonnes of pulp and 900,000 tonnes of paper.

Direct employment in the sector in 2010 rose to 17,200 people while indirect employment is estimated at around 85,000 jobs. These figures both represent a 5% reduction over the year 2006.

To a large extent, exports have been an escape route from the crisis for the sector. Export rates in 2010 stand at 52% for pulp and 49% for paper, which represent improvements of 4 and 5 percentage points respectively over the 2006 level.

Environmental aspect

The environment is a priority in all of ASPAPEL's activities and many of the resources and efforts made by our organisation are centred on achieving on reducing the sector's environmental impact to a minimum. All members of the ASPAPEL management team are committed to their responsibilities to further environmental policies and development. The Director of Recycling, the Director of Forestry and the Director of Environmental Affairs all have their own work committees made up of experts from sector companies that design and implement actions and plans aimed at improving the sector's environmental performance.

Their proposals are presented to the Board for approval. Every three years, ASPAPEL publishes its Sustainability Report, which uses a series of indicators to measure all issues relating to the Sector's environmental performance. Likewise, it publishes an annual update of the main indicators. In this way, the sector provides contrasted and up-to-date information to stakeholders about the situation and status of the industry: water and air-borne emissions, use of water, energy, etc. In line with the sector's commitment to sustainable development, it also qualifies and provides data about the sector's progress and contribution to CO₂ absorption in plantations, paper products as carbon sinks, paper recovery and recycling, etc. Another key question on which the sector is working to reduce its environmental impact is freight and transport.

The sector's environmental performance has improved very positively in recent years with the implementation of environmental management and impact control systems in both pulp and paper mills. The sector's target is for 100% of all production to be carried out under certified environmental management systems. In 2010, that figure was 93%, compared to 75% in 2006.

Social aspects, human rights, society and product responsibility

As far as social aspects are concerned (including human rights and product responsibility), ASPAPEL'S priorities are occupational health and safety, training and the establishment of suitable and fair working conditions at all companies in the sector.

In this regard, different initiatives are under way in collaboration with trade unions, specifically related to occupational health and safety and the prevention of hazards. The Association also organises systematic training courses on specific issues aimed at improving worker skills as part of a wide-ranging programme that is reviewed and extended each year to match it to our member companies' requirements. Furthermore, working conditions are negotiated with the main trade unions through Collective Worker Agreements of different duration (two or three years), which cover a multitude of issues such as working timetables, remuneration, licenses, etc. For this activity, Aspapel has its own Human Capital Department as well as the permanent support of a committee of experts from sector companies.

ASPAPEL also works on developing pro-active initiatives in the realm of paper product safety and consumer health, such as compliance with Industrial Guidelines, the implementation of best paper and board manufacturing practices and participation in forums on developing product safety policies. It also develops sector-wide strategies on priority issues for the industry as well as representing and defending the sector's interests before the administration and other stakeholders.

The making of this Report

This third edition of the Pulp & Paper sector's Sustainability Report covers the period 2007-2010. Thus, it provides an update of the data given in the previous version, published in 2008, which covered the period 2004-2006. The Report has been published every three years since 2005 and, in response to stakeholder demands, annual updates of the main indicators have been published since 2008.

The most significant change compared to the previous report is that this edition has now moved to the third quarter of the year in order to include data from the previous year after the annual statistics have been closed, something that was not possible in the earlier editions published in March 2005 and March 2008. In this way, the report published in 2011 is exceptional in that it covers a four-year period (2007 - 2010) and therefore represents a significant improvement by including more up-to-date information.

The series of historical data covered in this edition cover the period 2004 - 2010 and are sometimes extended to include information since the year 2000 where it is considered relevant for a better understanding of how these parameters have evolved. The data about the various indicators refers to the pulp and paper sector's business in the strict sense of pulp and paper making and not to the entire paper chain (raw material suppliers, paper transforming industries or the printing and publishing sector, etc.).

Starting from the concept of paper's natural cycle, the sector's commitment to sustainability is based on four main lines of action: sustainable forest management (GF), efficient and responsible manufacturing processing (PP), leadership in recovery and recycling (LR), and generation of wealth and contribution to living standards (GR). For each one of these lines of action - based on GRIse indicators - a series of

up to 30 indicators have been defined. Each area and group of indicators is materially relevant and encompasses items that directly or indirectly have an impact on the sector's sustainable development. In this way, the report covers the fundamental questions relating to sustainability from the economic, environmental and social points of view.

Information is gathered from sector companies for each of the indicators and this new data is then included in the Report. The nature of our organisation, given that it is a sectorial association, offers the advantage of providing an overall perspective of the entire sector which, as was seen in previous editions, then serves as a model and stimulus for companies in the sector to publish their own individual reports with their particular data. At the same time, external sources (MARM, INE,...) have also been used and are specifically noted at the foot of each table or graph.

Pulp & Paper Sector Sustainability Indicators

pág.

| | | | | |
|---|-------|--|-------|-------|
| ✗ | 1 GF | Origin of procured wood: national/ imported (%) | ■ | 21 |
| ✗ | 2 GF | Direct and indirect rural employment based on forest management | ■ ■ | 23 |
| ✗ | 3 GF | Carbon sinks for CO ₂ sequestration | ■ | 25 |
| ✓ | 4 GF | Forest certification: Mills with Chain of Custody (%) Certified wood consumption (%) Certified market pulp production (%) Certified paper production (%) | ■ | 27 |
| ✓ | 5 PP | Fuel consumption (%) | ■ | 33 |
| ✓ | 6 PP | Installed CHP capacity Electricity generation/consumption ratio | ■ | 34-35 |
| ✓ | 7 PP | CO ₂ emissions due to CHP (%) | ■ | 35-36 |
| ✓ | 8 PP | Airborne SO ₂ and NO _x emissions | ■ | 36 |
| ✓ | 9 PP | Solid waste generation | ■ | 37 |
| ✓ | 10 PP | Total use of water and discharge per tonne of pulp and paper Consumption | ■ | 38-39 |
| ✓ | 11 PP | Effluent quality | ■ | 40 |
| ✓ | 12 PP | On-site effluent treatment | ■ | 39 |
| ✓ | 13 PP | Number of mills with environmental management system and % of production under EMS | ■ | 41 |
| ✗ | 14 PP | Employment and personnel contract conditions Creation of employment in rural areas | ■ ■ | 42 |
| ✓ | 15 PP | Employee turnover rate Worker motivation | ■ ■ | 42 |
| ✓ | 16 PP | Sectorial cooperation in the field of Occupational Health & Safety | ■ | 43 |
| ✓ | 17 PP | Accident rates | ■ | 43 |
| ✓ | 18 LR | Recycling rates (consumption of recovered paper as raw material /total consumption of paper and board) | ■ | 50-51 |
| ✓ | 19 LR | Collection rate (collection of used paper / total consumption of paper and board) | ■ | 50-51 |
| ✓ | 20 LR | Sector's involvement in promoting used paper recovery and recycling | ■ ■ ■ | 52-53 |
| ✓ | 21 GR | Sectorial growth compared to GDP | ■ | 59 |
| ✗ | 22 GR | Capital investments by the sector | ■ ■ | 59 |
| ✗ | 23 GR | Sales turnover | ■ | 59 |
| ✓ | 24 GR | Raw material sourcing | ■ | 60 |
| ✓ | 25 GR | Trade balance Evolution of export rates Geographical distribution of sales Export destinations | ■ | 61 |
| ✗ | 26 GR | Direct / indirect employment | ■ ■ | 63 |
| ✓ | 27 GR | Labour productivity | ■ | 63 |
| ✗ | 28 GR | Stock market performance of listed companies | ■ | 63 |
| ✓ | 29 GR | Responsible consumption of paper and bio-consumption | ■ ■ | 65 |
| ✓ | 30 GR | The paper sector and social action | ■ | 64 |

Indicators modified since last report

Indicators extended and broken down: 4GF and 10PP
 Indicator now accomplished and replaced: old 11PP (non use of elemental chlorine for pulp-making)
 Indicator modified as a result of developments: 29GR

- ✓ Positive development
- ✗ No progress or negative progress
- Indicator of an environmental nature
- Indicator of a financial nature
- Indicator of a social nature

Stakeholder opinions >>

Independent third party data verification

In order to provide this Report with the maximum transparency and credibility, independent third-party verification was commissioned from Bureau Veritas Certification. The scope of such verification included checking the accuracy of the information given, the traceability of the data and the reliability of the contents. At the same time, the data and information, as well as the sources, were tested for quality and accuracy to ensure that the report meets the criteria of the Global Reporting Initiative Guidelines, under which it has been awarded a GRI B+ mark.



Stakeholder consultation

With Bureau Veritas to verify and validate the consultation process, a total of 77 surveys were sent out via e-mail to different individuals representing the main stakeholders, for which a response rate of around 20% was obtained.

The survey was structured into eight main blocks: responsible consumption, forestry matters, recycling, the environment, energy, the future of paper and its uses, sectorial communications and economic sustainability.

The replies received enabled us to focus this Report on those questions and issues about which stakeholders appear to be most sensitive.

Paper products

Stakeholders consider that paper could replace other products thanks to its particular characteristics and renewable nature. It is considered to be a product with great potential for a multitude of uses and with a future. Emphasis was placed on the need for awareness campaigns and for research and development into new paper types over and above current uses. The feeling exists that financial and economic reasons lie behind campaigns aimed at minimising paper consumption.

Pulp & Paper sector

It is considered to be a key sector for the economy and future development.

Wood

Sufficient information is thought to exist regarding the sources of wood used by the sector, although that perception could be improved. The fact that wood comes from sustainably managed forests was positively valued. It was noted that public perception about this matter should be improved.

Recycling

Sufficient information about recycling already exists. Improved efforts in this regard are thought to be necessary through information and education campaigns, an increase in selective waste collection points and other specific programs for certain social groups.

Manufacturing processes

The sector's image as far as its environmental performance is concerned is deemed to be positive. However, greater disclosure about the progress made is recommended as margin for improvement is still seen to exist.

Energy

From the point of view of energy, a clear margin for further energy savings and efficiency was identified, although more information on this matter is required to be able to compare with other sectors. The fuels used by the pulp & paper sector and its usage of CHP co-generation plants are not widely known. However, the sector is seen to



In order to provide this Report with the maximum transparency and credibility, independent third-party verification was commissioned from Bureau Veritas Certification.

play a key role in the current electricity market. Greater research and investment into clean technologies and sources of renewable energy were urged.

Transport

Associated processes such as freight and transport are considered to be of great importance and eligible for optimisation in order to improve both economic competitiveness and also environmental impact.

Communications

The communications campaigns carried out in the past have had a significant impact as respondents to the survey declared they were familiar with them. However, it is felt they should be more end consumer-oriented with a non-defensive approach. The survey revealed positive appreciation of the sector's transparency, although it also highlighted a need for more communications actions and campaigns. Moreover, the communications channels used were deemed to be suitable.

Map of Stakeholders

Financial Social Environmental



- End consumer
- First customer
- Children and youngsters
- Direct employees
- Indirect employees
- Service providers
- Raw material suppliers
- Banks
- Investors
- Insurance companies
- Rating agencies
- Central government
- Regional government
- Local government
- Political parties
- Teaching institutions / Universities
- Consumer associations
- Residents' associations
- Sectorial associations
- ENGOS
- Associations of persons with disabilities
- Trade unions
- Financial press and media
- Environmental press and media

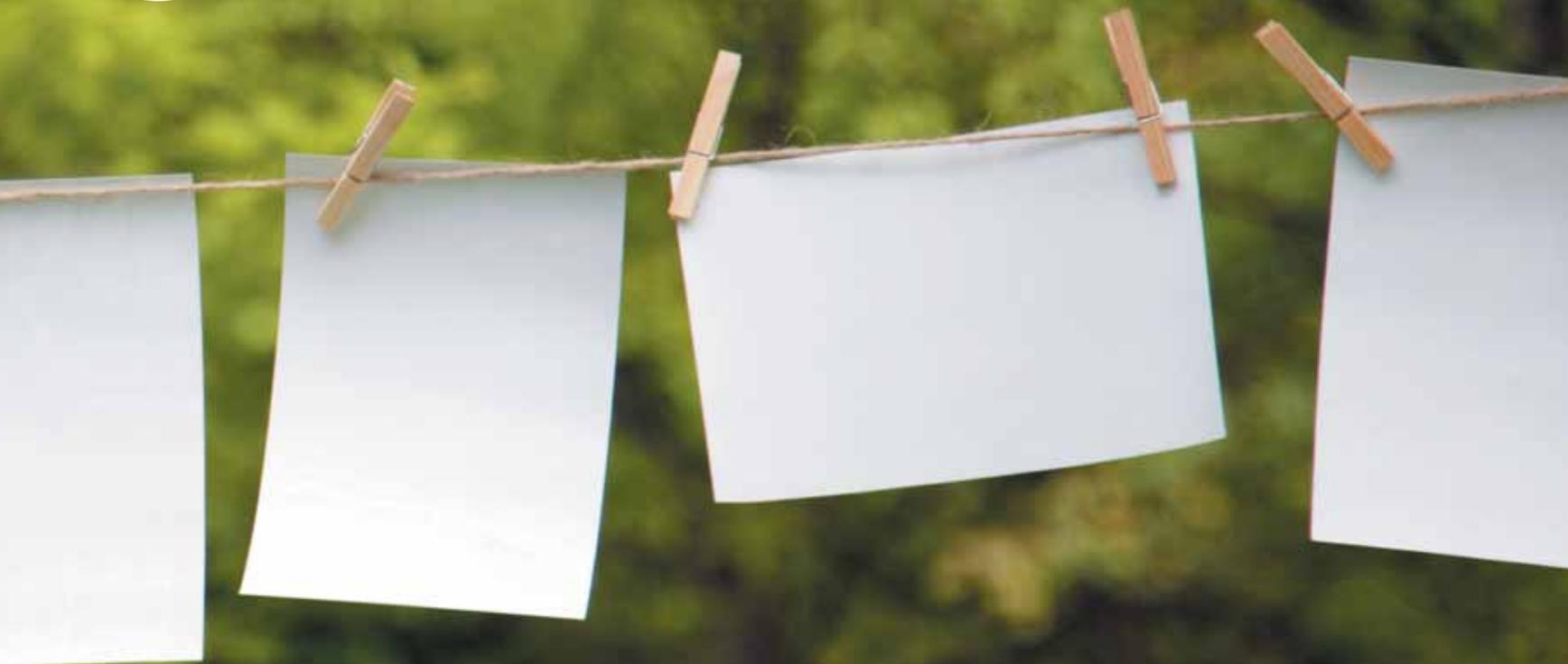
Financial Social Environmental



Paper grows on trees
trees makes paper



ees... and
grow





More paper, more trees and more rural employment

Paper grows on trees - that is why it is natural and renewable. But paper also makes trees grow: that means more trees and more rural employment. In Spain, pine and eucalypt trees for papermaking are grown on 360,000 hectares plantations that are constantly being replanted and regenerated and account for about 4120 direct jobs and nearly 12,360 indirect jobs in rural areas.

The sector is committed to implementing sustainable forest management and to having that management certified in order to guarantee that its paper-based products come from wood grown on sustainably managed plantations in Spain. Likewise, imported timber is also covered by new certification instruments such as Due Diligence systems that guarantee imported wood comes from legal sources.

The Pulp and Paper industry, based on a natural cycle, is expected to play a key role in what will be and is already becoming the economy of the future: the bio-economy. The paper industry is eco-efficient, the key to which is its optimal use of wood, a natural and

renewable resource, which forms the basis of papermaking. The process involves making not just pulp and paper from wood and also bio-energy, bio-fuels, bio-composites, biochemicals...

The flagstones of development for this sector that is destined to play a leading role in Spain's new financial and economic model are the gradual consolidation of the nation's forestry potential, the guaranteed legality of all imported timber, the extension of forest certification and an innovative industry committed to eco-efficiency that exports half of its annual output.



Making the most of our forest potential

In 2010, 5,802,500 m³ of eucalypt and pine wood were used in Spain to make paper, that is 7.8% more than in the previous year, in line with the recovery in paper manufacturing output but still far from the levels attained prior to the crisis (6.3 million m³ in 2006). However, nearly a third of that wood (31.7%) was imported.

While consumption of domestically grown wood went up by only 3.2%, consumption of imported timber increased by 19.2%.

We do not have gas or oil and are obliged to import them but as a result of the special climate conditions in the Iberian Peninsula, we do have a great forest potential that we need to make the most of.

Our pulp and paper industry is firmly committed to sustainable forest management and its certification, to increasingly efficient management of its plantations, and to the proper usage of its timber stocks, but it needs the support of central and regional governments to make our forestry potential come true.

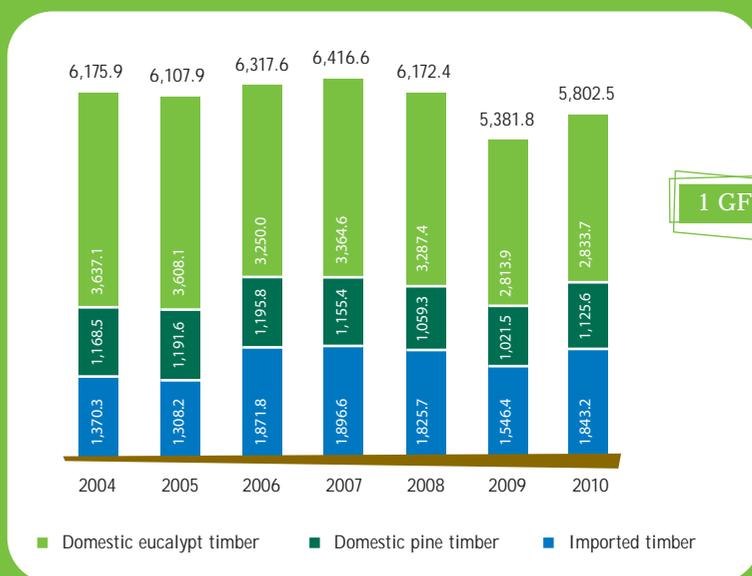
30%

The total amount of wood imported during the period 2007-2010 represented 30% of all wood consumption, six percent more than in the previous period (24% in 2004-2006).

