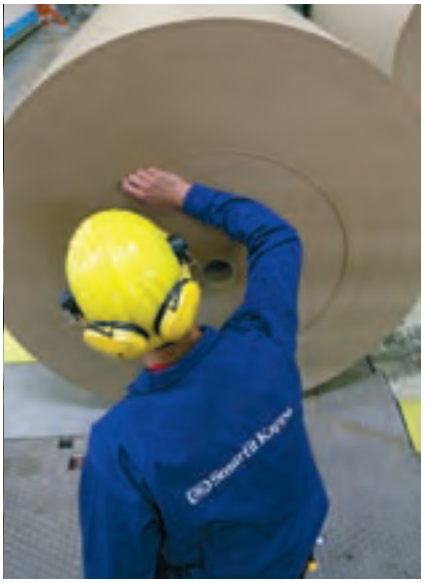
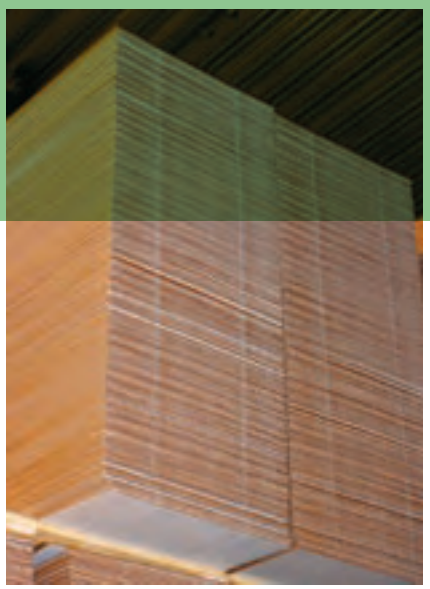




Smurfit Kappa Group plc

SUSTAINABLE DEVELOPMENT 2009

2009 HIGHLIGHTS

- Chain of Custody – certification (PEFC/FSC) finalised for kraftliner mills in Europe
- Certified Packaging – programme commenced to extend Chain of Custody certification to recycled paper mills and converting plants
- Investment in Renewable Energy – start of investment in biomass based energy plant for sack paper mill in Spain
- Combined Heat and Power – new turbo generator start-up in Cali, Colombia
- Energy reduction – programme to reduce energy consumption by more than 20% in solidboard mills in the Netherlands
- CO_2 reduction – Carbon Trust award to UK Corrugated highlighting efforts to decrease its carbon footprint
- Water - start up of the SSK water treatment plant in Birmingham, UK
- Social - "Health Brigades" bring improvements for local people in Venezuela

This report follows a similar structure to previous reports, beginning with a brief introduction by Gary McGann, the Group CEO, on page 3.

The first section of the report summarises our approach to Sustainability, achievements and future aspirations. The report is then divided into four parts relating to the Environment, Social Development, Business Development and concluding with an Information section including a glossary. In preparing this report every effort has been made to follow Global Reporting Initiative (GRI) guidelines.

Smurfit Kappa Group plc

PACKAGING EXPERTISE

SKG is involved in all aspects of the production and use of paper-based packaging. The product life cycle starts with virgin and recovered fibres being processed through the mills to become paper and board, which are delivered to box converting plants where corrugated and solidboard packaging is produced. Flat packaging is delivered to customers' packing and filling operations, where it is erected, filled and used to transport, protect and promote goods through the supply chain. The recycling process begins when the flattened used packaging is collected (mainly from retail outlets), sorted and then returned to the mills for reprocessing.

At every stage of this cycle SKG has the experience, expertise and passion for both success and sustainability.

LETTER FROM CEO

Introduction by Gary McGann

I am pleased to introduce the third annual Sustainable Development Report of Smurfit Kappa Group. I see this as being of significant importance alongside our recently issued Annual Report. In 2009, the business conditions faced by the Group were challenging. However, this in no way diminished the Group's resolve to press on with the improvements planned in the broad areas which we define as "Sustainability" and which are described in the pages which immediately follow. I would like to take the opportunity to emphasise four main points.

Clearly defined business area

SKG operates essentially in one business area only, that of paper-based packaging. We are proud to be in this business because we know it has made – and will continue to make – a real contribution to everyone's general way of life. It would be difficult to imagine a world without transport packaging, used to protect products from place of origin to place of consumption. Our business has a strong future so long as we have access to the essential resources we use and so long as we continue to professionally manage our business while taking care of employees and other stakeholders.

Supplying customers in every business area

While SKG is particularly focussed on one business area, the nature of that activity brings us into contact with virtually every other business involved in the manufacture or supply of products. Our packaging is used for the protection of fragile and valuable items as well as for massive bulk quantities. It is used to transport goods from continent to continent or for more local situations and as a critical part of the marketing of our customers' products to their end users.

We and our customers are determined to contribute to a more sustainable world and our mission is to increasingly progress this agenda, thus ensuring the delivery of sustainable cost effective packaging solutions. We do this by preventing waste caused by damaged products, by designing packaging which optimises material usage and by providing packaging which reduces the number of trips required to deliver products to market.

An Open Approach

Our determination is to be open and transparent and to have our progress appraised and evaluated by others. We are therefore very pleased to report that we have increased our Global Reporting Initiative (GRI) application level to B+. We also participate in the Carbon Disclosure initiative, and we give committed support to the Supplier Ethical Data Exchange (Sedex) and to the UN Global Compact Initiative. The independent assurance on our environmental performance indicators, introduced for the first time into this Sustainable Development Report, adds to the serious purpose of our endeavours.

We recognise that we still have some way to go to achieve full and open disclosure not just relating to environmental statistics but also to facts relating to social and economic topics. The issue is certainly not a question of a reluctance to be open and frank but a matter of ensuring that information is correctly collated and meaningfully expressed for consistency and continuity.

Our Main Challenge

Our key risks and challenges are clearly expressed on pages 9 to 11 and act as the menu for our future focus and actions.

While all of the points made are important, one particular factor stands out above all others.

We believe that the most fundamental, overriding requirement for a sustainable future for SKG is that legislators, at both national and international level, continue to create the environment for businesses in our industry and other similar industries to prosper. Access, at affordable and competitive costs, to recovered paper and wood fibres and the availability, without distortive taxes or subsidies, of energy and water will be key for our industry's future.

We will be working hard during 2010 to ensure that our points of view are properly taken into account by legislators and by those who influence them so that we can continue to have the means to satisfy all key constituents in a sustainable manner.

Gary McGann
Group Chief Executive Officer

June 2010

In August 2009 the SKG Board meeting was held at the Zülpich mIll in Germany where the board of directors was able to view the construction of the new multi-fuel boiler.

CORPORATE GOVERNANCE STATEMENT

The Directors are committed to maintaining the highest standards of corporate governance and this statement describes in summary the Group's governance at Board level. The full Corporate Governance Report is set out in the 2009 Annual Report.

Board of Directors

The Board is primarily responsible for setting the Group's strategic aims, for the leadership and control of the Company and for reviewing the Group's system of internal control. There is a clear division of responsibilities within the Group between the Board and executive management, with the Board retaining control of strategic and other major decisions under a formal schedule of matters reserved to it.

Sustainability Governance

Sustainable development is a core issue in all facets of SKG's operations and activities. The Board has overall responsibility for ensuring that the Group plays an appropriate role in promoting a realistically sustainable development agenda in the paper-based packaging sector. The development and implementation of SKG's policies in this area are sponsored by the Group CEO.

At executive management level, a Group Steering Committee sets out the strategy and objectives for sustainable development in SKG and reviews the progress made in meeting our commitments. This committee comprises the three executive directors (Group CEO, Group COO and Group CFO) and top management from each region and Group headquarters.

The Group Steering Committee is supported by a Sustainability Working Group comprising key representatives from each of the main operating divisions in Europe and Latin America as well as Group headquarters. This Group's task is to monitor the achievement of targets across a wide range of sustainability indicators and to promote the theme of sustainable development in SKG's interface with customers, suppliers and the general environment. The Working Group is also responsible for the preparation and production of the annual Sustainable Development Report.