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Origin of timber for papermaking: domestic/imported.

(In thousand m³)



Source: ASPAPEL

The sustainable alternative for rural development

In Spain, plantations for papermaking basically contain two highly productive and very fast-growing species, namely eucalyptus and pine.

Apart from increasing timberland cover and helping to preserve our natural forests, these plantations are very efficient ways of controlling erosion, helping to regulate climate and the water cycle, and above all are efficient CO₂ sinks. Moreover, they also provide a series of social benefits related to nature-based leisure activities. But these pine and eucalypt plantations not only offer environmental and social advantages.

In a country like Spain, where there exist large depleted wastelands of abandoned arable and cattle farms, these highly productive species represent a healthy alternative for rural development by creating both direct and indirect employment and contributing to forest owners' income.

Nowadays, in Spain, there are 883,500 hectares of eucalyptus and 277,000 hectares of Radiata pine timberlands. Of this total surface area, it is estimated that in 2010, about 288,000 hectares of eucalypt and 71,000 ha of Radiata pine were used to produce wood for papermaking, which represents a drop of 16% over the year 2005, due to the downturn in pulp production and consumption of domestic wood.

Plantations for papermaking provide direct employment for about 4,120 people in the countryside dedicated to forest replanting and management on these timberlands. Three quarters of those jobs belong to eucalypt plantations and the rest to pine plantations for paperma-



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king. Apart from this direct employment, another 12,360 indirect jobs (machinery, transport, workshops...) can also be added and represent a significant dynamic force in rural development.

During the period 2007 - 2010, average consumption of domestic timber went down by 9% compared to the period 2004 - 2006, which in turn also led to a drop in forest employment dependent on this business. Greater use of domestic wood and improved conditions of our timberlands with a better use of our forest potential would lead to a

significant increase in rural employment. Our deficit in domestic timber as a result of not using the full potential of our national plantations forces the industry to outsource its raw material needs from abroad, which not only has increased economic costs with a subsequent loss of competitive edge for the sector but also the environmental cost of transporting it here.



Increased employment is directly linked to a growth in domestic timber consumption. Improved usage of our forest potential would lead to more employment.

Direct and indirect employment on pine and eucalypt plantations for papermaking

2 GF

| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|---|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Total direct employment | 4,990 | 4,830 | 4,690 | 4,660 | 4,150 | 3,940 | 4,120 |
| Direct employment on eucalypt plantations | 4,150 | 4,120 | 3,800 | 3,810 | 3,720 | 3,170 | 3,260 |
| Direct employment on pine plantations | 830 | 710 | 900 | 850 | 790 | 770 | 860 |
| Indirect employment | 14,950 | 14,490 | 14,080 | 13,990 | 13,170 | 11,800 | 12,360 |

Source: ASPAPEL

+ paper = -CO₂

Increasing paper production and therefore timber consumption represents an increase in the carbon stored in plantations for papermaking.

More paper, less CO₂

Trees absorb CO₂ from the atmosphere in order to feed and grow: wood fibre - cellulose - is a carbohydrate. Fast-growing trees such as the pine and eucalyptus that the pulp and paper industry uses are the ones that absorb the most CO₂ precisely because they are actively growing. Eucalyptus, for example, fixes twice as much carbon as a chestnut tree and five times more quickly than a Holm oak. These plantations are constantly rejuvenated as they are regularly harvested and then replanted. Because they are young trees, they are growing at a faster rate and thus absorb more CO₂. Plantations for papermaking are therefore enormous CO₂ sinks that help to mitigate climate change, because the carbon stored in the farms is not released when the tree is felled but remains in the paper products made with it. And that CO₂ storage lasts longer and longer as those paper products are recycled over and over again.

Carbon sinks for CO₂ sequestration

(In thousands tons)

3 CF

| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|---|-------------|-------------|-------------|-------------|-------------|-------------|--------------|
| On total Spanish timberlands | | | | | | | |
| Stored carbon | 345,102.7 | 350,193.9 | 355,285.2 | 360,376.4 | 365,467.6 | 370,558.9 | 375,650.1* |
| CO ₂ equivalent | 1,265,376.6 | 1,284,044.5 | 1,302,712.3 | 1,321,380.1 | 1,340,048.0 | 1,358,715.8 | 1,377,383.6* |
| On total eucalypt and Radiata pine plantations | | | | | | | |
| Stored carbon | 11,666.9 | 12,417.8 | 13,254.5 | 14,058.0 | 14,884.5 | 15,734.0 | 16,606.4 |
| CO ₂ equivalent | 42,778.6 | 45,531.9 | 48,600.0 | 51,546.1 | 54,576.5 | 57,691.2 | 60,890.2 |
| On plantations for papermaking | | | | | | | |
| Stored carbon | 5,260.8 | 5,504.5 | 5,372.0 | 5,715.6 | 5,762.9 | 5,219.5 | 5,735.3 |
| CO ₂ equivalent | 19,289.6 | 20,183.3 | 19,697.2 | 20,957.3 | 21,130.5 | 19,138.2 | 21,029.3 |

* Estimated

Sustainable forest management

- ❧ **Maintains and improves forest resources and their function as absorbers of CO₂, one of the gases responsible for the greenhouse gas effect.**
- ❧ **Keeps forests healthy and strong.**
- ❧ **Maintains and improves the forest's productive functions.**
- ❧ **Maintains, preserves and improves biodiversity, i.e. the wealth of plants and animals**
- ❧ **Maintains and improves the forest's protective functions and especially that of protecting soil and water.**
- ❧ **Maintains other social and economic conditions and functions.**

Certified sustainability

Forests are natural resources of great value for society as they fulfil a whole series of natural, social and economic functions. Sustainable forest management is a way of reconciling the harvesting of forest-based products with the forest's ability to regenerate itself in such a way that it can continue to perform its functions both now and in the future.

Depending on the type of forest and its function, a series of preservation, regeneration and management operations are performed such as replanting (new trees), clearing (eliminating sick trees or trees that disturb others so that the rest can grow healthily) and logging (extracting or felling when the stand is mature).

Forest certification is a way of providing the end consumer with the certainty that the paper-based products he or she uses are sustainably produced. It is a process in which an independent, officially accredited third party certifies that the management of a forest is carried out in accordance with sustainability criteria and is then controlled through a chain of custody when the certified wood reaches the factory or mill. The wood is traced from the forest to the end consumer, who receives the product with a label that guarantees it has come from sustainably managed forest. The pulp and paper industry's commitment to sustainable forest management has borne its fruit: 33% of all mills in the sector (100% of pulp mills) hold a Chain of Custody certificate. As far as supplier companies go, 100% of pulp suppliers to integrated mills and 65% of timber suppliers are also certified. Nevertheless, only 10.7% of the wood consumed by the sector in 2010 was certified timber. It is now necessary to make a concerted effort to extend the amount of certified forest in Spain, which at present is only 7.5%, well below the European average (the overall average for Europe is 30% of forest with certification).

year 2010

Encouraging the supply of certified domestic timber is the way of increasing the number of certified products on the market. In 2010, 24% of our market pulp (not the pulp produced for self consumption but only the pulp that is sold in open competition with other producers) and 6.5% of paper output was certified.

33% mills in the sector with certified chain of custody

24% certified market pulp production

6.5% certified paper production

Forest certification

4 GF

(In % of total)

Source: ASPAPEL

| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|---|------|------|------|------|-------|-------|-------|
| Pulp Mills with certification ^(*) | 36.0 | 43.0 | 93.0 | 94.0 | 100.0 | 100.0 | 100.0 |
| Certified timber consumed by the paper sector | 0.0 | 4.2 | 17.2 | 12.9 | 12.1 | 10.4 | 10.7 |
| Certified timber suppliers ^(**) | 0.3 | 1.6 | 15.9 | 21.3 | 53.7 | 33.5 | 65.0 |
| Certified pulp suppliers ^{1(**)} | 12.8 | 37.8 | 71.4 | 74.1 | 87.0 | 100 | 100.0 |

^(*) As this indicator has reached 100% accomplishment, it is to be replaced in the future by the total number of certified pulp and paper mills.

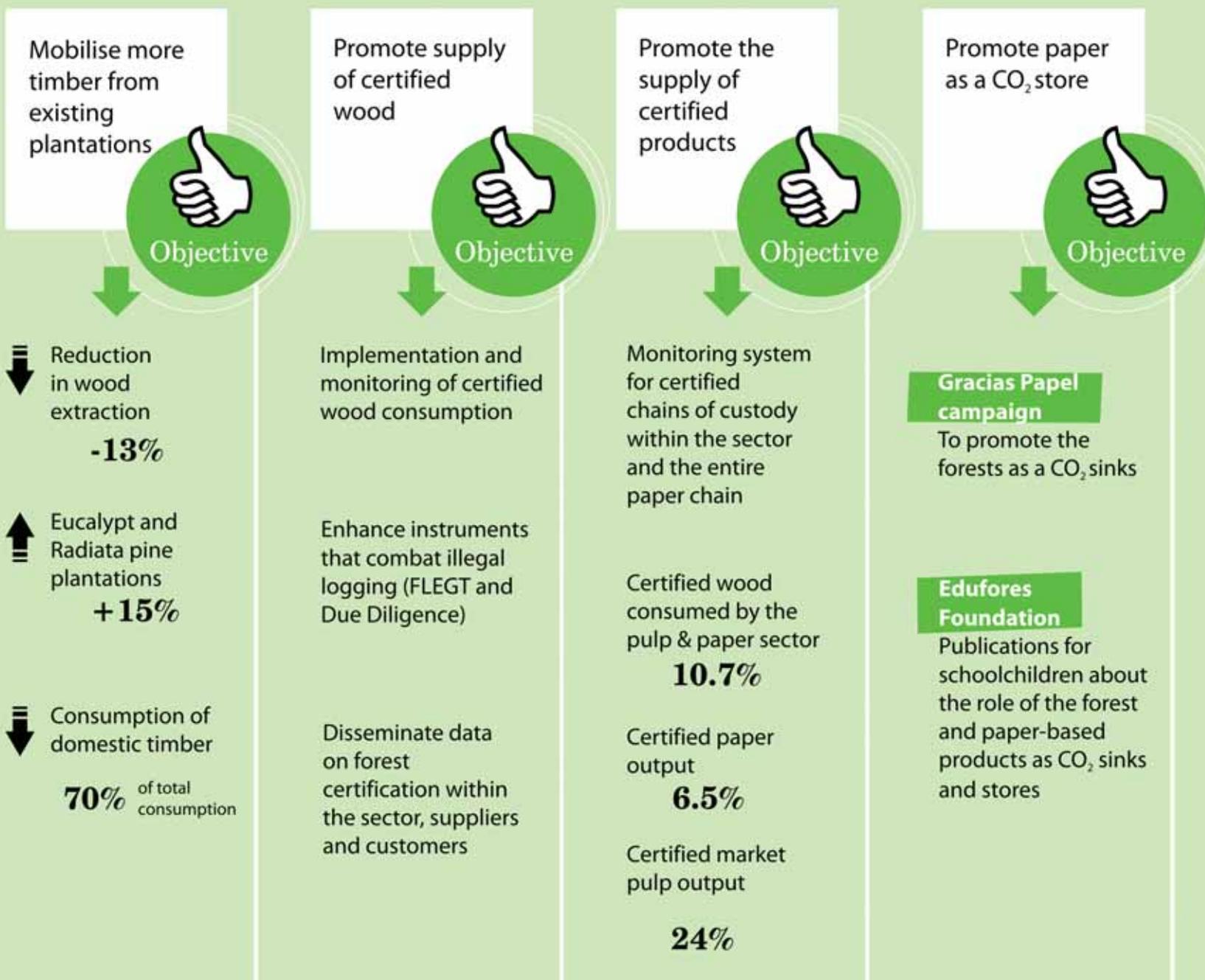
^(**) Given the development and progress of forest certification in Spain, these indicators will be replaced from now onwards by two others stating the amount of certified market pulp produced and the amount of certified paper produced.

¹⁾ Refers to integrated mills.



Accomplished objectives

New objectives



Mobilising a greater amount of domestically-produced timber and promoting the supply of certified wood and certified products were the main objectives that the sector set itself for the period 2007-2010.

Evident progress has been made on monitoring the certified wood consumed and certified chains of custody. Likewise, a significant boost has been given to disseminating data about forest certification within the sector, its suppliers and customers.

Nevertheless, there is still a long way to go and thus new objectives and targets have been set for the coming three years.

Increase supply of domestic timber



To develop tools capable of **enhancing the competitive edge** of our plantations and their wood mobilisation and trading levels

New Objective nº1

Promote the use of the forest and paper-based products



Create and distribute **educational materials** in schools

New Objective nº3

Increase the amount of certified product on the market



Guidelines, **communication** workshops and monitoring aimed at forest owners and consumers

New Objective nº5

To define and encourage documentation of sustainable in plantations management through **systematic dialogue** with stakeholders



Improvements in the sustainable management and certification of our plantations

New Objective nº 2

Develop and implement a **Due Diligence System Handbook** for procurement



Guarantee all supplies come from legally logged and traded sources

New Objective nº 4



eff



The efficient mill

Green mills, green jobs

A future that is **already upon us**

The **environmental revolution** that the pulp & paper industry has undergone in recent years has brought to life in the sector the concept of the **efficient mill**, efficient in both environmental and economic terms.

Efficient use of energy, efficient use of water and efficient management of process residues are the three main pillars of this 'green' revolution.

The sector has made significant investments on plant and technology improvements and on R+D to reduce the environmental impact of its industrial processes. At the same time as it has invested in the Best Available Technologies, it has also trained its workers in the implementation of environmental management systems. In 2010, 93% of all production was carried out under certified environmental management systems.

Continuous improvement and the application of the best available technologies represent the sector's permanent commitment and its current challenge in order to maintain and improve the 'efficient mill'. Today's pulp and paper industry works with a clear vision of the bio-economy of the future, an economy based on the efficient use of renewable and low carbon resources.

The key lies in optimising the use of wood, the natural and renewable resource on which papermaking is based. The issue is to produce not just pulp and paper from wood but also bio-energy, bio-fuels, bio-composites, and bio-chemicals ... in green mills that generate green employment in rural areas. And also to produce recycled paper in urban areas, at mills that have integrated waste management facilities to make the maximum use of recycled paper and board, using its process residues in the manufacturing of mouldings, insulation, and paper bio composites and eventually to derive value from its energy potential.



Renewable energy: the leader in biomass

Renewable energy: biomass accounts for a third of the fuel used by the sector

The pulp and paper making process generates biomass (bark, lignin, residue fibre unsuitable for recycling ...) that can and in fact is used to a large degree as fuel. In 2010, residual biomass from the industrial process accounted for over a third of the fuel used by the pulp and paper industry to produce the electricity and heat it requires in its mills.

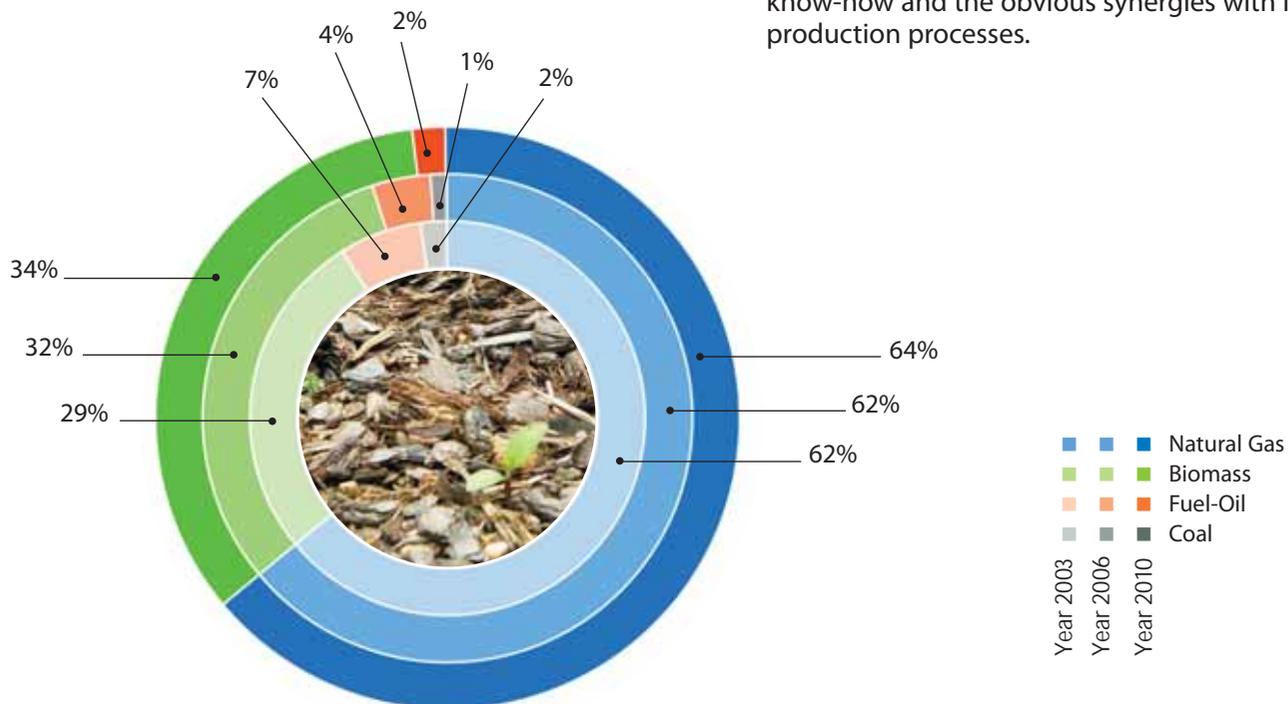
The remaining fuel used by the industry is natural gas, while less environmental fuels like coal and fuel-oil are practically no longer used in Spanish paper mills.

In the period 2007-2010, significant steps were taken within the sector to enhance the use of cleaner fuels. In 2010, natural gas accounted for 64% and biomass 34% of the fuel used by the sector, while coal and fuel-oil, which were already very scarce and barely represented 5% of the total in 2006, are even less widely used nowadays.

Nowadays, the pulp and paper industry is a leader in producing and consuming biomass and is firmly committed to renewable energy as one of the keys to the sector's future success. On the one hand, it provides economic value for process waste. This process waste is high in biomass and has great energy potential, both to be used as a fuel in a pulp paper mill and for the development of by-products. But the sector not only promotes the use of biomass in its own industrial processes but is also called upon to play a crucial role in developing other types of biomass given its capacity and inherent ambition, its integration in the logistics and supply chain, its know-how and the obvious synergies with its own production processes.

Fuel consumption

5 PP





Co-generation (CHP) - the **efficient** energy

Pulp and paper mills consume electricity to move the machinery and steam for the drying sections. Installing a co-generation plant is the most efficient response to these energy requirements because it produces both power and heat in the form of steam and it does so by optimal use of fuel, thereby affording significant reductions in emission rates. These Combined Heat and Power plants are generators of electricity installed next to pulp and paper mills. As they produce energy on the same site as where it is consumed, they prevent the losses that take place when it is transported over the grid.

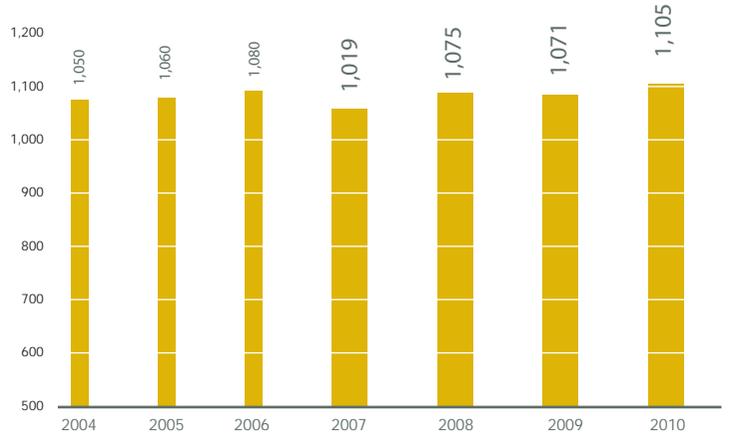
Co-generation, the efficient energy recognised as a B.A.T. (Best Available Technology), is another example of the paper sector's commitment to sustainability and indeed the industry has proved to be a leader in implementing this system, which saves primary energy and reduces emissions.

With an installed CHP capacity of 1105 MWe in 2010, the pulp and paper sector not only produces the energy it consumes but also supplies its surplus to the National Grid. Despite the economic crisis, which has led to some mills closing down, installed CHP capacity has not only remained constant over the period 2007 - 2010 but has in fact grown to some extent over the 2006 figure, albeit below the 100 MWe target set at the time.

Installed CHP capacity

(In MWe)

6 PP



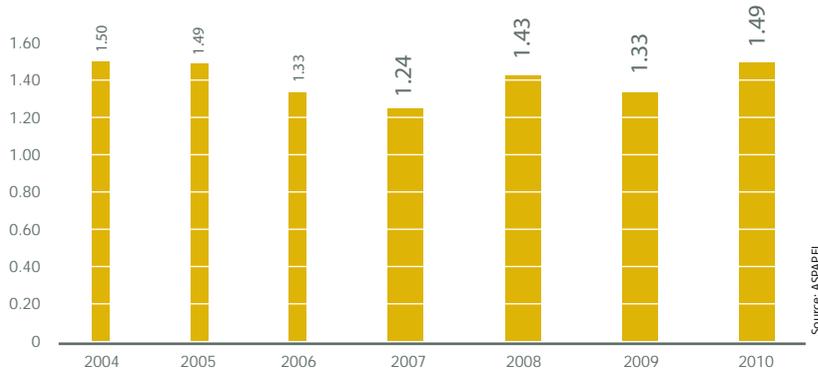
Source: ASPAPEL/IDAE

Despite the crisis, installed CHP capacity is growing

1,105 MWe in 2010

Electricity generation / consumption ratio

6 PP

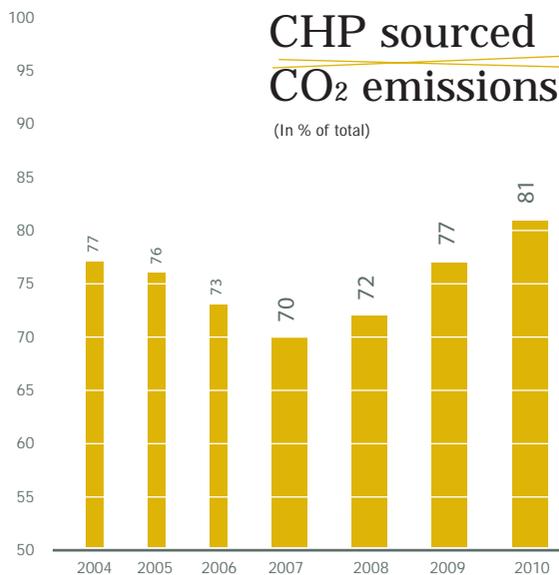


Following a temporary drop in 2006, the electricity generation/consumption ratio has recovered to its typical level.



Energy efficiency = fewer emissions

Most emissions from the pulp and paper sector have their source in co-generation. It is worth recalling that because the system is so efficient in energy generation, the pulp & paper sector is not only able to be self-sufficient but also supplies its surplus efficient energy to the grid, thereby affording the country significant savings on its total emission count.



7 PP

81% of the sector's CO₂ emissions come from Cogeneration, the most efficient system

81%

Continuous determination to **reduce** emission levels

In 2010, total CO₂ emissions by the sector stood at 4.4 million tons, while SO₂ and NO_x emissions stood at around 4,300 and 12,400 tons respectively. The sector has managed to break the link between greater emission and higher levels of pulp and paper production or electricity generation.

Air-borne SO₂ and NO_x emissions

8 PP

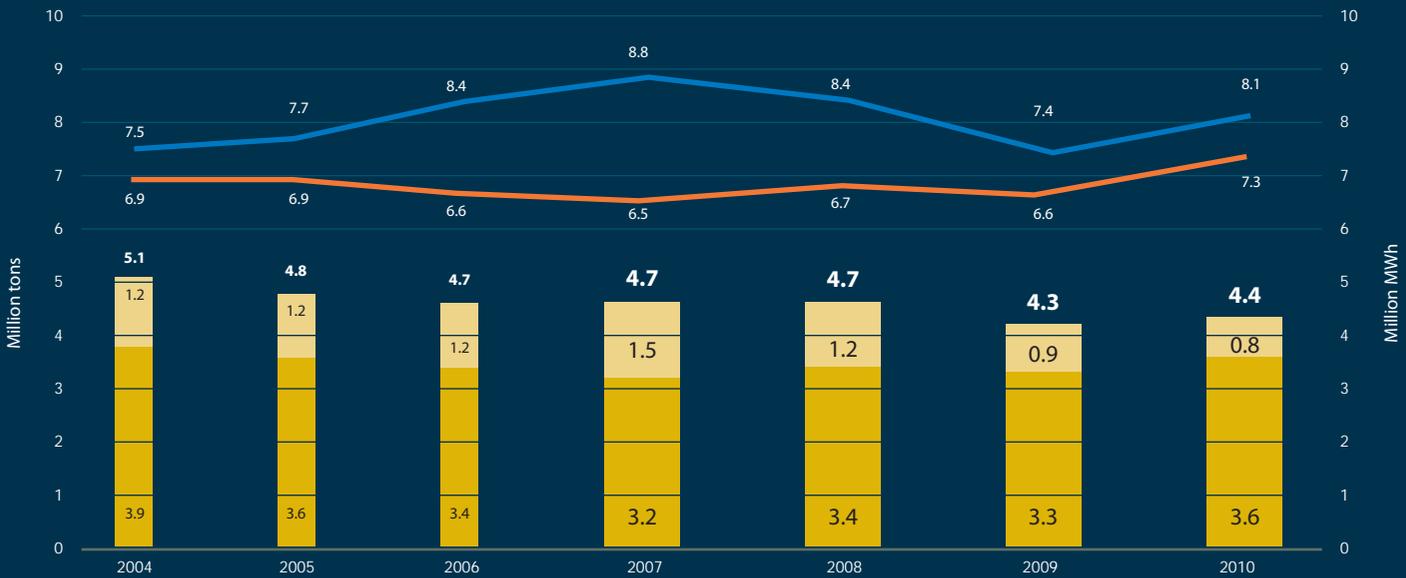
| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|--|--------|--------|--------|--------|-------|--------|--------|
| Air-borne SO ₂ emissions (t/yr) | 5,084 | 7,372 | 4,914 | 5,781 | 4,715 | 4,850 | 4,279 |
| Air-borne NO _x emissions (t/yr) | 15,259 | 14,465 | 13,583 | 10,098 | 9,109 | 11,500 | 12,371 |

Source: ASPAPEL

CO₂ emissions

7 PP

4.4 million tons of CO₂ in 2010



Source: ASPAPEL

- CO₂ emissions from cogeneration (million t)
- Other CO₂ emissions (million t)
- Pulp and paper production (million t)
- Electricity generation (million MWh)

Process waste management and re-use

Process residues are entirely non-hazardous waste

The residues generated in the pulp and paper-making process are a non-hazardous waste. A small percentage of waste is hazardous and does not come from paper-based products but are common to all industrial activity (used oil, fluorescent tube, batteries ...), so that the amount generated varies greatly from one year to the next. The large increase in this type of waste in 2007, for instance, was due to a mill being dismantled.

In 2010, 61% of all papermaking process waste was valorised re-used in different ways: direct agricultural use (32%), ceramic and brick industry (10%), compost (9%), cement industry (7%)... 3% of this waste was re-used as input energy in the actual mill, compared to 1% in 2006, which is nevertheless still humble growth for a waste management system with a very high future potential, as recognised by the National Renewable Energies Plan 2011 - 2020. The crisis in the building industry, with the consequent shutdown of brick making plants, has led to this waste being more widely used for agricultural purposes.

Residues generated

9 PP

(In tons)

| | 2006* | 2007 | 2008 | 2009 | 2010 |
|---|------------------|------------------|------------------|------------------|------------------|
| Specific non-hazardous waste from the pulp and paper sector | 1,303,069 | 1,327,235 | 1,447,568 | 1,424,208 | 1,553,390 |
| Other non-hazardous waste | 118,504 | 75,082 | 82,961 | 85,435 | 86,851 |
| Hazardous waste | 59,191 | 203,821 | 9,026 | 9,348 | 2,349 |
| TOTAL | 1,480,764 | 1,606,139 | 1,539,555 | 1,518,991 | 1,642,590 |

*No data is available prior to 2006. One of the targets laid down in the 2005 Sustainability Report was that of improving the sector's statistical handling of the waste it generates

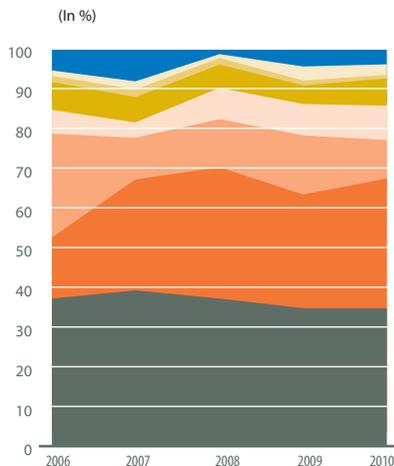
Source: ASPAPEL

Waste management efficiency: 61% waste valorised for different purposes



Process waste management

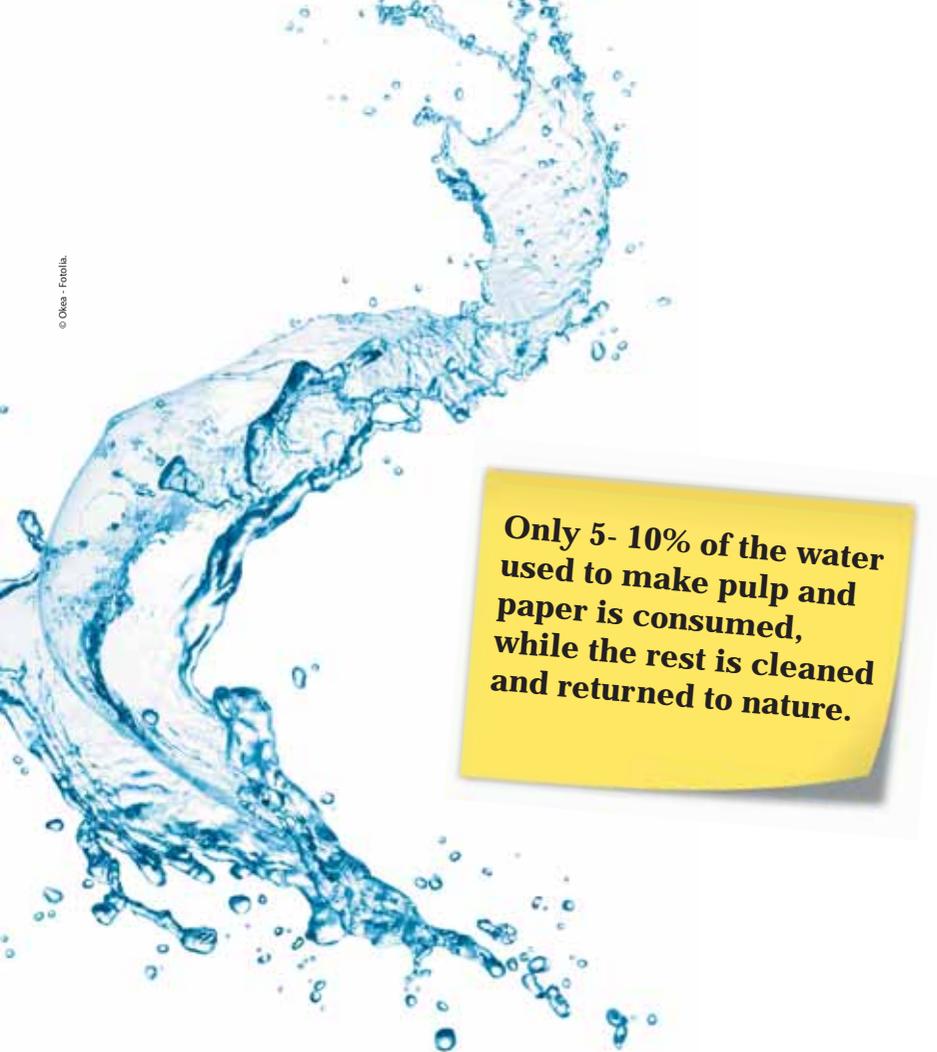
(En %)



| | 2006* | 2007 | 2008 | 2009 | 2010 |
|-----------------------------------|-------|------|------|------|------|
| Landfills | 37.5 | 39.0 | 37.5 | 35.0 | 35.0 |
| Direct agricultural use | 17.0 | 28.0 | 33.0 | 29.5 | 32.4 |
| Ceramics industry | 25.0 | 11.0 | 13.0 | 14.7 | 10.3 |
| Compost | 6.0 | 4.0 | 7.0 | 7.4 | 8.5 |
| Cement making | 7.0 | 7.0 | 6.0 | 5.1 | 6.7 |
| Raw material for other industries | 0.5 | 1.0 | 1.0 | 0.8 | 0.4 |
| Used as energy source at Mill | 1.0 | 2.0 | 0.5 | 2.6 | 2.9 |
| Other uses | 6.0 | 8.0 | 2.0 | 4.9 | 3.8 |

* No data is available prior to 2006. One of the targets laid down in the 2005 Sustainability Report was that of improving the sector's statistical handling of the waste it generates

Source: ASPAPEL



Only 5- 10% of the water used to make pulp and paper is consumed, while the rest is cleaned and returned to nature.