In order to reinforce the importance of sustainable development in SKG at management level, from 2010 onward 5% of the potential award from the annual management incentive plan will be based solely on the achievement of agreed targets in the area of environmental sustainability.

Membership of the Board

At present there are 13 Directors on the Smurfit Kappa Group plc Board, comprising: a non-executive Chairman, three executive Directors and nine non-executive Directors. More detail on the composition of the Board and biographical details of the Directors are set out in the 2009 Annual Report.

Chairman

The Chairman of the Board is independent and he is responsible for the leadership and efficient and effective working of the Board. He sets and manages the Board agenda to ensure that it addresses and carries out its stated objectives.

Group COO visiting Cerro Gordo plant in Mexico. From left to right: Alejandro Nolasco, Jorge Caraballo, José Luis Reynoso, Tony Smurfit, Braulio Arévalo and Juan Michelsen.

Senior Independent Director

The duties of the Senior Independent Director's include being available to shareholders if they have concerns which cannot be resolved through the Chairman or Group CEO.

Group Secretary

The Directors have access to the advice and services of the Group Secretary who is responsible to the Board for ensuring that Board procedures are followed and applicable rules and regulations are complied with. The Directors also have access to independent professional advice, at the Group's expense, if and when required.

Meetings

The Board met eight times in 2009 and details of the meetings held during the period, both of the Board and of the Board Committees, are contained in the 2009 Annual Report which also includes information on individual attendance. The Board holds at least one of its meetings each year at a major operating site to give the Directors an opportunity to meet with management and see the Group's operating activities. In 2009 the August Board meeting was held at the Zülpich mill in Germany.

Induction and Development

On appointment, all non-executive Directors receive comprehensive briefing documents on the Group and its operations. During the year Directors meet with senior management, both at Board meetings and on individual site visits.

Board Committees

The Board has established three Committees to assist in the execution of specific matters within its area of responsibility. These are the Audit Committee, the Compensation Committee and the Nominations Committee. More details on the current membership and the roles & responsibilities of these Committees can be found in the 2009 Annual Report.

Codes of Conduct

SKG has a series of codes of conduct covering a number of areas related to its management and operations. These are based upon the following international treaties and conventions:

1. ILO Declaration on Fundamental Principles and Rights at Work (core conventions)
2. UN Declaration on Fundamental Human Rights
3. OECD Guidelines for Multinational Enterprises.

The Group provides the foundation for key components of internal control by ensuring appropriate discipline and structure through a number of policies and programmes which serve to define acceptable business practices, resolution of conflicts of interest and the expected standards of ethical behaviour. We have also created specific policy statements in key areas of sustainability and they are integral in the drive to improve SKG's performance. These policy statements cover Environment, Sustainable Forestry, Social Citizenship and Health & Safety issues.

All of these codes and policies are available on our website www.smurfitkappa.com.

PAPER PACKAGING RECYCLING

Efficient packaging solutions contribute significantly to the sustainability of the total supply chain. The most obvious benefit of effective packaging is that it facilitates the transportation of goods safely thereby preventing damage to products.

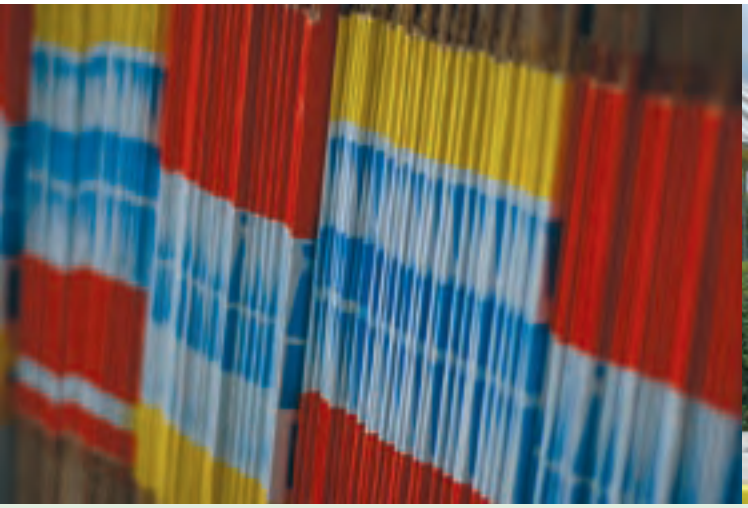
The recycling rate of paper and board packaging within the EU 27 member states for 2007, which is the latest year for which official EU statistics are available, was 77%, up from 75% in 2006. This compares very favourably to other packaging materials such as metal (67%), glass (64%) and plastic (28%). [DG environment: "Rates of packaging recycling and recovery in the Member States of the EU".]

For SKG's manufacturing operations in Europe, 74% of our fibre raw materials came from recycled fibres in 2009.

In Latin America, the rate of recycled fibres in all our raw materials was 70% for 2009 and, while official industry figures are not currently available, our recycling rate is considered to be materially better than the industry average for that region (approximately 48%).

Paper packaging is the most environmentally friendly form of packaging as the industry's raw material comes from renewable sources and the end product is recycled many times. In SKG we recover almost 5 million tonnes of used paper each year. Of this figure, 4 million tonnes are in Europe and most of this is collected within our own recovery system which makes us the clear industry leader in paper recycling. A very large proportion of our Latin American needs is also collected within our own system.

.



Visit by Group Chairman and CEO to the Guanajuato facility in Mexico in August 2009. Left to right: Alvaro Henao, Sergio Martínez, Juan Michelsen, Roberto Silva, Luis Mercader, Liam O´Mahony, Javier Morgan, Pablo Pérez, Gary McGann, Jorge Zuckerman, Francisco Palomares, Mario Garza.

SCOPE OF THE REPORT

The measures described in this report cover the total activities of the Smurfit Kappa Group in Europe and Latin America during the calendar year 2009.

SKG fully recognises that sustainable development embraces social and business subjects as well as environmental topics. SKG collected data from all its manufacturing operations that were functioning at end of 2009. SKG does not have any joint ventures.

When quantified performance or targets are mentioned in this report, they are reated to the production levels. Other data are reported in absolute figures.

Among the various sources used for the development and identification of baseline data included in this report are the G3 Sustainability Reporting Guidelines issued by the Global Reporting Initiative (GRI), an independent institution whose mission is to provide a trusted and credible framework for sustainability reporting.

For 2009, SKG applied the GRI at a "B+" application level.

Every effort has been made to provide as accurate data as possible. From 2008, data relating to environmental matters have been gathered using an IT based reporting system developed and implemented throughout the Group's operations for both Europe and Latin America. Due to the use of more precise calculation methods, in 2009, for biogenic energy and biogenic CO_2 emissions, 2008 data have been restated to show the correct trend over the last three years in the graphs presented on page 20.

This tool is integrated into the Group's Intranet, enabling sites to report their environmental and economic data online according to the GRI guidelines. As the information is stored centrally, this allows for easier and faster processing. During 2009, significant efforts have been made to refine this tool, in order to make it easier for the individual operations to use. Further enhancements made it possible to design monitoring protocols (test methods, frequency of sampling, collation and aggregation), thereby ensuring the continued consistency of data, for both European and Latin American operations.

For the most part, data is based on measured or metered quantities, or on best estimates based on industry knowledge and established calculation factors. CO_2 emission calculations have been based on established fuel consumption and air activity emission criteria. Definitions and calculations for the performance indicators can be found in the glossary on pages 67 to 72.

This year, for the first time, we involved an external assurance provider, whom we commissioned to provide limited assurance on a selected number of environmental parameters that are important to our business. The assurance report of KPMG can be found on pages 65 and 66.

SUSTAINABLE DEVELOPMENT
A SUMMARY

Our Commitment

Sustainability implies a clear commitment to building a sound future on three strong foundations:

- Environment
- Social development
- Economic progress, which for SKG mainly means business development.

SKG regards sustainability as an integral part of its business strategy. Sustainability is concerned with ensuring that the human and natural environment within which SKG operates is protected both today and into the future as the Group continues to use a wide range of such resources in meeting its business objectives.

1) Environment

SKG is committed to:

- Complying (as a minimum) with national and international environmental legislation and seeking to achieve best practice through the promotion of continuous improvement programmes
- Developing appropriate environmental management systems
- Continuing to use natural resources as efficiently as possible
- Meeting all reasonable expectations of stakeholders concerning environmental performance.

2) Society

SKG is committed to:

- Ensuring that all employees work in a healthy and safe environment and that local legislation remains the minimum acceptable standard with best international practice as the goal for all operations
- Applying the principle of equal employment opportunity
- Managing our business in an ethical and equitable manner and meeting our social responsibilities
- Ensuring that employees and suppliers are aware of the company policy on social responsibility
- Meeting our commitment to protect and advance human rights, particularly those of the indigenous communities where we have operations
- Promoting and enhancing strong relationships with the communities within which our businesses have the privilege to operate.

3) Business

SKG is committed to:

- Ensuring the expectations of shareholders and other stakeholders are met with regard to profitable, sustainable long term business development in the changing local and global economies
- Demonstrating leadership to customers and other stakeholders, as the biggest global business in the field of paper-based packaging, when it comes to developing more sustainable packaging solutions.

Municipality of Quinchía, Risaralda, Colombia. Smurfit Kappa Cartón de Colombia has extensive forestry operations in the state of Risaralda in the central Andes. In this area, our social programme supports families by helping local women become involved in the production and selling of flowers which provides valuable supplementary household income.

- Working closely with customers and others to provide packaging with high credentials regarding sustainability, taking account of factors such as packaging optimisation, recyclability and chain of custody
- Supporting suppliers, customers and other players in the Supply Chain on their own sustainability development projects
- Providing packaging solutions which make a positive contribution to sustainability, especially by minimising customers' product wastage and by reducing their distribution and transportation requirements.

Governance

When dealing with the environmental, social and business aspects of the Group's sustainability programmes, SKG is committed to:

- Ensuring compliance with all statutory, regulatory and legal requirements
- Maintaining codes of conduct that support our core values of integrity, responsibility and respect, when managing our business activities in all locations.

Whenever it is practical and economically feasible, SKG is committed to going further than complying with legal requirements. SKG recognises that factors such as ethical behaviour, transparency in governance standards, identification of risks and stakeholder engagement are fundamental for the sustainable success of the company. We seek to maintain and improve the recognition of SKG as a responsible company by all our stakeholders and by the community at large and as a progressive company for current and future employees.

Key Risks and Challenges

The key challenges and risks that face SKG and the paper packaging industry as a whole are:

1) Fibre Availability

This is the most basic necessity for our future business.

Wood and recovered papers are the fundamental raw materials which provide fibre for paper making. Sustainable forestry and paper recovery systems are of paramount importance for a company such as SKG.

Therefore, SKG is acutely concerned with the effect on the availability of its primary raw materials of the EU legislation targeting that, by 2020, 20% of all energy should be from renewable sources such as wood and/or recovered paper. Financial support for wood as a renewable fuel feedstock is of particular concern, as this drives up prices for our raw materials and puts the paper and the paper packaging industry at a clear competitive disadvantage both globally and in comparison with alternative packaging materials. Given the Group's limited ownership of forests, particularly in Europe, we see this challenge as significant for our industry and a totally inappropriate primary use of wood. SKG therefore welcomes - as a first step - the mandatory detailed National Renewable Action Plans at EU Member State level, which require the monitoring of changes in the competitiveness of wood using industries such as ours.

Nettingsdorfer paper mill, near Linz, Austria.

SUSTAINABLE DEVELOPMENT – A SUMMARY (CONTINUED)

SKG also strongly advocates the concept of a resource hierarchy giving priority to higher value added applications such as paper making over lower value added applications such as thermal use. This is particularly the case when a reordering of a sequential use of this scarce resource will still fully achieve the renewability objectives.

Another reason for keeping to this hierarchy is the fact that the European paper industry is already the single largest user and producer of bio-energy, with further untapped potential. It should prove possible to extract even more benefits from wood fibres through the further development of integrated bio-refinery technologies.

SKG's risk concerning fibre availability is mitigated y our position in the supply chain, ownership of forestry in Latin America and the relationships we have developed and will continue to develop with key suppliers of wood.

Growth of global recovered paper consumption is high, predominantly led by China continuing its strong economic growth. Demand will rise at an even faster pace than supply, due to further investment in recycled-based paper and board capacity in the developing world and by a modest increase in the usage rate of recovered paper in the developed world. Long-term prices of recovered paper are on an upward trend and rising energy costs are also creating pressure for further recovered paper price increases.

2) Energy

Although energy usage in the paper packaging industry was down in 2009 compared to 2008, our industry remains energy intensive. We fully support the need for (fossil) CO_2 emission reduction. The continued absence of a solid international agreement on CO_2 emissions, however, makes it even more essential that the post 2012 Emission Trading System (ETS) should function correctly and that key issues are dealt with properly. The European paper industry needs a recognised status as a 'carbon leakage' industry in order to remain competitive. Putting the appropriate benchmarks in place for specific paper and board grades will be a key factor.

In 2009 SKG's costs for energy were approximately €450 million which equates to 7.5% of our total costs. We are focusing our efforts to reduce specific types of energy usage and also aim to reduce greenhouse gas emissions by investing in more energy efficient systems such as Combined Heat and Power (CHP) plants, alternative energy options such as biomass, and by driving production efficiencies. By continuing to address this issue, our use of renewable energy has now risen to 48% in our total European mill system and to 25% in our Latin American mill system, which represent improvements in both regions over the last three years.

3) Water

Global pressure on freshwater resources is increasing. As our business is dependent on this natural resource, water is high on our business agenda. Sufficient availability of good quality water at an affordable cost is key for an industry like ours. In general we support the recent initiatives to develop "water footprints". These footprints will provide transparency for water usage, especially needed in those places where availability of freshwater is already or is becoming an issue.

The paper industry is seen as a very water intensive industry. In reality, however, it is predominantly processing rather than consuming significant volumes of water, returning most of its intake in a very clean condition to the environment. Indeed by making significant investments in water treatment plants, the paper industry is contributing to the good quality of water discharged. During 2009 SKG invested in five water treatment plants.

SKG will continue to identify the means by which we can further reduce both water usage and discharges to water, through improved efficiency and by commercial investment.

4) Food Contact and Food Safety

The challenge our industry faces on food safety involves the fact that we endeavour to repeatedly recycle our paper materials as much as we can.

As our raw material is mostly post consumer recovered paper there are traces of additives such as ink, starch and other chemicals in the recycled product. Our industry, therefore, has to go to great lengths to ensure that these substances will not be detrimental to packaged goods and, more specifically, what they comply with the European Regulation on materials that come into contact with food.

EU legislation has not yet developed specific measures for paper and board materials. The European paper industry has therefore recently developed Industry Guidelines that establish suitability rules for paper and board in food contact applications. These guidelines should ensure that food can be safely packed in our products and our responsibility is to constantly monitor the qualities of our raw materials and to make sure we adjust our processes if needed.

SKG contributed to the drawing up and implementation of the Industry Guidelines and has an internal team that purely focuses on food contact and food safety.

Achievements 2009

In our 2008 Report we published a roadmap which identified commitments to be reached over the coming years. The information which now follows measures our performance against the commitments made in relation to 2009.

OUR PERFORMANCE IN 2009

In our 2008 Sustainable Development Report we published a roadmap which identified commitments to be reached over the coming years. The information which now follows measures our performance against the 2009 commitments.

ACHIEVED

PARTIALLY ACHIEVED

NOT ACHIEVED

All abbreviations can be found in the glossary on pages 67 to 72.