Clean waters

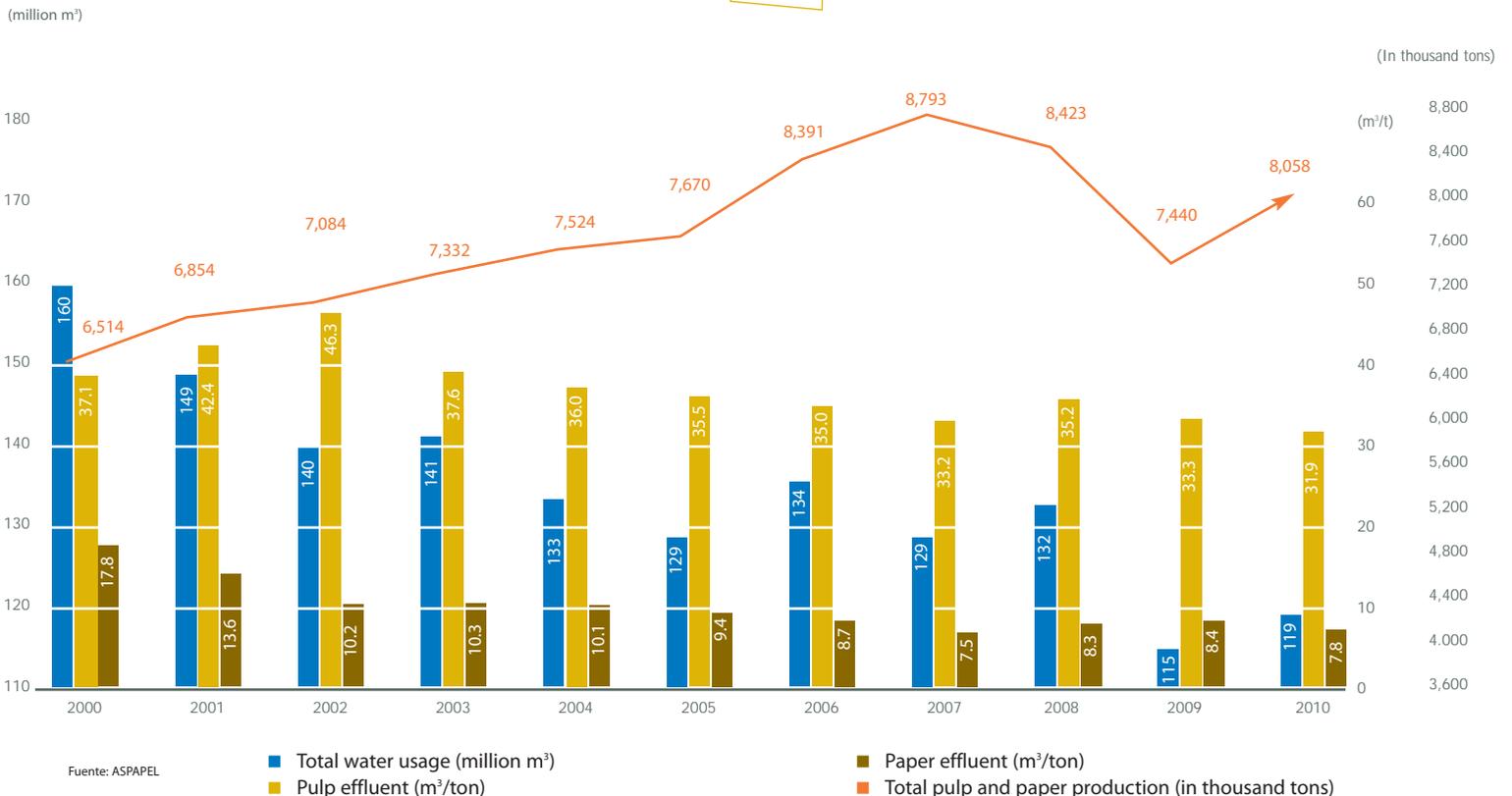
Making paper with minimal water consumption and returning the rest of the water used to the river or the sea after it has been screened and cleaned is the way of achieving water usage efficiency that the pulp and paper sector has been working on with ambitious objectives: to completely eradicate the use of molecular chlorine (Cl₂) in pulp bleaching and to reduce and condition its effluents to meet increasingly stringent value limits.

The first objective was achieved back in 2007, so that nowadays all bleached pulp in Spain is either ECF (elemental chlorine free) or TCF (totally chlorine free).

As far as the second objective is concerned, despite having achieved magnificent results in 2006, the period 2007 - 2010 saw even greater reductions in total water usage and amount of effluent, as well as improved or stabilised effluent quality in all relevant parameters.

Total water usage and effluent amounts for pulp and paper

10 PP



© iktkrednik - Fotolia.com



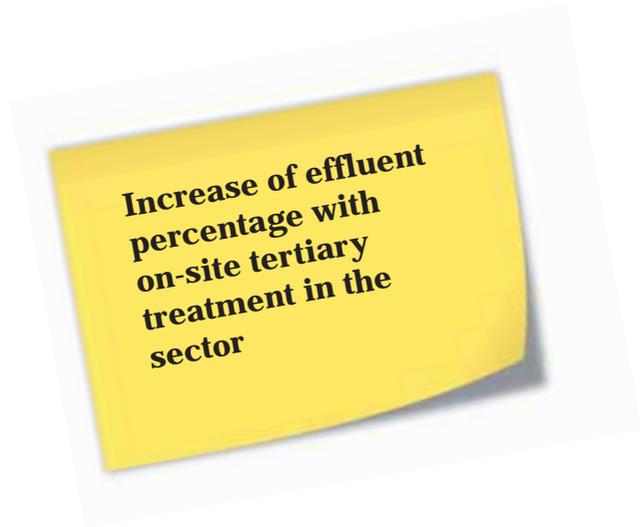
Less water and less effluent

While pulp and paper production remained at a similar level, the use of water in 2010 went down by 11.2% over 2006 to 119,000,000 m³. In addition, only a small amount of the water used by the sector is actually consumed. The pulp and paper sector uses water in its manufacturing processes mainly as a means of transporting fibre. Thus, of the total amount of water used for pulp and paper making, only 5-10% is consumed through evaporation in the process or because it forms part of the end product. The rest of the water (90 - 95%) is returned to the river or sea after being treated.

In 2010, water consumption was 1.2 m³ per ton of pulp and paper (2.8 m³ of water consumption per ton of pulp and 0.8 m³ per ton of paper). 74% of the water consumed in the manufacturing process in 2010 came from rivers (surface water courses), 21% from underground wells and 5% from the network.

Liquid effluents have also continued to be reduced over the period 2007 - 2010 to reach a figure of 31.9 m³ per ton for pulp (compared to 35 m³ per ton in 2006) and 7.8 m³ per ton for paper (compared to 8.7 m³ per ton in 2006).

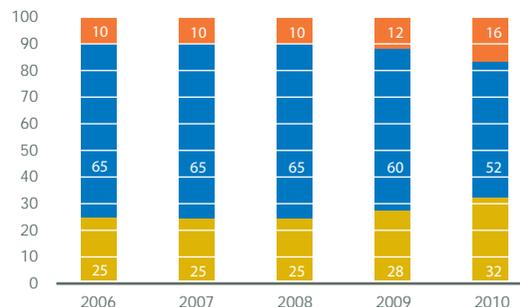
The pulp and paper sector's liquid effluents are fed either into municipal sewers, surface waters (rivers, lakes...) or the sea. All mills that discharge into a river or the sea have an upstream water treatment system, and all Mills that discharge into municipal sewers have primary effluent treatment on site, which is then supplemented with biological or secondary treatment in the municipality's water treatment plant.



12 PP

On-site water treatment in the sector

(En%)



Source: ASPAPEL

- Primary treatment
- Primary + secondary treatment
- Primary + secondary + tertiary treatment

Effluent quality

11 PP

Chemical Oxygen Demand

■ COD pulp (Kg/t)
■ COD paper (Kg/t)

- 5.1%



Suspended Solids

■ SST pulp (Kg/t)
■ SST paper (Kg/t)

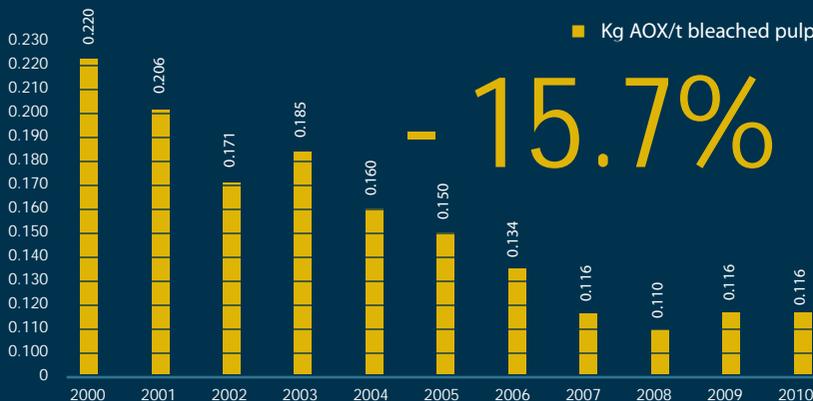
- 20%



Organic halides

■ Kg AOX/t bleached pulp

- 15.7%



Ever cleaner effluents

As far as effluent quality is concerned, COD (Chemical Oxygen Demand) has stabilised in paper production at around 3 kg COD/ton, while for pulp it has gone down by 5.1%. In pulp-making, total Suspended Solids (SSt) have remained stable at around 2.2 kg SSt/ton of pulp, while for paper, the figure has been brought down to 0.8 kg/ton of paper in 2010, which is 20% less than in 2006. Finally, Adsorbable Organic Halides (AOX), a parameter specific to bleached pulp effluents, has come down to 0.116 kg per ton (15.7% less than in 2006).

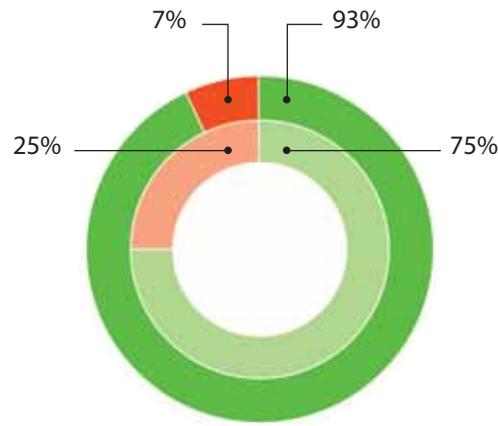


Mills with Environmental Management Systems



■ Mills/Production with EMS
■ Mills/Production without EMS
 Year 2006
 Year 2010

Production under Environmental Management Systems



Nearly all production (93%) in Spain is now carried out under certified environmental management systems

The sector has gone to great lengths in terms of investment and R+D to reduce the environmental impact of its industrial processes



Environmental management

The sector has gone to great lengths in terms of investment and R+D to reduce the environmental impact of its industrial processing (installing water treatment plants, giving up processes with highest emission rates,...). Apart from investing in the Best Available Technologies, significant dedication has been given to training employees in the implementation of Environmental Management Systems (ISO or EMAS). In 2010, there were 53 mills with an EMS, which means 93% of total production capacity now takes place under a certified environmental management system, compared to 47 Mills and 75% of total production in 2006.

13 PP



Green and **skilled** employment

In the Efficient Mill's process of technological change towards a green economy, it is fundamental that its human resources be managed as efficiently as possible so that workers can fully develop their potential for both their own and the company's benefit. Stable, full-time employment, low turnover rates, skilled labour, continuous training or the sector's ongoing commitment to occupational health and safety are basic elements in managing human capital resources within the pulp and paper sector.

Employment in the pulp and paper industry is in fact highly stable and reveals a very low turnover rate.

Of the 17,200 workers in the sector, 14,844 have permanent contracts (86.3%) while 2,356 (13.7%) are on fixed term contracts, which represents in fact a very low temporary employment rate. Nearly all workers in the sector are employed full-time.

15 PP

14 PP

Compared to other similar sectors and the average level within Spanish industry, the pulp and paper sector has a more skilled workforce: nearly 50% of its employees have secondary studies and 14% are university graduates. 47% of workers are aged between 30 and 44 and 40% between 45 and 59 years old.

14 PP

Continuous training, both in-house and through ASPAPEL, which offers a wide range of classroom-based and distance learning courses and seminars through the Spanish Paper Institute (IPE), is key to the process of technological change and production model adaptation in which the sector is currently immersed. In the last five years, nearly 1700 sector workers have successfully participated in over 2,300 e-learning actions and about 140 technicians have made good use of our classroom training courses.

The pulp and paper industry in

Spain has 85 production mills throughout the country, who play an important role in generating employment and wealth in their respective communities. The sector is also characterised by its creation of employment in rural areas.

14 PP

One of the activities carried out by ASPAPEL is the negotiation of the sector's Collective Bargaining Agreement, a process which involves the main trade unions, who defend and represent worker interests. Depending on the quota of representation assigned by law to different business and worker organisations, the Agreement is applicable throughout the sector, although some companies have their own in-house agreements. ASPAPEL is a professional, sector-wide association and therefore all companies in the sector are free to join it or not. At present, our member companies account for over 90% of Spain's total pulp, paper and board production.

Efficient Mill, **Safe** Mill

An efficient mill is a safe mill. Safety is a priority in the Pulp and Paper industry, which is embarked on an ambitious sector-wide programme of occupational health and safety, promoted jointly by ASPAPEL and the trade unions FSC-CCOO and FITAG-UGT.

Within the framework of a sectorial programme, in the period 2007 - 2010, work has continued on those aspects subject to improvement in view of the Diagnosis carried out in 2005. In this regard, an Audiovisual Catalogue of Critical Situations and Preventive Measures in the P&P industry has been produced, as well as teaching material about work permits for the most hazardous operations. In addition, a handbook on the Observation of Safe Behaviour

(OSB) in the pulp and paper industry has been edited, which focuses on creating and enhancing safe behaviour patterns to create a true safety conscience that leads to a drop in accident rates.

16 PP

In the year 2010, a new Diagnosis (OHS +5 Diagnosis) of the situation in the sector was carried out, which revealed a significant drop in the number of accidents but an increase in severity rates, i.e., more serious accidents, even fatalities, have taken place than should or could have been expected given the way these rates were developing. Two characteristics in the sector lie behind this fact: a) the significant interaction between man and machine and b) vehicle traffic inside mill premises. Furthermore, analysis

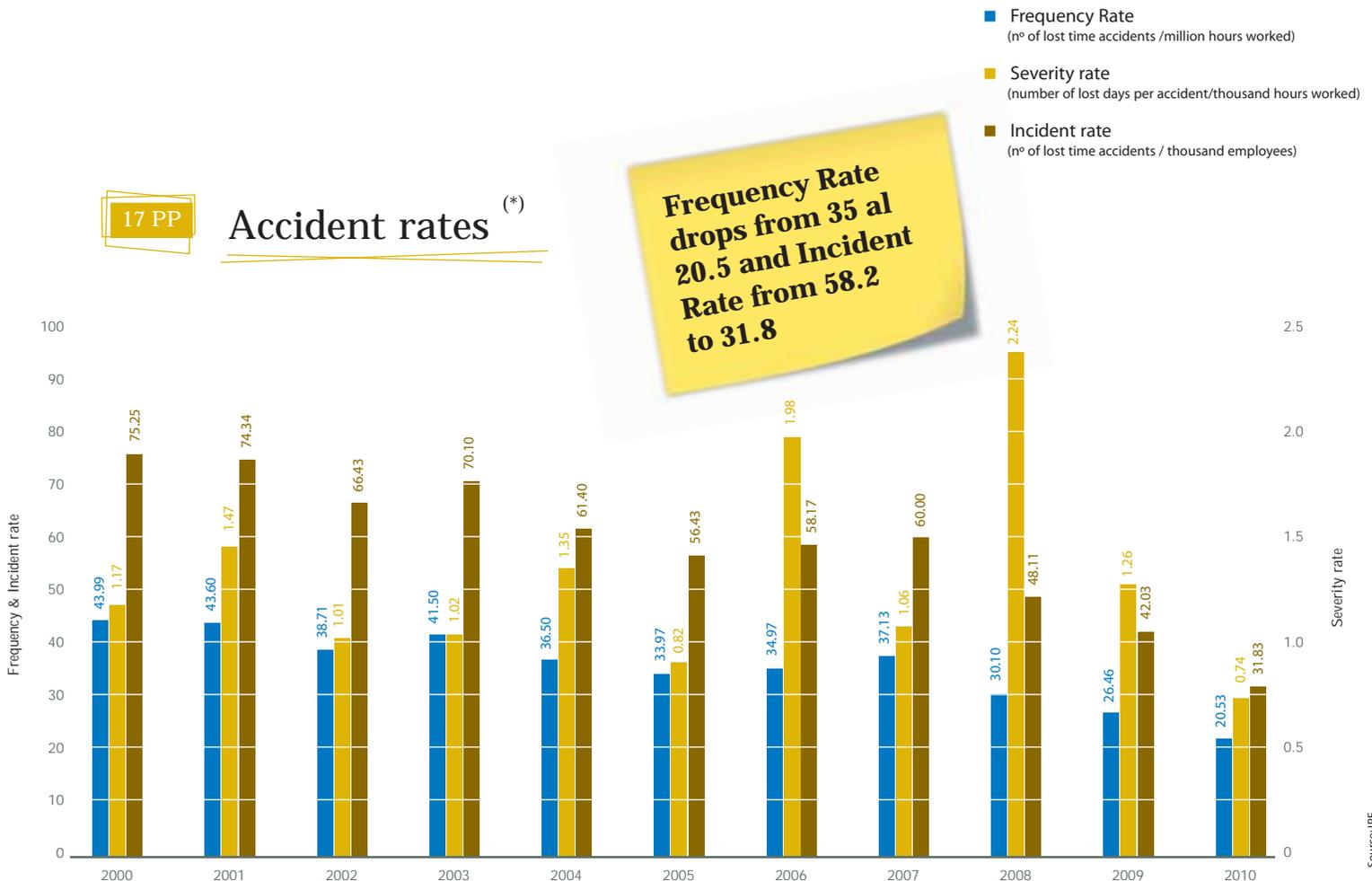
of near-miss incident rates shows that the downward trend is not as remarkable as for accidents with casualties, which is therefore another sign of alert and indicates that hazards are still not sufficiently under control.