	KEY AREA
CORPORATE GOVERNANCE	Code of Business Conduct
	Social Citizenship
	Employee Development
	Community
HEALTH & SAFETY	Policy
	Continuous improvement
ENVIRONMENT	Policy SKG
	EMS Europe
	EMS LA
	CoC Europe
	CoC LA
	Pulp Purchase
	Third Party Paper Suppliers Europe
	Third Party Paper Suppliers LA
	Energy Europe
	Energy LA
	Water Discharges Europe
	Water Discharges LA
	Hazardous Chemicals Europe
	Hazardous Chemicals LA
	AIR Emission Europe
	AIR Emission LA
OTHER STAKEHOLDER DIALOGUE	Suppliers
	Customers
	Social Responsibility Investment Ratings
	GRI Reporting Guidelines

COMMITMENT 2009	RESULT	
Review and refine where appropriate. Maintain best practice.	We maintained implementation of this Code in all our operations.	
Continue to work together with employees and communities to ensure SKG remains an employer of choice and a highly respected neighbour. This is delegated locally.	For details see page 29 to 39	
Ensure Group has a highly trained and motivated workforce. Ongoing cross-training. Career development opportunities and promotion.	For details see page 29 to 30	
Continually encourage and promote.	For details see page 36 to 39	
Ensure full adherence and refine as appropriate.	We maintained implementation of the policy in all our operations.	
Continue to improve on previous year's performance by an annual 10% (severity and frequency).	We decreased our frequency rate by 9.8% and our severity by 12.1%.	
Action to ensure policies are understood and implemented in all operations. Review and refine as necessary. Specific actions follow below.	Meetings with various management levels to ensure policies are understood and implemented.	
The three remaining mills not yet ISO 14001 will be certified by end of 2009. Maintain 100% certification.	From June 2009 all mills (containerboard mills and solidboard mills) ISO 14001 certified.	
Five paper mills to be certified ISO 14001 by end of 2010. Set target completion dates for the remaining six mills.	Environment Management System certification programme has progressed in 2009 according to the timetable fixed. In December 2009 our three Colombian mills (Cali, Barranquilla & Papelsa) have successfully passed their ISO 14001 audits. Target for remaining six mills has not been set.	
Maintain CoC certification.	From January 2009 all our virgin mills are CoC certified under FSC or PEFC.	
Extend FSC CoC certification to all remaining mill products in Colombia (kraft and testliners) by end of 2010. The process on CoC certification in Venezuela is currently on hold.	Colombian target achieved in Oct 2009 – one year ahead of the planning. The process on CoC certification in Venezuela is currently on hold.	
Action to ensure that policies are adopted by all purchasing departments by end 2009. Review annually through periodic internal audits.	Pulp is purchased exclusively from pulpmills certified Chain of Custody under FSC or PEFC schemes or other equivalent schemes - review done regularly through environmental questionnaire (twice a year in 2009).	
In Europe, ensure 90% compliance by end of 2009. In 2009 also agree target date to achieve 100% compliance.	We achieved over 90% of compliance with regard to our Sustainable Forestry Policy. We changed the focus for compliance to our strategic suppliers.	
Latin America will commence in 2010.	Process due to start in 2010.	
Continue investment to increase CHP ratios and improve specific energy consumption with the target to increase our own rate of CHP by 5% in 2010. Agree annual targets. No targets set for 2009/10 until investment benefits start to flow through. Continue external mill audits currently ongoing to assess efficiency of energy consumption.	Investment in new boiler in Zülpich (Germany) in progress. Decision to invest in new biomass boiler in Nervión (Spain). Audits have been carried out in four additional mills (for details see page 21). The rate of co-generation of electricity increased by 7% compared to 2008.	
Options for biofuel usage increase being assessed. Based on capital expenditure, current possibilities limited to Cali. Rate to increase from 24% at present to 27% by 2010 within our mill system.	We made progress in 2009 to reach the target we set for 2010. The rate of biofuel usage reached 25% at end of 2009.	
€15m investment programme underway covering five Water Treatment Plants (WTP). Achieve 25% reduction in COD discharge by 2010 over 2005.	Investment carried out as planned, four WTPs commissioned before end of 2009, fifth to be commissioned summer 2010.	
Target 2% reduction in each of the next five years on COD, BOD and TSS.	Target improvement was exceeded for COD (-6.5%) whereas BOD and TSS discharges increased by 1.8% compared to last year.	
Accelerate the replacement of hazardous chemicals where technically possible with a view to elimination of all within a five year time frame.	Minimisation of use of hazardous chemicals is now common practice in our operations.	
Commence in 2009 inventory of all chemicals to identify target list for replacement.	Paper mills have made an inventory of hazardous chemicals based on local and national legislation.	
A technical database of all European mill boilers now in place to measure efficiency. By 2010 all air emission monitoring will comply with EU/IPPC regulations due for implementation by 2014.	In progress.	
Monitoring system to be defined by end 2009. Implementation to be achieved by the end of 2010.	Monitoring system defined for paper mills, implementation to be started in 2010.	
Policy statement to be finalised. Implement policy and continually assess.	Group Sustainable Sourcing Policy has been finalised early 2010.	
Agree with customers on key priorities, Key Performance Indicators and agree time frame regarding development of sustainable packaging solutions.	With some key customers we agreed our Key Priorities, Strategic Initiatives and Sustainability Targets.	
Commence engagement and promote in 2009.	Under review.	
Continue to adopt ongoing changes.	Progress to level B+ for the 2009 report including limited external assurance.	

ROADMAP

The targets set out in this section for 2010/2011 are an extension of the commitments we gave in the two last years. We address here those that are current.

KEY AREA
CORPORATE GOVERNANCE
Code of Business Conduct
Social Citizenship
Employee Development
Community
HEALTH & SAFETY
Policy
Continuous improvement
ENVIRONMENT
Policy SKG
EMS EUROPE
EMS LA
CoC Europe
CoC LA
Pulp Purchase
Third Party Paper Suppliers Europe
Third Party Paper Suppliers LA
Energy Europe
Energy LA
Water Discharges Europe
Water Discharges LA
Hazardous Chemicals Europe
Hazardous Chemicals LA
AIR Emission Europe
AIR Emission LA
OTHER STAKEHOLDER DIALOGUE
Suppliers
Customers
Social Responsibility Investment Ratings
GRI Reporting Guidelines

	STATUS END OF 2009	COMMITMENT 2010/2011 AND LONGER TERM
	Implemented for many years.	Review where appropriate and maintain.
	Policy statement in place.	Continue to apply in all operations worldwide. This is delegated locally.
	Programmes in place to help educate, train and promote employee opportunities.	Continue.
	Ongoing involvement appropriate to local needs in all countries.	Continually encourage.
	In place.	Ensure full adherence.
	Regular new actions or surveys undertaken to improve work safety and work environment.	Continue to improve on previous year's performance by an annual 10%.
	SKG policies on Environment and Sustainable Forestry in place.	Action to ensure policies are understood and implemented in all operations. Review and refine as necessary.
	All European mills operate under an Environmental Management System (EMS).	Maintain the certification.
	Three paper mills out of the eleven mills of Latin America have been certified ISO 14001 in 2009.	Two additional mills to be certified EMS by end of 2010.
	All operations handling wood (paper mills, plywood, wood suppliers) are Chain of Custody certified under FSC or PEFC. 40% of the recycled mills (paper & board mills) are Chain of Custody certified under FSC. Part of our converting units: corrugated, carton packaging, solidboard packaging are certified Chain of Custody FCS and PEFC.	Achieve 100% of our recycled mills (paper and board mills) certified by 2010. Continue our programme of CoC certification of the converting units to match customer demand.
	Colombian operations (paper mills & converting units) are operating under CoC FSC certification.	Continue to maintain CoC certification in Colombia.
	Policy on pulp purchase is in place (part of the Sustainable Forestry Policy) in both regions (Europe & LA).	Continue and monitor.
	SKG sourcing policy for all suppliers is now finalised. Compliance assessment is currently being carried out.	Communication and commitment process continued to ensure compliance by strategic suppliers by end of 2010.
	SKG sourcing policy for all suppliers is now finalised.	Communication and commitment process will commence in 2010. Ensure 60% compliance by end of 2010.
	Investments to increase CHP ratios and improve specific energy consumption are ongoing. External mill audits to assess efficiency of electricity consumption have been carried out in majority of mills.	Commissioning new boiler in Zülpich and start up of the Dalkia biomass boiler in Cellulose du Pin in 2010. Re-commissioning of CHP (from a closed mill) to our solidboard mill in Nieuweschans by 2010.
	Rate of biofuel usage in LA mill system has increased in 2009.	Rate of biofuel usage in our mill system to increase to 27% by 2010.
	€15m investment programme to upgrade five Water Treatment Plants (WTP) has been completed at end of 2009.	The second upgrade phase of the fifth WTP is due to start mid 2010. Achieve 25% reduction in COD discharge by 2010 over 2005.
	In 2009, COD discharges decreased by 6.5%, while TSS and BOD increased slightly by 1.8%.	Target 2% reduction in each of the next four years on COD, BOD and TSS.
	Minimisation of use of hazardous chemicals is now common practice in our operations.	Continue to maintain best practices.
	Inventory of all chemicals is now in place at all LA operations.	Start assessment to minimise usage of hazardous to environment chemicals each time it is technically possible.
	A technical database of all European mill boilers now in place.	Air emission monitoring of our European mill boilers will comply with new EU/IPPC regulations by 2010. By law, compliance has to be achieved by 2014.
	Monitoring system for air emissions has been defined for mills.	Implementation of the monitoring system will start – 70% to be achieved by 2010.
	Policy statement is finalised. Communication and compliance process started.	Continuous implementation and assessment to achieve compliance among strategic suppliers.
	With some key customers we agreed our Key Priorities, Strategic Initiatives and Sustainability Targets.	Continue agreements with customers on Sustainable Packaging Strategies. Include Sustainability Metrics in our Customer Support Tools.
	Commence engagement.	Participate when appropriate in ratings and other relevant initiatives.
	Progress to level B for the 2009 report including limited external assurance.	Continue to report as previous years and increase our transparency.

ENVIRONMENT

This section of our report deals with matters relating to environmental subjects. It is organised into four sections:

- Sustainable Forestry
- Efficient use of energy
- Cleaner Air
- Purer Water.

SKG would like to record that throughout its operations in Europe and Latin America the Group received no significant fine nor suffered any other sanction regarding environmental matters. This reflects our determination to at least meet legislative requirements and to exceed such standards whenever possible.

1 Sustainable Forestry

IN SUPPORT OF ACTION AGAINST CLIMATE CHANGE

Policy Statement

SKG recognises its responsibility for ensuring sustainability with regard to the sourcing of wood and virgin fibre from third parties or timber harvested from its owned forest lands, for the purposes of converting it into appropriate value added products.

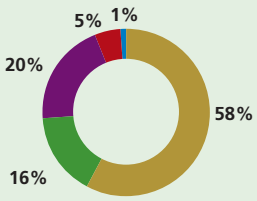
Whether SKG owns, leases or manages areas of forest, we:

- as a minimum, adhere to all relevant national laws and international treaties
- seek to achieve accreditation by a recognised forest certification scheme at the earliest possible date
- pursue the protection of natural forests, so as to ensure conservation and sustainable use of their biodiversity and as far as possible contribute to watershed and habitat protection
- contribute to the development of a forestry culture by means of an open information exchange with interested parties. We also promote meaningful relationships with Government, local communities, NGOs and other relevant stakeholders
- allocate resources to sustainable forest management, including education and training in forest research and natural ecosystems.

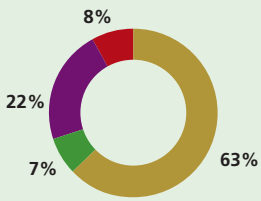
For timber and pulp purchases from third parties we:

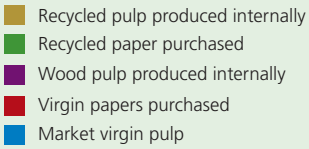
- ensure that all wood suppliers are legally compliant and preferably certified to FSC or PEFC or a credible alternative standard. We further request all wood suppliers to guarantee that their wood originates from non-controversial sources.

Fibre origins 2009
European operations



Fibre origins 2009
Latin American operations





- ensure that all our European mills using wood as a raw material are certified with Chain-of-Custody (CoC) certification, either through FSC or PEFC. In Latin America, two thirds of our wood based paper production is FSC certified
- purchase or produce bleached pulp that is either elemental chlorine free or total chlorine free
- purchase pulp only from mills that have CoC certification from FSC or PEFC or a credible alternative certification scheme.

For other forest based products purchased by SKG we require that all our suppliers meet the commitments expressed above for wood or fibre.

We have implemented appropriate communication, training and auditing procedures to ensure that all SKG operations meet the requirements outlined in this policy statement.

SKG's involvement in forestry

Our products are manufactured from virgin fibres and/or recycled fibres. The charts above show per region the type of fibres produced by our pulp, paper and board mills and also the papers externally sourced for our converting operations.

SKG owns forests in Colombia and Venezuela, where we have over 95,000 hectares and we manage a further 6,500 hectares. These plantations provide the mills in both countries with almost all of their virgin fibre requirements. During 2009 the total amount of virgin pulp that we processed in Colombia and Venezuela (both market and wood) was over 260,000 tonnes.

The forest plantations in Colombia have been FSC certified since 2003. In March 2009 our plantations successfully renewed their FSC Chain of Custody certification.

During 2009, we have worked hard to extend the FSC Chain of Custody certification to all our operations in Colombia for all our products (pulp, all grades of paper and board and all types of packaging). In October 2009, Smurfit Kappa Cartón de Colombia and all its subsidiaries were granted this certification.

The forest plantations in Venezuela have not yet been certified but are well advanced in terms of best practice and will seek certifications as local circumstances permit.

The main species harvested are varieties of Eucalyptus and the ones most commonly used by SKG in Colombia and Venezuela are *grandis* and *urograndis*. The Eucalyptus plantations act as effective water regulators through the filtration and gradual release of water into streams and rivers, thus helping to avoid soil erosion and localised flooding. As a tree that grows very rapidly, Eucalyptus is also an efficient purifier of air. As with all trees, the plantations act as efficient carbon sinks whereby the trees absorb carbon dioxide (thus "fixing" the carbon in their wood) and release oxygen.

Colombia has the largest concentration of the Group's forest ownership, 69,000 hectares. The company manages its forest estate based on sustainable development principles, promoting economic growth, a responsible use of natural resources and fostering social equity in the regions where forest plantations are located.

In Venezuela, the Forestry Division owns 35,000 hectares in three western states of the country. Of this total, 19,000 hectares are commercial plantations, 13,000 hectares are natural reserves and the balance is given over to infrastructure (roads, facilities and nurseries).

Commercial plantations include over 12,000 hectares of short fibre (Eucalyptus mainly) while 6,400 hectares are long fibre *(Pinus caribaea)*. The balance is used for research and development such as silviculture, plantation management, forest protection and forestry research.

During the plantation life cycle, SKG conforms to the numerous governmental legal, technical and environmental regulations, for which, in most cases, annual renewals are required.

In Europe, SKG neither owns nor leases forests. We act as forestry 'managers' with our forestry co-operation partners in France and Spain.

In 2009 SKG processed 1.4 million tonnes of virgin pulp in Europe, either from wood or market pulp.

Certification schemes

SKG recognises and utilises the two major international forest certification schemes, FSC and PEFC.

A credible forest certification for our suppliers provides assurance to us and to our customers that the wood and fibres we source externally originates from sustainable forests and are legitimately sourced.

All our operations handling wood in Europe are Chain of Custody certified by FSC or PEFC. These include all our mills where virgin fibres are produced, together with our plywood plant in France and the two wood supply companies of the Group in France and Spain.

Certification ensures that, both for our operations and for external suppliers, assessments are performed regularly by an independent accredited organisation.

The lack of availability of certified wood in some countries where we purchase wood (mainly Sweden and Spain) lead us to restrict the volume of end product that may be labelled as certified.

While 100% of our virgin paper capacity in Europe was Chain of Custody certified in 2009, we can certify only 57% of our paper production.