It is therefore necessary to continue working to improve health and safety conditions at the workplace and to support companies, especially small and medium-size enterprises, to improve their H&S management systems, mainly by strengthening the integration of health and safety within the company's general management system, apart from training workers and providing for greater operational hazard control.

17 PP

Accident rates (*)

Frequency Rate drops from 35 at 20.5 and Incident Rate from 58.2 to 31.8



*2010 data based on annual accident statistical survey covering 84% of production capacity.

Accomplished objectives

New objectives

Despite the economic crisis, as far as energy is concerned, the previous objective of incrementing installed CHP capacity has been partially achieved, while the target for the next three years is now set at installing an additional 50 MWe.

Improving electrical energy efficiency (0.605MWh in 2010) is established as a new objective. In the next three years, following energy audits, consumption monitoring and the renewal of equipment for optimisation, this parameter is expected to improve by 5%.

Waste production has followed the trend of the variations in production levels. The objectives of reducing land filling with waste by 50% in the year 2012 and increasing the re-use of waste as energy by 20% in 2015 are both matters that have improved in the period 2007 - 2010 but not sufficiently.

The target of eradicating the use of elemental chlorine in pulp bleaching has indeed been accomplished and since the year 2007, all pulp in Spain is either ECF or TCF. In the same way, total water usage and effluent production have been reduced, while the quality of liquid effluents has also improved or stabilised in all parameters.

The target of 80% of all production taking place under certified environmental management systems has been comfortably exceeded.

A downward trend in the number of accidents has been achieved and for the next three years, the objective is set at bringing down the accident frequency rate to less than 20 lost time accidents per million hours' worked and also to reducing severity rates.



Objective

Reduce accident rates.
Improve information about occupational illnesses.

Sectorial OHS program
won the IV AEPSAL awards

From 2006 to 2010

AFR down from 34.97 to 20.53

incident rate down from del 58.17 to 31.83

Severity rate: **fluctuations**
due to fatal and serious accidents

Information on occupational illness underway



New Objective n° 6

Reduce frequency rate to under 20 and achieve downward trend in severity rate

Sectorial OHS program
Manual for Health & Safety officers
Hazardous job analysis
Improve OHS management and integration

Objective 

Increase Cogeneration in 100 MWe.
Improve energy efficiency

Contribution to the Kyoto Protocol

Increase of installed CHP capacity of **25 MW** from 2006 a 2010

Increase of cogeneration use per ton compared to 2006

Stable emission intensity from 2006 to 2010

New Objective n° 7 

To enhance cogeneration in the sector.
Improve electrical energy efficiency by 5% by the year 2013

Install a further 50 MWe in CHP plants by 2013

- Energy audits to determine efficiency and savings measures
- Consumption monitoring, installation of meters /counters
- Consumption optimisation; equipment renewal (lighting, turbines, new cogeneration units, etc)

Objective 

Minimise process waste
Reduce unsuitable materials.

Since 2006
waste generation stable

Increase energy valorisation and reduce land filling:

- Reduce landfilling by 50% by 2012
- Increase energy valorisation by 20% by 2015

Objective 

Greater **energy valorisation** ➔ **2.9%** en 2010

↓
great potential as an alternative under development

Production Waste Management Handbook

Enhance objective 

New Objective n° 8

Objective 

reduce and improve the quality of liquid effluents

| | | | | | |
|---------------------------|-----------------------------|-----------|--------------------------|---|-----------|
| Reduce effluent per tonne | 10.0% less for paper | 2007-2010 | Improve effluent quality | COD (kg/t): -8.0% | 2007-2010 |
| | 8.8% less for pulp | | | SST (kg/t): -15.1% | |
| | | | | AOX (kg/t): -15.7% <small>for bleached pulp</small> | |

Compliance with
Min. of Environment - ASPAPEL
Voluntary Agreement on Effluents 2005 - 2009

Use of elemental chlorine to produce bleached pulp **eradicated**

80% of production to take place under certified EMS
Participation of workers in Environmental Management.

Objective 

Collective Bargaining Agreement 2007-2009

2 new professional categories opened
Environmental Supervisor
Environmental Technician

Greater worker **implication** in EMS. 

New Objective n° 9

93% production performed under certified Environmental Management System
2010



Recycling: the
improving

A person with long dark hair, wearing a light green shirt, is reading a newspaper. The newspaper is open, and the text is partially visible. A large, white, stylized cross graphic with a blue outline is overlaid on the right side of the image. The background is blurred, showing a green wall and a pink object.

challenges of on success

Collective commitment

Spain stands amongst the elite in paper and board recovery and recycling

The Spanish paper industry recycled over **5 million tons of used paper** in 2010. This fact places us at the forefront of recycling in Europe, second only to Germany in terms of volume and practically on a par with France and Italy. Paper and board recycling in Spain is a success story - success born of the joint effort and commitment made by citizens, public authorities and the paper industry itself. Starting from a much more modest position, in just a few years we have taken our place among the elite in recovery and recycling. The challenge now lies in consolidating and improving on these results.

The basic data used to assess the status of pulp and paper recovery and recycling is: how much paper of all that is consumed in a country is collected for recycling once used and how much used paper is re-used by the paper industry in that country as raw material?

In our recycling society, the paper industry plays a leading role. Paper-based products are 100% recyclable and paper is the most recycled material in Spain.

The sector works with a very clear philosophy: to recycle cellulose fibre as many times as possible and



at the end of its useful life, to derive value from that residue for agricultural purposes, as raw material in other industries such as brick or cement making, to produce insulating materials, mouldings... and eventually as biomass for bio-fuel. This philosophy includes paper-based products that are eco-designed for optimal recycling.

Recycling optimises the effective use made of a natural and renewable resource such as wood, it closes the paper cycle and it contributes very significantly to reducing landfill volumes. The final destiny of paper-based products is not landfill because used paper is not waste but rather a raw material.

As far as used paper and board collection is concerned, in 2010 we collected 4.6 million tons of used paper and board for recycling: 71.9% of all the paper and board the Spanish consumed last year. And that figure means that we remain in the '70% Club', which we joined in 2009, where we can rub shoulders on equal terms with other leading countries in the world of paper and board collection.

The
70%
Club

Spain joined
the club in
2009

Spain is one of the
top 10 countries in
the world in paper
and board
collection

It is no easy task to reach - and even to exceed - this magical figure of 70%, especially bearing mind that a percentage of the paper we use cannot form part of the recycling circuit: in some cases because we store it - such as books or photographs, for example - and in others, because it deteriorates during use.

Among the top recycling countries in Europe

Spain not only recovers for recycling three quarters of the paper and board it consumes; there is even more good news in that, thanks to the Spanish paper industry's large recycling capacity, all the paper and board selectively collected in the country can be recycled locally.

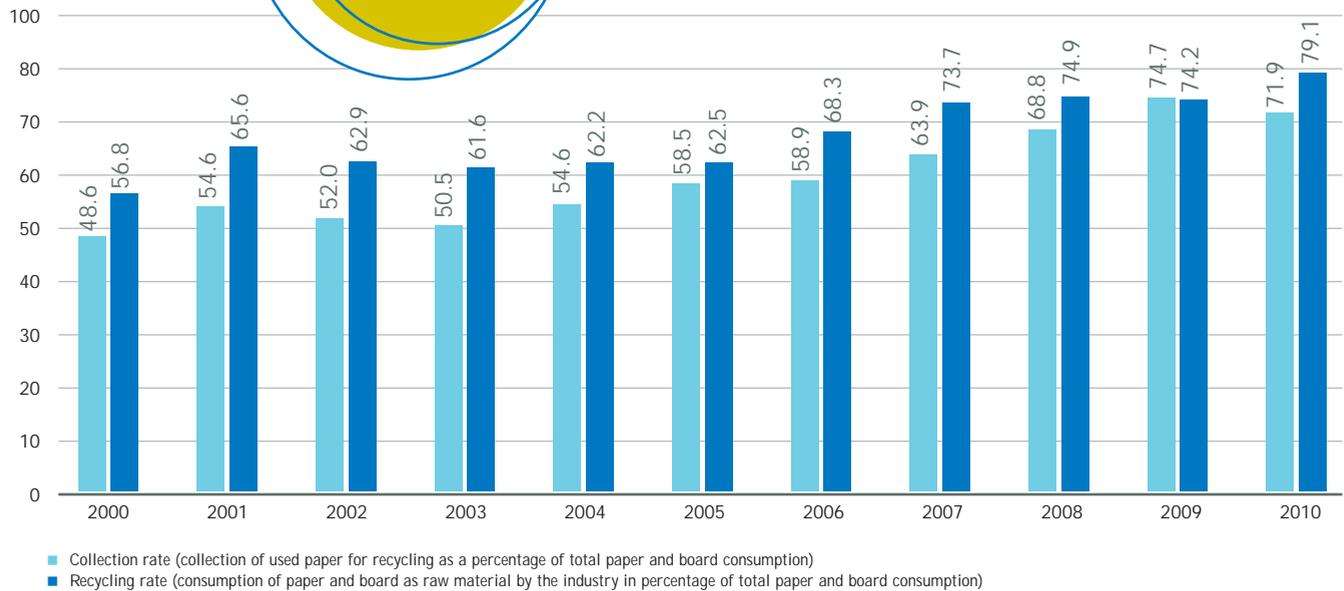
It has already been stated above that the volume of used paper collected for recycling accounts for 71.9% of the paper consumed in Spain (collection rate). Indeed, the volume of paper recycled by the industry is in fact greater than that and represents 79.1% of total consumption (recycling rate). This means that our paper industry is not only prepared to recycle locally the significant volume of used paper collected in Spain but is also ready to absorb future increases in used paper collection rates.



Leadership in collection and recycling

> 70%

Data: expressed in %



The Spanish paper industry's large recycling capacity enabled Spain last year to recycle over 5.1 million tons of used paper and board, a volume only exceeded in Europe by Germany.

Collection and recycling rates

18-19 LR

However, there is a down side to this: while paper collection has grown steadily over recent years, so too have Spanish exports of recovered paper, the large majority of which has been shipped to China.

The main problem is that these massive and erratic exports create volatility along the entire paper recycling chain and rupture the basic principle of environmental and economic efficiency that local recycling provides. This is especially acute when, as in the case of Spain, successful paper collection systems are backed by a large recycling capacity in local industry, which enables the recycling loop to be closed completely within the country.

One decade ago, we scarcely collected 50% of the paper and board we consumed for recycling, whereas today we collect over 70%.

Collection: how come and how much

There are two ways of collecting all that used paper: industrial collection and selective municipal collection. Industrial collection refers to collecting paperboard from big box stores and markets, industries, publishers, trims from printers, etc... while selective municipal collection recovers paper from domestic homes, small retail outlets, offices... through the blue bin, urban recycling centres and door-to-door collection.

Many people wonder what happens when they drop their used paper and board in the blue bin. First of all, it is collected by a truck that takes it to a paper and board sorting store, where it is then graded by type, cleaned, conditioned, and packed in bales to be sold to paper mills.

In 2010, 4.6 million tons of recovered paper were collected, which account for a space saving in landfills equivalent to 45 large football stadiums such as Real Madrid's Bernabeu or Barcelona's Camp Nou filled to the brim and a saving in landfill emissions of 4.1 million tonnes of CO₂ (about 1% of the total emissions produced by the country).

A slower economy means fewer cardboard boxes, fewer paper bags, fewer invoices, fewer catalogues and brochures, fewer advertisements in the press... Logically, if we consume less paper, there is less paper to collect and recycle. However, thanks to the significant boost in paper and board collection in recent years, this drop in consumption has had a relatively moderate effect on paper collection.

Recycling: guaranteed by industry

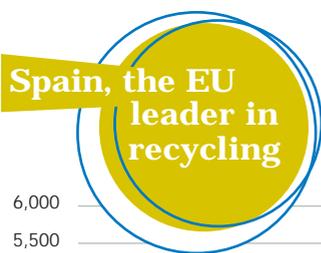
The paper we recover through industrial collection and selective municipal collection is sold as raw material to paper mills to be recycled. There exist international standard grades that define over 60 types of recovered paper, which is used according to the type of new paper to be produced.

At the mill, used paper is mixed with water. Paper fibres are separated from staples, plastics, etc. and then fed to the paper machine, where the cellulose fibres form a wet web, from which water is gradually extracted. That way, our used paper is turned into a reel of new paper.

The newspaper we read this morning, if we deposit it in the nearest blue bin, will come back to the news-stand next week. And the cardboard package or paper bag that we take to the bin after using it will reappear in our shops as new packaging.

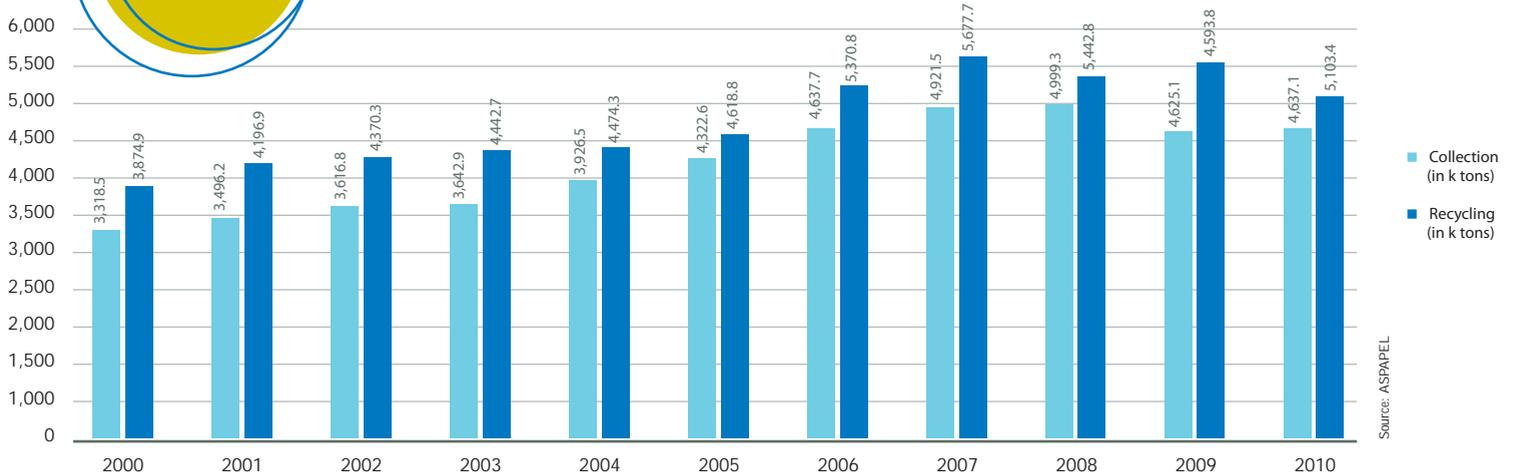
Through recovery and recycling, used paper becomes a raw material, the collection and conditioning of which generates wealth and employment, and therefore it is eventually turned into finished products with greater added value.

Citizens need to know that their efforts and collaboration are very worthwhile, because the Spanish paper industry guarantees that all the paper and board recovered selectively will be recycled. And the industry can make such assurances because it is number one in recycling within the European Union.



Paper and board collection and recycling volumes

18 LR / 19 LR



Source: ASPAPEL

Spanish pulp and paper sector promotes recycling:

Tu papel es importante campaign

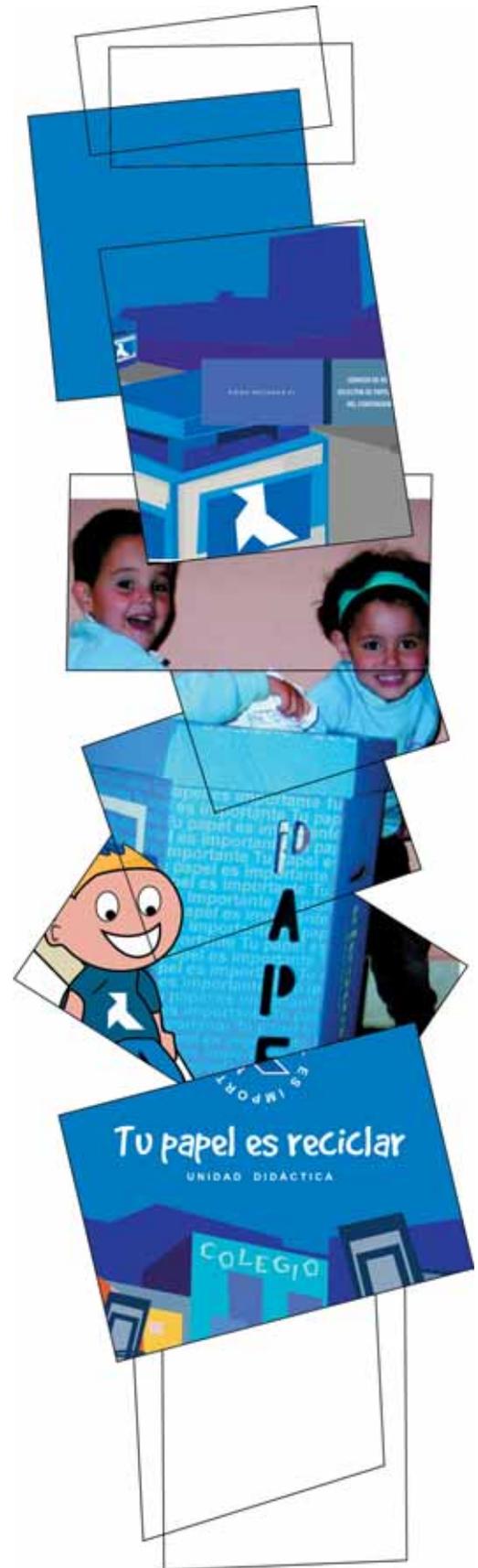
Apart from guaranteeing that all paper and board selectively collected will be recycled, the Spanish paper industry supports and actively sponsors recycling through a program called in Spanish *Tu papel es importante* (www.tupapelesimportante.com), promoted by ASPAPEL and with which over 130 town councils from across Spain already collaborate.