The statistics from Confederation of European Paper Industries (CEPI) show that in 2008, 76% of virgin paper, tissue and board production capacity at European mills is Chain of Custody certified by PEFC or FSC, but only 13% of paper, tissue and board is sold as being certified.

Status of the SKG mills system and SKG papers and board in Europe regarding fibre certification at end of 2009*:

- Virgin fibre paper mill capacity certified: 100%
- Virgin paper production certified: 57%
- Recycled containerboard production certified: 15%
- Uncoated solidboard production certified: 100%

** Within KPMG assurance scope. The assurance report can be found on pages 65 and 66.*

Our customers increasingly require us to supply them with certified packaging. Early in 2009 we started to certify Chain of Custody at a number of our converting plants. This effort was initiated in the UK where demand for certified packaging is strongest. In order to be flexible and to take into account the total European situation we seek dual certification (PEFC and FSC) of our plants.

Currently we are in the process of certifying all our European recycled containerboard mills. This will allow us to certify significant volumes of packaging as FSC or PEFC certified. This is a commitment in our Sustainability Roadmap for 2010.

In 2009 we achieved full CoC FSC certification of our recycled mill system in the UK, which represents 15% of our recycled containerboard production in Europe. In our Roadmap, we have committed to increase this to 100% in 2010. 100% of our European uncoated solidboard production is also FSC recycled certified.

Biodiversity

As all our forest ownership is located in Latin America, these comments are concentrated on that region.

In Colombia, the Forestry Division, in cooperation with the National Centre for Coffee Research (CENICAFE) and more recently with the Forestry Engineering School of Universidad Nacional de Colombia in Medellin, has continued its research work to determine the water consumption of *Eucalyptus grandis*, which is one of the main sources of short fibre for our Colombian Mills.

In addition to the water usage project, the forestry R&D group and the CENICAFE plant physiology team are now working on the potential carbon sequestration capabilities of the pine and eucalyptus species planted by Smurfit Kappa Cartón de Colombia.

In Colombia 21,000 hectares of the total forest area of 69,000 hectares are natural forest, while in Venezuela the balance is 13,000 hectares of natural forest, of the 35,000 hectares owned by the Group.

Natural forests located on our lands are protected and not replaced by plantations, thus maintaining biodiversity, preserving watersheds and helping to conserve natural habitats.

SKG fully recognises both the rights and the responsibilities which come with being members of the community, as established by Colombian legislation. We participate and cooperate with the progress and improvement in the quality of life of the communities established in the areas where we manage our forests. This acts as a complement to the responsibilities of the Government.

At the Claridad farm, located in the Cauca region of Colombia, a seed orchard has been established using the best clones from the genetic improvement programme, involving hybrid crosses between diverse tree species.

These combine the optimum features of the species in relation to growth, disease resistance and quality of fibre.

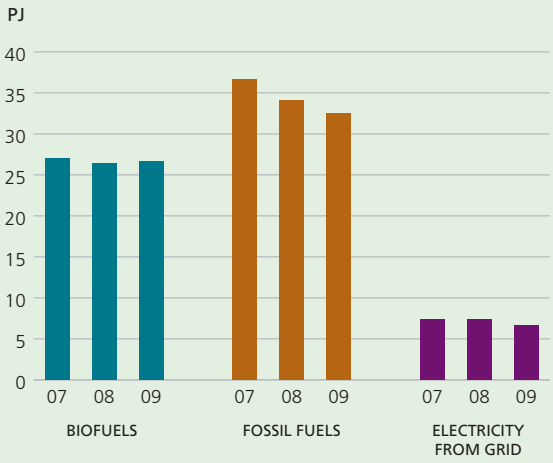
Included amongst the principles of the company's forestry policy in Latin America are:

- the development of a continuous and systematic research programme to preserve and enhance soil productivity
- identifying appropriate species and forestry systems that will enable the increase of plantation yields with environmental protection
- the preservation of natural forests located on company lands, so as to ensure the sustainability of forest diversity and thereby contribute to the protection of water sources and the habitat of flora and fauna.

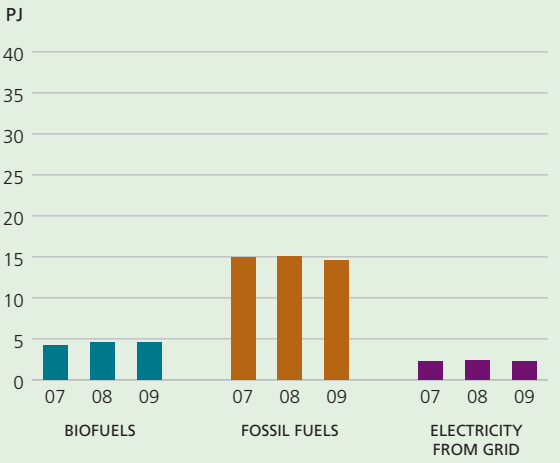
SKG has also participated in the studies carried out by the Forestry Engineering School concerning a micro river basin with pastures, native forest regeneration and eucalyptus plantations on former grassland. The study measures the effects of water yield when grassland is replaced by plantations.

The company contributes to the development of a forestry culture by means of an open, non proprietary, information exchange with interested individuals and organisations. There is also a continuous dialogue with customers, communities, government, employees and investors aimed at an improvement in goods and services obtained from sustainable forest management.

Energy: biofuels, fossil fuels, electricity from grid
All European operations



Energy: biofuels, fossil fuels, electricity from grid
All Latin American operations



Protected Areas

We have identified the SKG operations which are either within or in close proximity to legally protected areas or areas of high biodiversity value.

Natura 2000 is an ecology network of protected areas in the territory of the European Union which has been created in 1992 after governments adopted legislation designed to protect the most seriously threatened habitats and species across Europe. Ten of our European sites are located or adjacent to such protected areas.

Some eleven other sites are adjacent or within areas protected by national or local status. Additionally, five of our operations withdraw from or discharge water to bodies that are protected or classified as sensitive.

SKG is keenly aware of these situations and continues to take all necessary steps to ensure both the environmental protection and the sustainability of these sensitive areas.

The list of these sites can be found on our website at www.smurfitkappa.com.

2 Efficient use of Energy

THEREBY CONTRIBUTING TO ACTION AGAINST CLIMATE CHANGE

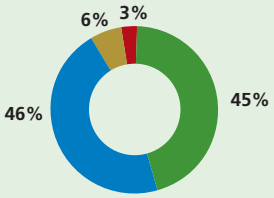
The pulp and paper industry is energy intensive and has a responsibility to look carefully at the impact of fossil fuels. Given the volatility in pricing of energy over the past number of years, there is also a commercial imperative to achieve the most efficient use of energy. SKG looks upon improved energy usage as a major priority.

In terms of improving production efficiencies we have been making additional investment in co-generation. In 2009, Smurfit Kappa Zülpich Papier (the biggest of SKG's German recycled paper mills, located near Cologne) began building a new multi-fuel boiler for the production of electricity and steam for the paper mill which will be operational in 2010.

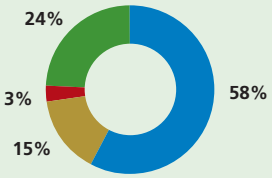
The power boiler doubles the capacity of the old boiler to 100 tonnes of steam, while utilising the same technology. It will burn both brown coal from local sources and biogas, derived from anaerobic process water treatment at the mill.

40,000 tonnes of organic waste from the paper recycling process will also be consumed, of which 20,000 tonnes will come from the mill itself and the other 20,000 tonnes will come from other paper mills in the Group. 15 MW of electricity will be produced, which will increase the mill's self sufficiency with regard to electricity to almost 100%.

Energy consumption 2009
European operations



Energy consumption 2009
LA operations



Natural Gas Coal Other fossil fuels Biofuel

The start up of this power plant is scheduled for September 2010.

Taking into account the higher efficiency of a cogeneration plant compared to a conventional electrical power station, this investment will allow a decrease in overall fossil CO_2 emissions by 4% for producing the same amount of steam and electricity (source: EIA database average figures for Germany 2007). This results from the fact that the new boiler has a higher efficiency than the existing one although the mill's on-site fossil CO_2 emissions will rise as brown coal will replace part of the natural gas currently burned.

Energy efficiency initiatives

During 2009 the project for a biomass boiler at Cellulose du Pin made considerable progress - see side panel.

In the course of 2009, four SKG mills have been audited by an expert external company to assess energy consumption.

Audits have been carried out by Allplan in Cellulose du Pin (France), Mengibar (Spain), SSK (UK) and Ania (Italy). To implement the actionable points revealed by the audits we invested in excess of €1 million to save 10 GWh of electricity, representing variously between 0.2% and 2% of electricity consumption by these mills. External energy audits of additional mills will continue during 2010.

Cellulose du Pin green energy project

The SKG Kraft mill, Cellulose du Pin, located at Facture (France) and Dalkia signed a contract in 2008 to build and operate a new biomass boiler for the production of green electricity and steam for the paper mill.

2009 marked the start of the project.

The power boiler of 124 MW will burn 500,000 tonnes of biomass per year to produce 70 MW of green electricity and the low pressure steam will be used by the mill for the last phase of drying paper. In addition to our own wood bark the boiler will also burn 200,000 tonnes of forestry waste materials, such as tree stumps and logging residues that presently go unrecovered.

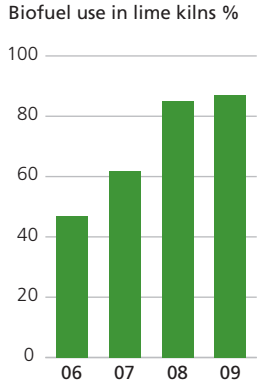
The project is making good progress and will be ready to start as scheduled in September 2010.

Successful initiative for using biofuel in lime kilns at Smurfit Kappa Piteå

The kraftliner mill in Piteå has a unique process where wood biomass is pulverised and used as a fuel in its two lime kilns. The system for pulverisation consists of a drying system with a hammer impact mill and a classifier, utilising flue gases from the recovery boiler for drying. Until the start-up of the new biofuel boiler in 2007, the system was used to produce pulverised fuel for both the lime kilns and the previous biofuel boiler. Since the new boiler does not have to use pulverised fuel it is therefore possible to increase its use in the lime kilns.

The pulverisation system for feeding and burning the fuel in the lime kilns has been modified in order to increase the use of biofuel. The result is a significant reduction of heavy fuel oil usage, bringing a positive environmental improvement.

Since 2006, the use of fuel oil decreased from 10,000 m^3 per year (390,000 GJ) to less than 3000 m^3 (90,000 GJ) per year. At the same time the use of biofuel has increased from 330,000 GJ to 550,000 GJ. The amount of biofuel used in the lime kilns since 2008 has increased by more than 85%.



In Europe, the co-generation ratio for 2009 increased by 7% compared to 2008, for the use of electricity for all our operations. The main reason for this increase, besides lower paper production levels, comes from our two mills in Austria and Slovakia that returned to operating their CHP at their normal levels after maintenance work in 2008. The steam turbine at the SKG kraftliner mill in Piteå (Sweden) also operated for the first time for a full year.

In 2009 we achieved the commitment we made in our 2007 Report to increase by 5% our own rate of electricity produced from Combined Heat and Power (CHP) plants. This was achieved a year earlier than planned.

In Latin America we made even greater progress than in Europe as the rate of electricity produced by CHP plants increased by 10%. This increase is mainly the result of the installation of the new RB3 recovery boiler in Cali, with its additional capacity for electricity generation.

Some other initiatives and investments were decided upon in 2009, all of them aiming to achieve our main objective of reducing our fossil fuel consumption. A good example of this is the use of biofuel in lime kilns at our Piteå mill in Sweden (see side panel).

Energy, CO_2 emissions and other air emissions related data are reported for individual mills in the tables on pages 52, 53 & 55. The methods applied for calculations as well as details on specific definitions are given in the glossary on pages 67 to 72. We are making ongoing efforts to increase standardisation of our data collection methods and to improve the quality and scope of our key environmental indicators. In 2008, we implemented a new web-based reporting tool that helped us to standardise the reporting system. Although these efforts – in particular the web based reporting tool – have a positive impact on data quality, we are working to further improve the internal controls on data quality. We realise that energy and CO_2 information involves uncertainty due to the nature of the data. We will

continue to focus on improving the quality of our environmental data and for this purpose we will enhance internal controls on data quality across the Group.

In this report default Lower Heating Values and CO_2 emission factors have been used to calculate the energy use and CO_2 emissions from the use of biogenic energy sources where actual values were not available. The actual values can differ from the default values. Going forward, SKG will make an effort to increase the use of actual measured Lower Heating Values and CO_2 emission factors.

3 Cleaner Air

SEEKING TO REDUCE OUR IMPACT

In Europe, although in absolute terms the CO_2 fossil emitted by SKG in 2009 showed a drop of 100 Ktonnes compared to 2008, the CO_2 emission, volume adjusted, stayed at the same level as the previous year. Overall emission levels were lower because of lower production levels resulting from the global economic downturn.

The same remark applies to Latin America for absolute CO_2 emission, while we note a slight increase in CO_2 emission when expressed by tonne of paper produced. For this region we noted an increase in 2009 in the share of biogenic CO_2 versus fossil CO_2.

Trends for fossil CO_2 emissions, by both SKG regions, over the past three years are shown in the graphs on page 24.

SKG endorses the emission reduction targets to be defined in the EU ETS Directive post 2012 according to existing EU targets. On a project by project basis, more ambitious reduction targets are formulated by us from time to time if commercially advantageous (see item on solidboard in the Netherlands in the side panel).

Additionally, we progressively take into account CO_2 reduction in every investment decision.

Smurfit Kappa Solid Board in the Netherlands has committed to a target of reducing energy consumption by over 20% by 2020

Investment projects that focus on the use of waste heat have been initiated at the Oude Pekela and Coevorden sites.

A pilot project investigating the use of heat pump technology is also currently ongoing at the Coevorden location. Geothermal energy is used as a heat source in the production processes, for example for the paper drying systems. This latter project is carried out in collaboration with technology suppliers.

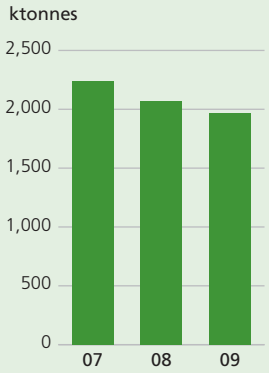
The goal of the project is to develop a prototype thermo-acoustic heat pump. The Dutch government has contributed funding for this unique pilot project with the objective of developing the laboratory-proven technology into a commercially viable solution. Use is even made of the sound energy that is produced when burning natural gas, as it is converted into electricity and heat.

Nervión, the SKG paper sack mill at Iurreta (Biscay) in Spain, will invest €25 million to replace the biomass-based renewable energy plant together with residual gas treatment

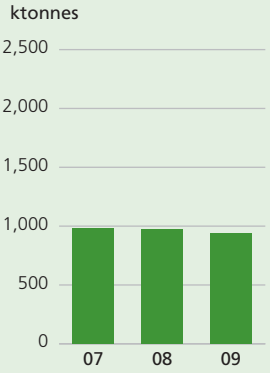
The purpose of this capital investment, which is due to start in the first half of 2011, is to increase heat and electricity generation from renewable sources at the plant and significantly improve the operating efficiency of the installed equipment and the mill's capacity to treat and manage residual forest-based material.

As a result of this project, forest biomass consumption is planned to increase by over 40,000 tonnes per year to reach an annual consumption of more than 100,000 tonnes, while the increase in electricity generation of over 40% will set the annual figure at 115,000 MWh. A total of €45 million will be invested in the period between 2008 and 2012. In 2008, €20 million was invested to improve quality and production efficiency. This project is encompassed within the Group's overall strategy to increase its overall operating efficiencies while supporting renewable energy sources, sustainable forest management and environmental protection.