The aim of *Tu papel es importante* is to achieve continuous improvement in paper and board recovery by strengthening collection from blue bins and developing additional formulas in those areas where room for improvement has been detected, namely offices, education centres, small retail outlets, industrial estates, markets, hotels, universities, etc.

The programme has won the recognition of the European Recovered Paper Council's European Paper Recycling Award. The prize was awarded by an independent panel of European experts, made up of representatives from the European Parliament, the European commission, ACR+ (Association of Cities and Regions for Recycling and Sustainable Resource Management) and WWF International.

As part of the program, ASPAPEL has developed a system named *Tu Papel 21*, which provides town councils with assessment, advice and certification about selective paper and board collection.

In 2010, **22 local councils obtained this certification** and over 16 million citizens are now witnesses of a system that expresses and seals their commitment to paper and board recycling.



Town councils with *Tu papel 21* certification

Certificate no. C Certified town councils

| | |
|----------|---------------------------|
| 001-2005 | Fuenlabrada |
| 002-2005 | Pamplona District Council |
| 003-2005 | San Marcos (Guipuzkoa) |
| 004-2005 | Lleida |
| 005-2005 | Oviedo |
| 006-2005 | Reus |
| 007-2005 | Granada |
| 008-2006 | Ciudad Real |
| 009-2007 | A Coruña |
| 010-2007 | Bilbao |
| 011-2007 | Pozuelo de Alarcon |
| 012-2007 | Leon |
| 013-2008 | Palma (Majorca) |
| 014-2008 | West Costa del Sol |
| 015-2008 | Barcelona |
| 016-2009 | Gijon |
| 017-2010 | Salamanca |
| 018-2010 | Burgos |
| 019-2010 | Alcoy |
| 020-2010 | Cadiz |
| 021-2011 | Sabadell |
| 022-2011 | Logroño |

NOTE: Although Sabadell and Logroño obtained their certificate in 2011, the process was basically carried out in 2010.

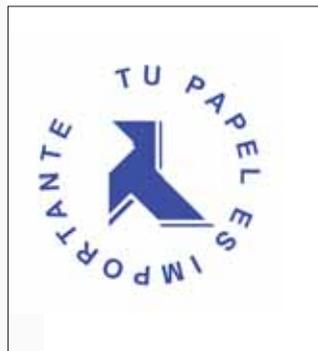
The recipe for success

What is the recipe for such success, how can excellence in paper and board recycling be achieved?

The 22 local councils that in 2010 were able to display the seal of the little blue bird following the award of their Tu Papel 21 certificate are good examples because behind that excellence, one can always find a local government prepared to make the necessary resources, infrastructures, training and information available to its citizens.

A sufficient number of paper and board bins for domestic use suitably distributed, positioned and emptied frequently in line with users' needs are the fundamental basis of consolidating selective paper collection in any town.

If, on top of this, specific collection systems are implemented for other used pulp and paper generators (small retail outlets, offices, schools, hotels and restaurants, markets, industrial estates, universities, beaches...), thereby preventing the blue bins for domestic use from being overloaded, the recipe for success is assured. Further ingredients are awareness campaigns and regular information about the results, because nothing is more encouraging for the citizen than knowing that his or her efforts lead to positive results.

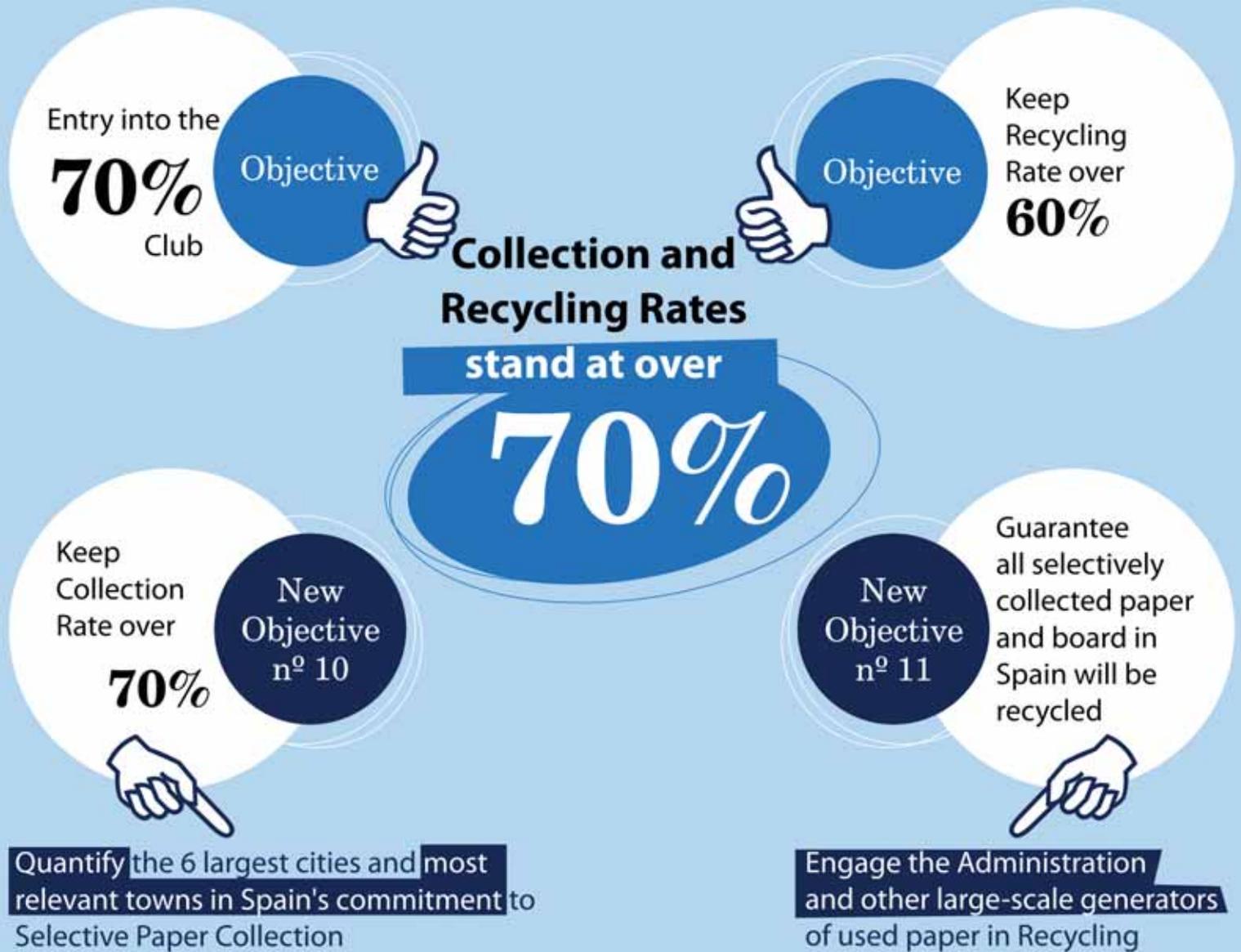




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**Accomplished
objectives**

**New
objectives**



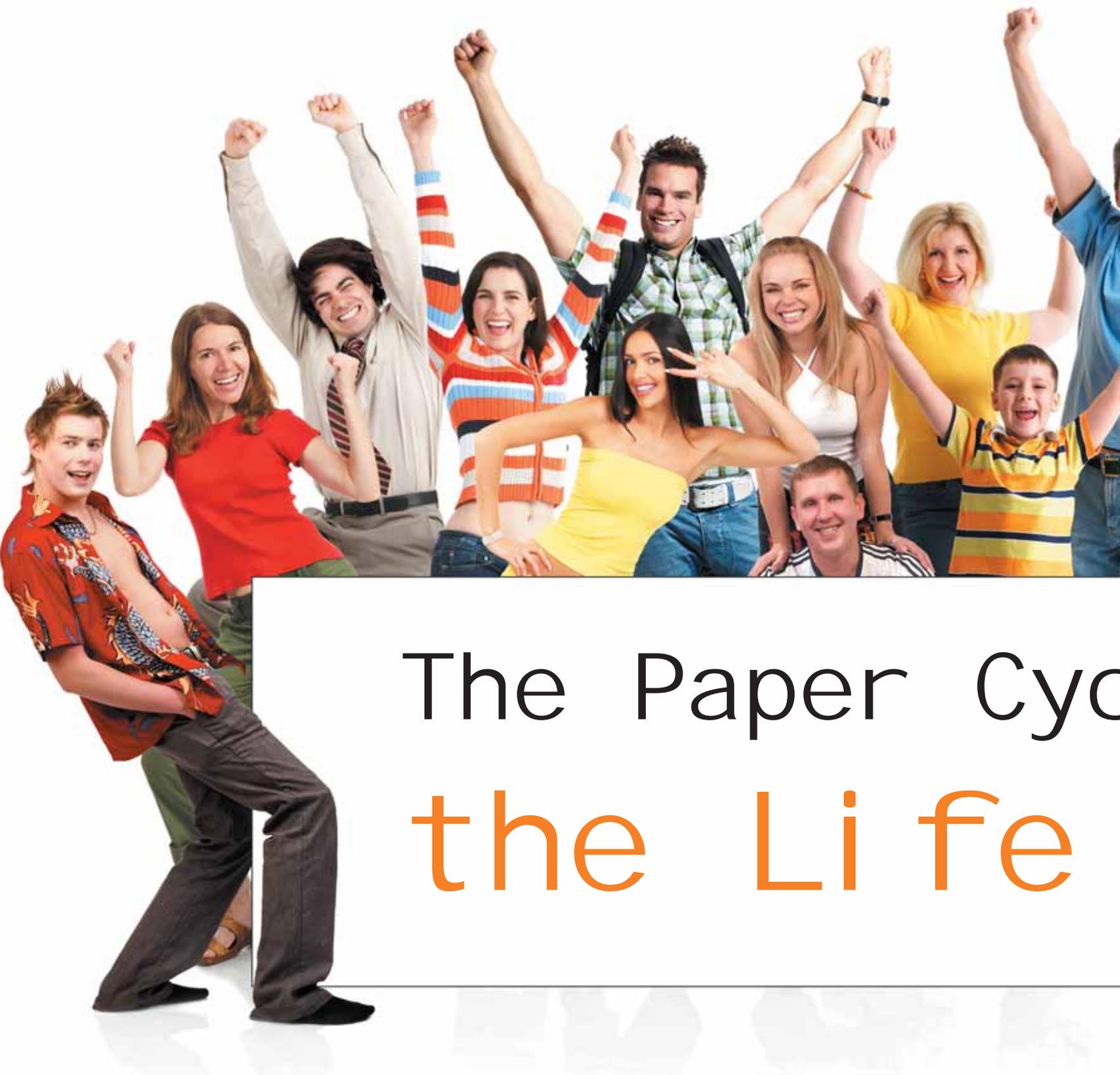
The Spanish paper sector had set itself the ambitious target for the period 2007-2010 of reaching a paper collection rate of over 70%, starting from the 59% figure of 2006. That objective of becoming one of the elite in paper collection has been more than comfortably achieved, with collection rates of 75% in 2009 and 72% in 2010.

Likewise, starting from a recycling rate of 68% in 2006, the target for 2007-2010 was to keep that rate at a level of over 60%. Again, this objective was clearly exceeded with recycling rates of over 70% throughout the entire period.

The new target for the period 2011-2013 is to guarantee the recycling of all used paper collected in Spain. Through the combined efforts of all parties, we have succeeded in balancing our paper and board collection systems with our industry's recycling capacity, which means that all the paper collected selectively can be properly managed and new

paper made from it. The challenge we face in the coming years is to maintain that balance in this global economy, while to reach even higher rates, we need to engage the commitment of government agencies and other large-scale generators of used paper.

With regard to collection over the next three years, in which the public administration is bound to be restricted by measures of austerity, the target is to maintain collection rates over 70%. There is still room for improvement in municipal selective collection in certain towns and cities and especially on the regional scale. To bring them on board, it will be more important than ever to ensure that all efforts and resources are managed with utmost efficiency. For that reason, the main focus will be on the 6 largest cities in Spain and the most relevant municipalities.



The Paper Cycle the Li fe



le, Cycle

The natural side of life

Paper is a product that forms part of the cycle of nature, the carbon cycle, the basic biological cycle.

It is as natural as life itself. Throughout the day, over and over again, we use paper-based products to meet the most wide-ranging needs, from paper and board packaging to protect and transport our recent purchases to communications with others for information and education.

We use paper-based products in our personal hygiene, during our leisure hours, at work, in the kitchen...

Paper and board products contribute to people's standard of living and they do so in a natural way, not just because they are renewable and recyclable, not just because they come from a natural raw material, but also because when we use paper in any situation, we do so naturally, with a familiarity that is born from a day-to-day relationship, a relationship based on trust.

If we stopped for a minute to think about our daily relationship with paper, we would be surprised by how much we depend on paper in so many situations and we would realise to what extent paper forms a natural part of our lives.

We can trust paper to improve our standards of living because behind paper-based products lies

an industrial sector committed to eco-efficiency. It is a sector that is ready, willing and able to play a fundamental role in the emerging bio-economy, the economy of the future, a sector that generates wealth from the standpoint of its unwavering commitment to sustainability.

Because the Pulp and Paper industry exports half of its production, creates stable skilled employment and uses a natural and renewable resource in which Spain has a great potential that is largely infra-utilised, it is a key sector for the industrial future of our country.

Consumers have clearly growing demands for products that meet their needs at the lowest possible environmental cost. For that reason, only industries based on natural cycles will thrive in the future.



The Green Economy, the economy of the future

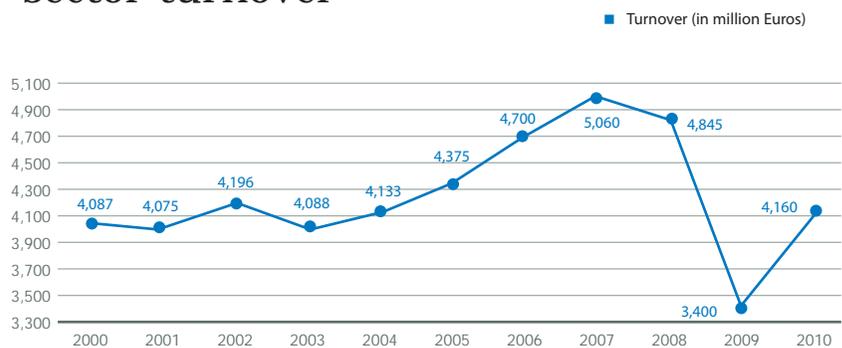
The pulp and paper sector has been especially sensitive to the economic crisis. In the period 2007 - 2010, paper production went down by an aggregate figure of 2.1%, while GDP went up by 0.5%. The crisis was already noticeable in 2008, when paper production went down by 4.5%, and even more so in 2009, when production slipped back 11.1% to the level of the year 2005.

In the same way as the drop in paper production was far more severe than the reduction in GDP, recovery is also taking place at a faster rate, with an increase in paper production of 9.1% in the year 2010. However, despite this increase, the sector is still far from recovering production levels prior to the crisis. As a consequence of this economic downturn, in the period 2007 - 2010, 3 pulp mills and 34 paper mills closed down, which represent a drop in nominal production capacity of 250,000 t of pulp and 900,000 t of paper.

However, the trend over the last decade shows a paper production increase of nearly 31%, 8 percentage points over GDP, which is clear evidence of the strength of this innovative and future-oriented sector. Sector turnover in 2010 reached €4,160 million and, despite the increase of over 22% compared to the year before, remains at a level similar to the beginning of the decade and still 21% below annual turnover immediately prior to the crisis.

Pulp and paper sector turnover

23 GR



Source: ASPAPEL

Despite the severity of the crisis, the pulp and paper sector continues to grow over GDP and is expected to play a relevant role in our economy's recovery.

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Sector growth compared to GDP

21 GR



Source: ASPAPEL - INE

■ Paper production (% aggregate growth)
■ Spanish GDP (% aggregate growth)

Sector grows **31%** more than GDP between 2000 and 2010

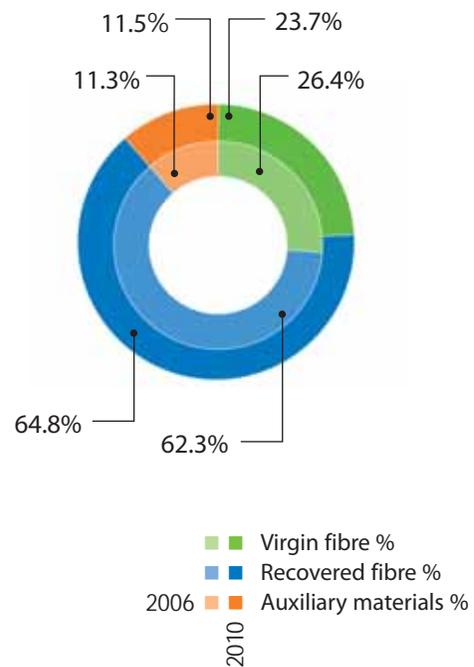
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Raw materials that create wealth

The materials used in papermaking are basically virgin or recovered fibre and auxiliary materials (starch, chemicals etc.). In 2010, raw material procurement reached a total of almost 7.9 million tonnes, of which 24% was virgin fibre, 65% recovered fibre and 11% auxiliary materials. These supplies of raw materials to the paper industry are a good example of the sector's potential for generating green employment.

The importance of recovered fibre in the raw material mix is due to the amount of packaging paper, which uses about 85% recovered fibre, and newsprint, with 100% recovered fibre, manufactured. This fibre mix enables the Spanish paper industry, thanks to its large recycling capacity, to make optimal use of virgin fibre and to recycle locally used paper and board collected in our country. The pulp & paper sector is committed to the efficient use of resources by minimising the impact of their usage on the environment.

Promoting the recycling of used paper and preventing waste provide medium and long-term economic and environmental benefits.



Raw material procurement

24 GR

| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|-------------------------------------|-------|-------|-------|-------|-------|-------|-------|
| Virgin fibre % | 28.8 | 28.8 | 26.5 | 25.7 | 26.0 | 26.8 | 25.5 |
| Recovered fibre (pulp equivalent) % | 59.8 | 60.0 | 62.2 | 62.8 | 62.6 | 61.6 | 63.1 |
| Auxiliary materials % | 11.4 | 11.2 | 11.3 | 11.5 | 11.4 | 11.6 | 11.4 |
| Total raw materials (in k tons) | 6,510 | 6,694 | 7,515 | 7,860 | 7,550 | 6,490 | 7,034 |

Source: ASPAPEL

Increasing export capacity



Destinations of pulp and paper exports in %

| | Year 2006 | Year 2010 |
|----------------|-----------|-----------|
| European Union | 77.6 | 75.9 |
| Asia | 7.8 | 7.9 |
| Africa | 5.1 | 7.5 |
| Latin America | 3.1 | 3.8 |
| Other Europe | 3.6 | 2.6 |
| U.S. & Canada | 1.9 | 1.9 |
| Rest | 0.9 | 0.3 |

To a large extent, exports have been an escape route from the crisis for the sector. Export rates in 2010 stood at 52% for pulp and 49% for paper, an improvement of 4 and 5 percentage points respectively over the 2006 figures.

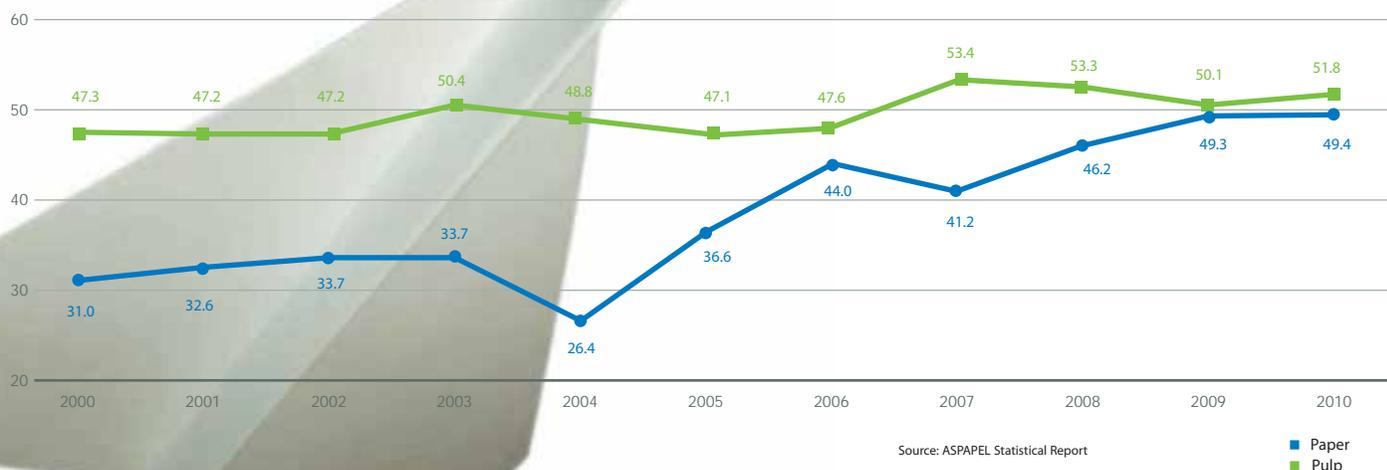
The Spanish pulp and paper industry's growing export capacity says much about the quality of its products, its competitiveness and its potential as a key player in the economic future of our country. Three quarters of those exports were shipped to other European Union countries such as France, Portugal, Italy, the Netherlands, the United Kingdom or Germany.



25 GR

Geographical distribution of sales. Trade balance

Evolution of export rate (% exports / production)



Source: ASPAPEL Statistical Report

■ Paper
■ Pulp

Moving towards more sustainable **transport**



Transport is a key question in sustainability and the sector is working to adopt measures that help to reduce its impact.

The Spanish pulp and paper industry moves over 24.5 million tons of goods every year (wood, raw materials, finished goods and other products). These goods are transported by road (74%), sea (21%), and railway (5%). Road haulage is the most widely used form of transport by the pulp and paper industry, as is the case for other vital economic sectors in Spain, while sea freighting is used basically for long-distance shipping.

One of the sector's priority objectives is to increase the use of rail transport, the environmental advantage of which is unquestionable. At the same time as it searches for formulas that improve access to rail transport, especially as far as service cost and flexibility are concerned, the sector is also working

on measures within road haulage that reduce its environmental impact and at the same time give it a greater competitive edge.

An example of this would be to increase the maximum load that trucks are allowed to carry in Spain from the current 40 tons to 44 tons, as has been done in several European countries. In this way, net loads would increase by 16.6% (from 24 to 28 t), which reduces the number of lorries on the road, as well as CO₂ emissions, the risk of accidents etc. Another example would be to increase truck height.

Furthermore, it should be noted that in Scandinavian countries, the Netherlands, Germany (currently being tested) and Portugal (for certain products including paper-based products), trucks are allowed to carry up to 60 tons. In this case, the reduction both of fuel consumption and CO₂ emissions is estimated at around 14%.



Stable and skilled employment

Direct employment in the sector in 2010 stood at 17,200 people, while indirect employment can be estimated at around 85,000 jobs. These figures represent 5% less than in 2006.

26GR

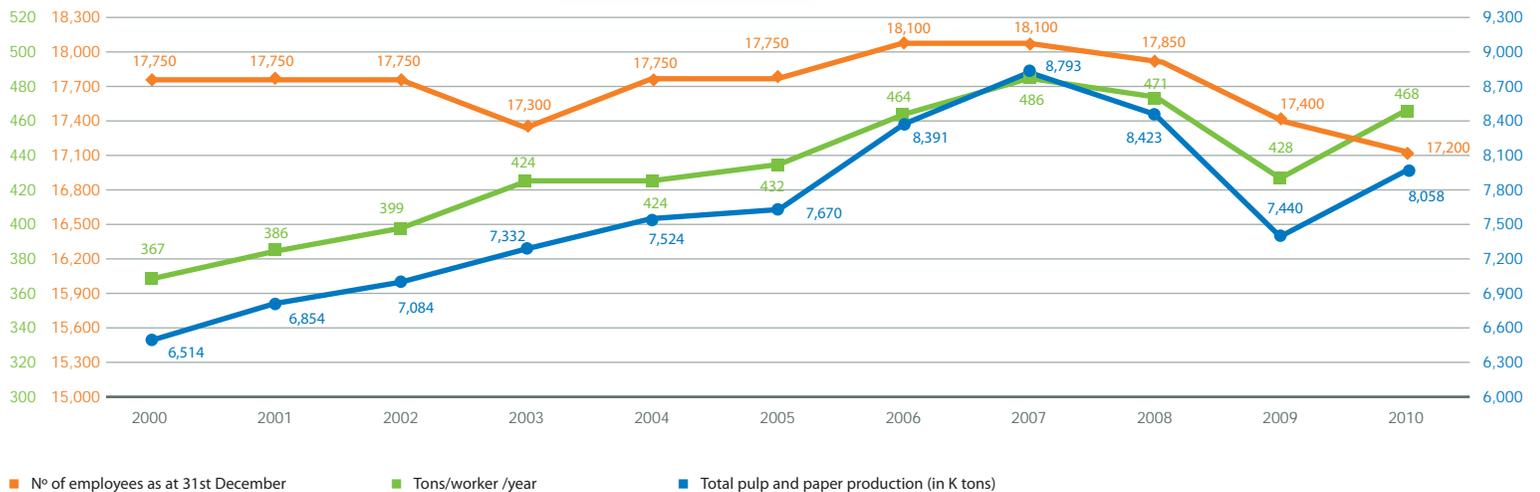
These job losses are moderate compared to the situation across the Spanish economy as a whole and once again is indicative of the quality of employment in the sector, characterised by its stability, skills and high productivity.

In the four-year period covered by this report, productivity followed the same trend as the crisis, which was very severe in 2009 - when it dropped to the level of 2005 - and with a noteworthy improvement in 2010, which can be attributed not only to an increase in production levels but also to mill closures.



27GR

Labour productivity



28GR Stock market performance of listed companies

Stock market performance of the pulp and paper sector as a whole has gone through two clearly different phases in the period 2007 - 2010. At the beginning of the period, the share price for companies in the sector stood above the IBEX35 average, a situation which was reversed when the crisis broke out.

Social action in the pulp and paper sector 30GR

As part of their corporate social responsibility strategy, paper sector companies sponsor and support various assistance, educational, cultural, and sports programmes in collaboration with local administrations and non-governmental organisations.

On the sectorial level, ASPAPEL carries out "forest in the School" program through its **Edufores Foundation** (www.edufores.com), training in recycling through its **Tu papel es Importante** program (www.tupapelesimportante.com) and also collaborates with other organisations, of which the following are highlights:

- **APAI Foundation: vocational training and integration for mentally handicapped youths:** collaboration in developing a teaching unit about the history and natural cycle of paper, in which handicapped youths are monitors for schoolchildren on outings programmed with different schools.
- **Hispanic Association of Paper Historians (AHHP):** an agreement by which ASPAPEL supports the organisation and structure and sponsors the AHHP bi-annual awards, as well as collaborating to organise exhibitions, publish documents, etc.
- **Capellades Paper Mill Museum:** an agreement to collaborate in maintaining the museum and its work.

29GR

From responsible consumption to **bio-consumership**

Responsible consumption is fundamental to achieving optimal use of resources, even renewable resources. And now, going one stage on from responsible consumption, society grows in its demands for products that are integrated within the cycle of nature - products that come from Nature, are recycled and then return to Nature, thereby fulfilling man's requirements in perfect harmony with Nature's own capabilities.

There are very few products like paper that are able to meet all the requirements that the consumer of our future society is already demanding of recycling and bio-consumership.

Technology, innovation and research are essential for nature cycle-based industries like the pulp and paper sector to make society's aspirations come true. The key lies in Nature herself, as she is in a constant, never-ending process of innovation to assure her own future.

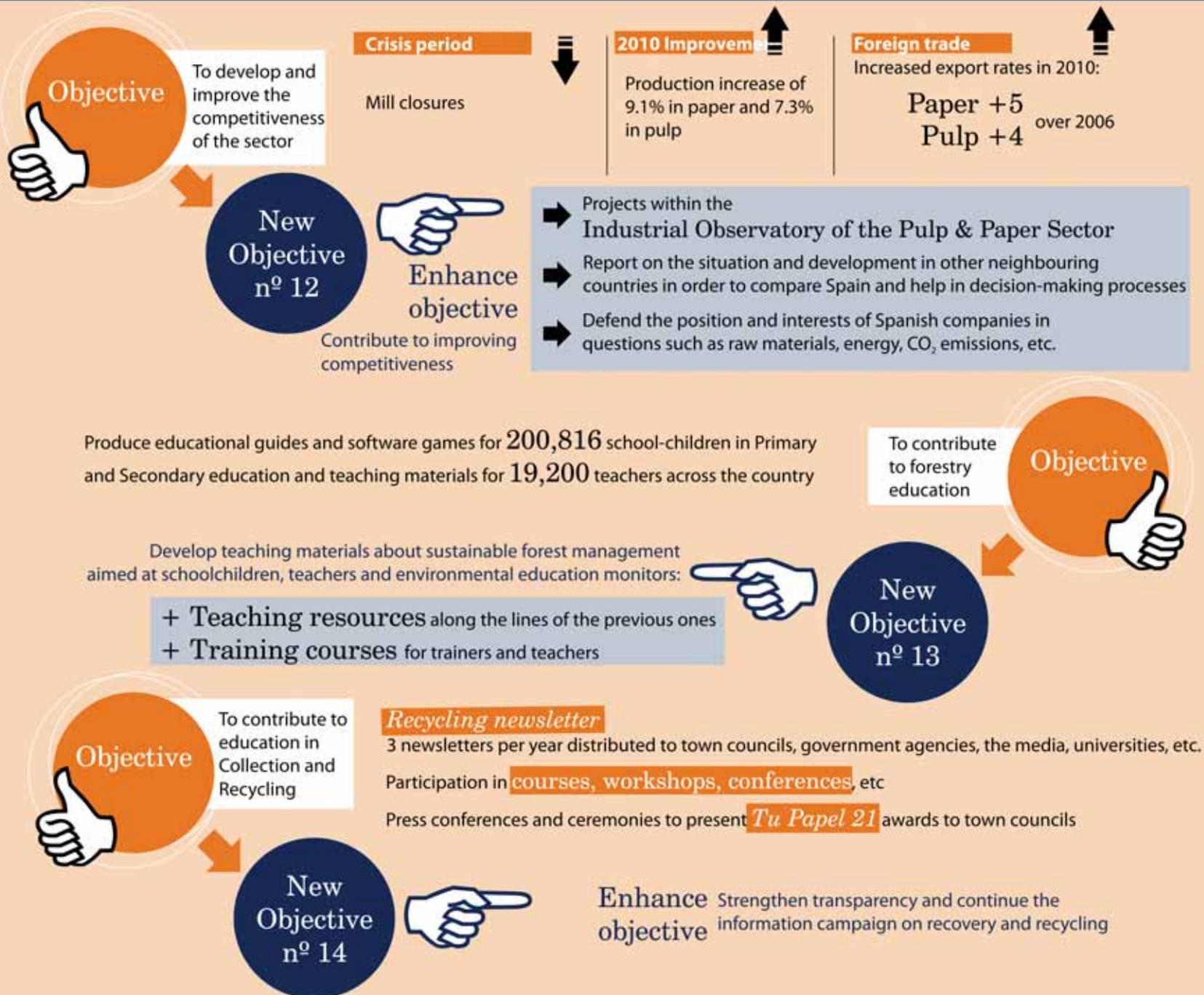
In the Pulp & Paper sector, that future has already begun, with intelligent products that interact with the consumer (heat-sensitive papers that tell you when the fruit is ripe, paper and board packaging capable of storing medical data to remind you when you should take your medicine), paper batteries, fibre screens made with wood cellulose ...

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Accomplished objectives

New objectives



Following an especially difficult period as 2007-2010 has been, furthering the objective of enhancing the sector's competitive position is a priority for the next few years to ensure the Pulp & Paper industry makes a significant contribution to the country's economic recovery.

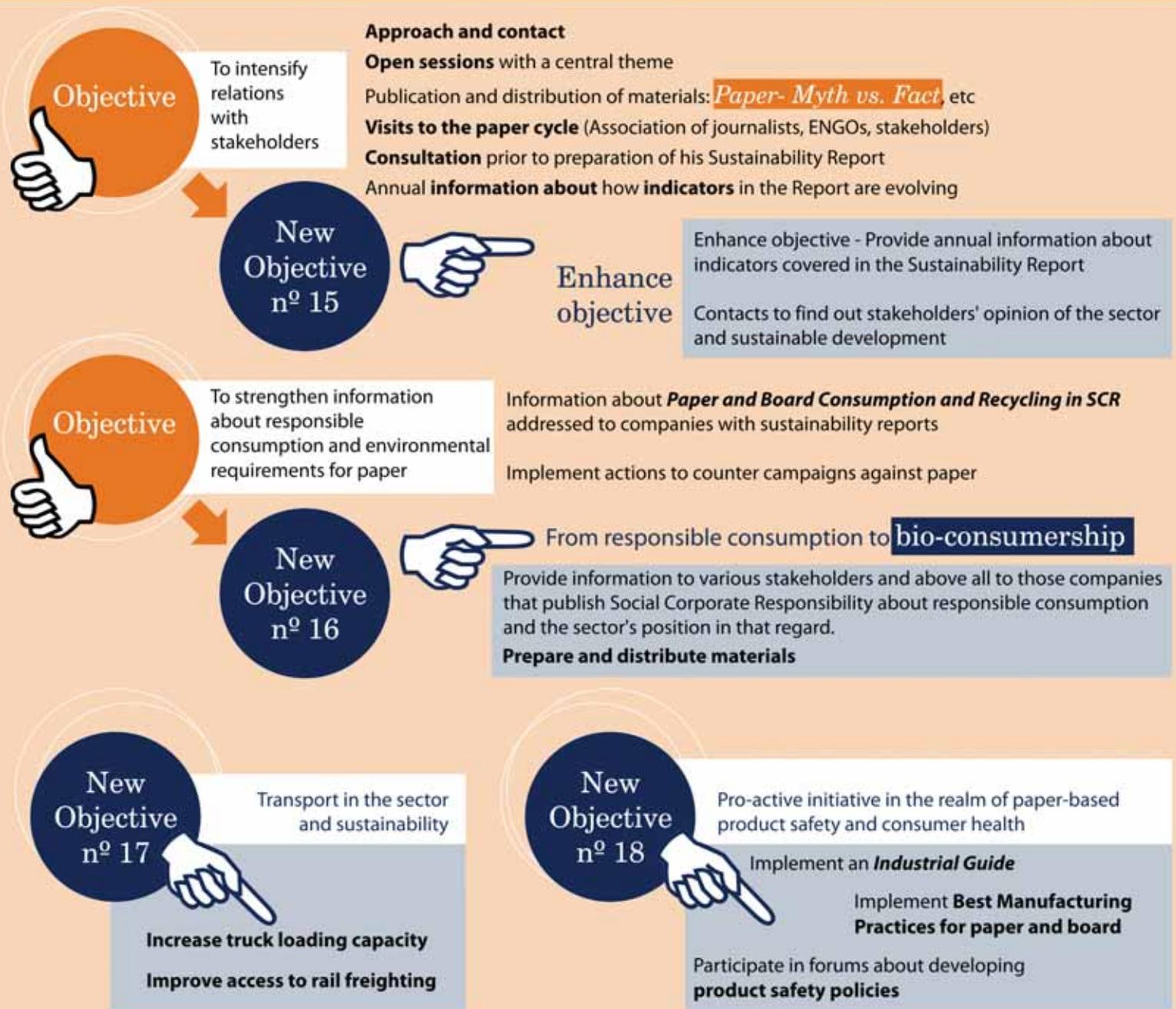
The new objectives for 2011-2013 include implementing improvements that make transport in the sector more sustainable (increasing maximum load rates on trucks, improving availability of railroad freighting...) as well as proactive initiatives in the realm of paper-based product safety and consumer health.

Progress has also been made with

regard to enhancing information about responsible paper consumption and environmental requirements for paper through the publication and distribution of documents such as "Consumo y Reciclaje de Papel y Cartón en la RSC" (Paper and Board Consumption and Recycling in SCR), as well as providing data directly to companies, banks and public agencies with interest in the matter. This line of action is left open for further development over the next three-year period.

In order to contribute to forestry and recycling education, ASPAPEL carried out a series of programs and activities in the period 2007-2010, which are to be maintained and extended in the next 3 years.

Another objective which continues into the next period is to achieve more intensive interaction with stakeholders. Throughout the period 2007-2010, work sessions were held on different subjects (2007: 4 Legends about Paper; 2008: The Recipe for Paper Sustainability; 2009: Paper: The Way towards a Sustainable Future, 2010: Tree, Paper, Planet). Publications were brought out, such as *Papel, Mitos frente a Datos* (Paper- Myth vs. Fact), annual data was provided about the current status of the sector's main sustainability performance indicators and visits were organised to various pulp & paper mills. In addition, stakeholders were invited to express their opinions through a consultation survey prior to this Sustainability Report being drafted.



Annex

BUREAU VERITAS
Certification



Bureau Veritas Certification
declares that has performed the assessment of the

Sustainability Report **ASPAPEL - 2010**

Regarding the structure, content and source of information and as a result of this assessment Bureau Veritas concludes that

- The content of this report has been properly examined and assessed through audit techniques and sampling
- The materiality, traceability and contents of the report are adequate.
- Complies with the requirements and the principles established in the GRI Sustainability Reporting Guidelines, version G-3.

According to this declaration Bureau Veritas Certification confirms for the

2010 Sustainability Report
ASPAPEL
the **application level B+**

Issuing date: june 13th 2011.

Carlos Martín-Peñasco
Lead Verrificator CSR
Bureau Veritas Certification

This declaration is based on a detailed Verification Report available to all interested parties.





Statement GRI Application Level Check

GRI hereby states that **ASPAPEL** has presented its report "MEMORIA DE SOSTENIBILIDAD SECTOR PAPEL 2011" to GRI's Report Services which have concluded that the report fulfills the requirement of Application Level B+.

GRI Application Levels communicate the extent to which the content of the G3 Guidelines has been used in the submitted sustainability reporting. The Check confirms that the required set and number of disclosures for that Application Level have been addressed in the reporting and that the GRI Content Index demonstrates a valid representation of the required disclosures, as described in the GRI G3 Guidelines.

Application Levels do not provide an opinion on the sustainability performance of the reporter nor the quality of the information in the report.

Amsterdam, 4 July 2011

A handwritten signature in blue ink, appearing to read "Nelmara Arbex", is written over a large, faint watermark of the GRI logo in the background.

Nelmara Arbex
Deputy Chief Executive
Global Reporting Initiative



The "+" has been added to this Application Level because ASPAPEL has submitted this report for external assurance. GRI accepts the reporter's own criteria for choosing the relevant assurance provider.

The Global Reporting Initiative (GRI) is a network-based organization that has pioneered the development of the world's most widely used sustainability reporting framework and is committed to its continuous improvement and application worldwide. The GRI Guidelines set out the principles and indicators that organizations can use to measure and report their economic, environmental, and social performance. www.globalreporting.org

Disclaimer: Where the relevant sustainability reporting includes external links, including to audio visual material, this statement only concerns material submitted to GRI at the time of the Check on 23 June 2011. GRI explicitly excludes the statement being applied to any later changes to such material.

GRI G3 Reporting Guidelines

GRI Application B Level G3 contents assured by Bureau Veritas

| Disclosure | Page | * |
|--|---|---|
| Strategy and Analysis | | |
| 1.1 Statement from the most senior decision maker of the organization (e.g., CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and its strategy | 1 | C |
| 1.2 Description of key impacts, risks, and opportunities | 1 | C |
| Organizational Profile | | |
| 2.1 Name of the organization | 10 | C |
| 2.2 Primary brands, products, and /or services | 10 | C |
| 2.3 Operational structure of the organisation, including main divisions, operating companies, subsidiary Aries, and joint ventures | 10-11 | C |
| 2.4 Location of organisation's headquarters | 10 y 78 | C |
| 2.5 Number of countries where the organisation operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report | 10 | C |
| 2.6 Nature of ownership and legal form | 10 | C |
| 2.7 Markets served (including geographic breakdown, sectors served, and types of customer/beneficiaries) | 10 y 76 | C |
| 2.8 Scale of the reporting organisation | 11 (number of employees) ^(*) | P |
| 2.9 Significant changes during the reporting period regarding size, structure, or ownership of the organisation | None | C |
| 2.10 Awards received in the reporting period | 44 | C |
| Report Parameters | | |
| 3.1 Reporting period (e.g. Fiscal/calendar year) for information provided | 14 | C |
| 3.2 Date of most recent previous report (if any) | 14 | C |
| 3.3 Reporting cycle (annual, biennial, etc) | 14 | C |
| 3.4 Contact point for questions regarding the report or its contents | 78 | C |
| 3.5 Process for defining report content | 14 | C |
| 3.6 Boundary of the report (e.g. countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers) | 14-15 | C |
| 3.7 State any specific limitations on the scope or boundary of the report | 14-15 | C |
| 3.8 Bases for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organisations | (**) | C |
| 3.9 Data measurement techniques and the basis of calculations, including assumptions and techniques underlying estimations applied to the compilation of the indicators and other information in the report | 14 | C |
| 3.10 Explanation of the effect of any restatements of information provided in earlier reports, and the reasons for such restatement (e.g. mergers/acquisitions, change of base years/periods, nature of business, measurement methods) | 14 | C |
| 3.11 Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report | 14-15 | C |
| 3.12 Table identifying the location of the Standard Disclosures in the report | 15 y 72-75 | C |
| 3.13 Policy and current practice with regard to seeking external assurance for the report | 16 y 70 | C |
| Governance, Commitments, and Engagement | | |
| 4.1 Governance structure of the organisation, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organisational oversight | 11 | C |
| 4.2 Indicate whether the Chair of the highest governance body is also an executive officer | 1 y 11 | C |
| 4.3 For organisations that have a unitary board structure (members of the highest governance body that are independent and/or non-executive members) | (***) | C |
| 4.4 Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body | No stakeholders | C |
| 4.5 Linkage between compensation for members of the highest governance body, senior managers, and executives and the organisation's performance. | 11 | C |

^(*) ASPAPEL is a non-profit-making professional body that represents the Spanish pulp and paper sector. As it has no business activity, it has no income from sales. An annual budget is approved each year, which guarantees its business activity and is covered by the fees paid by member companies.

^(**) ASPAPEL is an association and has no joint ventures, etc.

^(***) The members of the board of directors are independent from the organisation except for the Director General and the Secretary General.

| Disclosure | Page | * |
|---|--|---|
| 4.6 Processes in place for the highest governance body to ensure conflicts of interest are avoided | 11 | C |
| 4.7 Process for determining the qualifications and expertise of the members of the highest governance body to guide the organization's strategy on social, environmental and economic questions | 11 | C |
| 4.8 Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation | 1, 15, 28-29, 44-45, 54-55, 66-67 | C |
| 4.9 Procedures of the highest governance body for overseeing the organisation's identification and management of economic, environmental and social performance, and adherence or compliance with internationally agreed standards, codes of conduct, and principles. | 11 | C |
| 4.10 Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance. | No hay tales procedimientos en ASPAPEL | C |
| 4.11 Explanation of whether and how the precautionary approach or principle is addressed by the organisation. | 11 y 15 | C |
| 4.12 Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organisation subscribes or endorses. | (****) | C |
| 4.13 Memberships in associations and/or national/international advocacy in organisations in which the organisation participates | 11 | C |
| 4.14 List of stakeholder groups engaged by the organisation | 17 | C |
| 4.15 Basis for identification and selection of stakeholders with whom to engage | 17 y 67 | C |
| 4.16 Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group | 16-17 y 67 | C |
| 4.17 Key topics and concerns that have been raised through stakeholder engagement, and how the organisation has responded to those key topics and concerns through its reporting. | 16-17 | C |
| Management Approach | | |
| DMA EC - Economic | 12 | P |
| Economic performance | 12 | P |
| Market presence | 12 | P |
| Indirect economic impacts | 12 | N |
| DMA EN - environmental | 13 | P |
| Materials | 13 | C |
| Energy | 13 | P |
| Water | 13 | P |
| Biodiversity | 13 | P |
| Emissions, effluents and waste | 13 | P |
| Products and services | 13 | P |
| Compliance | 13 | N |
| Transport | 13 | C |
| Overall | 13 | N |
| DMA LA - Labour practices | 13 | P |
| Employment | 13 | P |
| Labour /management relations | 13 | P |
| Occupational health and safety | 13 | P |
| Training and education | 13 | P |
| Diversity and equal opportunity | 13 | N |
| DMA HR - Human Rights | 13 | P |
| Investment and procurement practices | 13 | N |
| Non-discrimination | 13 | N |
| Freedom of association and collective bargaining | 13 | C |
| Child labour | 13 | N |
| Forced and compulsory labour | 13 | N |
| Security practices | 13 | N |
| Indigenous rights | 13 | N |

(****) (****) Illegal logging code 20 y 28-29. Implementation of best paper and board manufacturing practices 67.

| Disclosure | | Page | * |
|---|--|-----------------------------|---|
| DMA SO - Society | | 13 | P |
| | Local community | 13 | C |
| | Corruption | 13 | N |
| | Public policy | 13 | C |
| | Anti-competitive behaviour | 13 | N |
| | Compliance | 13 | N |
| DMA PR - product responsibility | | 13 | P |
| | Customer health and safety | 13 | P |
| | Product and service labelling | 13 | N |
| | Marketing communications | 13 | N |
| | Customer privacy | 13 | N |
| | Compliance | 13 | N |
| Performance Indicators | | | |
| Economic performance | | | |
| | Main challenges for the pulp and paper industry | Throughout | |
| | Evolution of pulp and paper production | 59 | |
| EC1 | Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments | 59-61 | C |
| | Turnover in the sector | | |
| | Efficient manufacturing | | |
| EC6 | Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation | 20-23, 42 | C |
| | Sustainable and stable employment. | y 49-50 | |
| | Local wood suppliers. Locally recovered paper | | |
| Environmental Performance | | | |
| EN1 | Materials used by weight or volume | 60 | C |
| EN2 | Percentage of materials used that are recycled input materials | 37 | C |
| EN3 | Direct energy consumption by primary energy source | 33 | C |
| EN6 | Initiatives to provide energy-efficient or renewable energy-based products and services, and reductions in energy requirements as a result of these initiatives. | 34-35 y 44 | C |
| EN8 | Total water withdrawal by source | 38-39 | C |
| EN14 | Strategies, current actions, and future plans for managing impacts on biodiversity | 20, 26-27 | C |
| | Actions against illegal logging | y 28-29 | |
| | Forestry certification | | |
| EN16 | Total direct and indirect greenhouse gas emissions by weight | 36 | C |
| EN17 | Other relevant indirect greenhouse gas emissions by weight | 36 | C |
| EN20 | NOx, SO2, and other significant airborne emissions by type and weight | 36 | C |
| EN21 | Total water discharge by quality and destination | 38-40 | C |
| EN22 | Total weight of waste under management, by type and disposal method | 37 | C |
| EN26 | Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation | 33-41, 44-45, 48-55 y 65 | C |
| EN29 | Significant environmental impacts of transporting products and other goods and materials used for the organisation's operations, and transporting members of the workforce | 62 | C |
| Labour practices and decent work performance | | | |
| LA1 | Total workforce by employment type | 42 | C |
| LA4 | Percentage of employees covered by collective bargaining agreements | 42 | C |
| LA7 | Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region | 43 | C |
| LA8 | Education, training, counselling, prevention and risk control programmes in place to assist workforce members, their families, or community members regarding serious diseases | 42 | C |

| Disclosure | | Page | * |
|------------|--|-------|---|
| LA11 | Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings Human Rights performance | 42 | C |
| HR5 | Company operations identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk and actions taken to support these rights Society performance | 42 | C |
| SO1 | Nature, scope and effectiveness of practices implemented with local community engagement, impact assessments, and development programmes. | 33-41 | C |
| SO5 | Public policy positions and participation in public policy development and lobbying Product responsibility performance | 10 | C |
| PR1 | Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures. | 67 | C |

*C = information complete, P = information partially provided, N = no information available

Organization: ASOCIACIÓN ESPAÑOLA DE FABRICANTES DE PASTA, PAPEL Y CARTÓN

Sector: Others

Title of Report: MEMORIA DE SOSTENIBILIDAD SECTOR PAPEL 2011 [Pulp & Paper Sector Sustainability Report 2011]

Applied GRI Guidelines: G3

Declared application level: B(+)

Sectorial supplement used: N/A

| Report Application Level | C | C+ | B | B+ | A | A+ | |
|--------------------------|--|---|---|---|---|--|--|
| Standard Disclosures | G3 Profile Disclosures OUTPUT | Report on: 1.1 2.1 - 2.10 3.1 - 3.8, 3.10 - 3.12 4.1 - 4.4, 4.14 - 4.15 | Report on all criteria listed for Level C plus: 1.2 3.9, 3.13 4.5 - 4.13, 4.16 - 4.17 | Report on all criteria listed for Level C plus: 1.2 3.9, 3.13 4.5 - 4.13, 4.16 - 4.17 | Report on all criteria listed for Level C plus: 1.2 3.9, 3.13 4.5 - 4.13, 4.16 - 4.17 | Report on all criteria listed for Level C plus: 1.2 3.9, 3.13 4.5 - 4.13, 4.16 - 4.17 | Report on all criteria listed for Level C plus: 1.2 3.9, 3.13 4.5 - 4.13, 4.16 - 4.17 |
| | G3 Management Approach Disclosures OUTPUT | Not Required | Management Approach Disclosures for each Indicator Category | Management Approach Disclosures for each Indicator Category | Management Approach disclosed for each Indicator Category | Management Approach disclosed for each Indicator Category | Management Approach disclosed for each Indicator Category |
| | G3 Performance Indicators & Sector Supplement Performance Indicators OUTPUT | Report on a minimum of 10 Performance Indicators, including at least one from each of: social, economic, and environment. | Report on a minimum of 20 Performance Indicators, at least one from each of: economic, environment, human rights, labor, society, product responsibility. | Report on a minimum of 20 Performance Indicators, at least one from each of: economic, environment, human rights, labor, society, product responsibility. | Report on a minimum of 20 Performance Indicators, at least one from each of: economic, environment, human rights, labor, society, product responsibility. | Respond on each core G3 and Sector Supplement* indicator with due regard to the materiality Principle by either: a) reporting on the indicator or b) explaining the reason for its omission. | Respond on each core G3 and Sector Supplement* indicator with due regard to the materiality Principle by either: a) reporting on the indicator or b) explaining the reason for its omission. |
| | | Report Externally Assured | | Report Externally Assured | | Report Externally Assured | |



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SNIACE
Stora Enso Barcelona, S.A.
Torraspapel, S.A.
Unión Industrial Papelera, S.A. (UIPSA)

Edita:

ASPAPEL - Asociación Española de Fabricantes de Pasta, Papel y Cartón
Av. de Baviera, 15 - 28028 Madrid
Tel.: +34 91 57 63 003 - Fax: +34 91 577 47 10
aspapel@aspapel.es | www.aspapel.es

Para más información:

Carlos Reinoso, *Director General*
Armando García-Mendoza, *Secretario General*
Ángeles Álvarez, *Comunicación*

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REPORT

Asociación Española de Fabricantes de Pasta, Papel y Cartón

Av. Baviera, 15 - Bajo. | 28028 MADRID
Tel.: 91 576 30 03 | Fax: 91 577 47 10 | aspapel@aspapel.es | www.aspapel.es