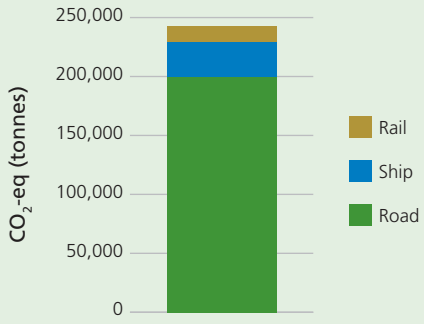
Direct fossil CO_2 emission 2009
European operations



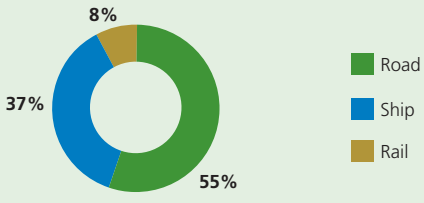
Direct fossil CO_2 emission 2009
LA operations



CO_2 emissions for transport of
raw materials by mode of transport
2009 EU



Distribution of raw materials by
mode of transport 2009 EU



SKG was engaged in activities during 2009 that aimed to reduce the carbon footprint of our products. Our Packaging division in the UK was recognised at the end of 2009 by The Carbon Trust for actions to reduce their carbon footprint. The Carbon Trust is a UK government sponsored company supporting organisations moving to a low carbon economy. It was the first multi-site packaging producer award by The Carbon Trust (see page 26).

Transport

In Europe we calculated the CO_2 emission for transport of our main raw materials to our mills and converting plants.

This includes transport of wood, recovered papers and market pulp used in our mills to produce paper and board. The transport of raw materials to the second stage of the supply chain (reels of paper, sheet corrugated board, sheet board, plastic films and other items to the converting plants) is also taken into account.

While the calculation of CO_2 emission for transport of reels between our own mills and the converting units (representing 74% of supplies) is accurate, we believe we have made a good estimate of emissions for the transport of the remaining reels of paper supplied to our corrugated plants by external parties.

For 2009, CO_2 equivalent amounted to 243,000 tonnes and breakdown by mode of transport is reported in the graph on this page. The CO_2 emission factors by transport mode are extracted from the European Reference Life Cycle Database version II (ELCD).

Road, measured by volume transported, accounts for half of SKG's transport mode, while sea represents the second largest mode of transport of our raw materials with a share of 37%.

We have not been able to do a similar exercise for Latin America due to the structure of its supplier base. We have yet to establish the parameters of the journeys to and from our paper mills.

4 Purer Water

SEEKING TO REDUCE OUR IMPACT

The majority of fresh water used by SKG is returned to the source after use and cleaning. We actually consume a relatively small quantity of water, equating to less than 9% of our water intake.

One of our mills in Germany (Zülpich) operates a totally closed loop system for process water, while the other SKG mills practise a high degree of water re-use within the process.

Water discharges in Europe

In 2005, we started an ambitious investment programme for the treatment of the process water from our mills prior to its discharge to watercourses. This programme is due to be completed by the end of 2010.

The investment over this period for the European paper mills amounts to €24 million, and will allow us to commit to a reduction target of 25% of our COD discharge by 2010 compared to 2005.

Four projects, out of the five initiated in 2008, were completed in 2009 and are running as expected since their commissioning.

A new water treatment plant has been commissioned at our SSK mill in the UK (see insert on page 27), as well as an anaerobic reactor added to the water treatment plant in our mill at Morava (Czech Republic) in March 2009.

The expanded water treatment plant in the Mengibar mill (Spain), started up in November 2009. The investment to upgrade the water treatment of another Spanish paper mill, in Sanguesa, is due to start mid 2010. Sanguesa will be the last investment to be commissioned as part of the €24 million programme defined for the period 2005-2010.

CO_2 emissions and gas consumption reduced by "Cool Corrugating" in Argentina

"Cool Corrugating" is a method used to reduce the heat transferred to the board by optimising the glue application, thus reducing emissions and saving natural resources.

The SKG Sunchales plant in Argentina was able to significantly reduce gas consumption by changing the glue application system in the corrugating units through installing a new double gluer machine. This application system regulates the amount of glue that is transferred to the tips of the flutes, creating a very thin layer of glue over the transferring roll thus resulting in a more precise glue application and a reduction in the amount of glue applied, which leads to a lower heat requirement.

Through knowledge sharing and benchmarking with Sunchales and our Pinto plant in Spain, a solution came up for the SKG Coronel Suárez plant in Argentina. Instead of installing new equipment, the improvement was achieved by optimising the use of the transferring roll and by boiler pressure control.

In both plants, a significant reduction of the heat needed in the drying process was achieved which allowed the plant to run the boiler at a lower pressure, resulting in lower gas consumption.

Cool Corrugating, by reducing the heat transfer needed for drying the board also makes it possible to reduce the pressure needed in the drying table which leads to reduced flute waste in the corrugating process. This ensures a significant reduction in carbon emissions into the air, resulting in a more environmentally friendly process. The intention is to extend this innovative development elsewhere.

Carbon Trust certifies Smurfit Kappa UK action to reduce carbon footprint

Smurfit Kappa UK (Packaging Division) was awarded the first Carbon Trust Standard for a major multi-site packaging company, as a result of its actions to measure and then reduce its carbon footprint.

This led to a reduction in emissions of almost 8,000 tonnes of CO_2 equivalents (CO_2e) in one year which represents a saving of 11% of CO_2 emitted for manufacturing or processing our products at the 20 UK sites that make up Smurfit Kappa's packaging operations in the UK. The Carbon Trust Standard is the world's first carbon award that requires an organisation to measure, manage and reduce its carbon footprint and to achieve real year-on-year reductions. Unlike other carbon related schemes, organisations are recognised for actions they have taken to cut carbon across their own operations.

In the UK, as part of a Carbon Management programme, Smurfit Kappa has made a wide range of changes to the way that the business operates, so as to improve annual energy consumption. Activities have encompassed new investments such as the installation of steam boiler condensate recovery systems saving 3,590 tonnes CO_2e and the installation of inverter drives to further reduce energy consumption. The programme also involved reducing vehicle movements through improved journey planning to include 'backhaul' (running full on both legs of a journey), providing savings of 771 tonnes CO_2e.

Harry Morrison, General Manager of the Carbon Trust Standard, commented: "Being certified with the Carbon Trust Standard is proof an organisation has taken genuine action to reduce their direct impact on climate change by cutting carbon emissions. We congratulate the packaging division of Smurfit Kappa UK on this achievement.

Both businesses and consumers share a desire for one, credible way to prove an organisation has not only measured, but actually reduced their carbon emissions year-on-year without the use of carbon offsetting. The Carbon Trust Standard provides this credibility and we encourage more organisations to follow Smurfit Kappa UK in making this commitment."

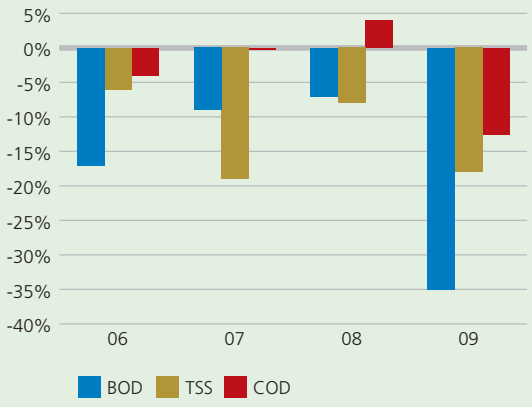
Nevertheless, we shall strive to continuously improve our performance regarding the quality of water we discharge to the environment. In December 2009 a further investment of €3.5 million was approved to expand the water treatment plant of the recycled paper mill at Wrexen in Germany. The expansion includes a new anaerobic reactor and a rebuild of the aerobic stage.

The treatment of the process water used in the mills is either carried out on-site, as is the case in the majority of our mills, or is sub-contracted to an external third party. For the latter, in all disclosures relating to the process water content (COD, BOD, TSS), we report levels in the water discharged by the mills prior to external treatment.

The water intake for the European operations increased slightly compared to the previous year mainly due to the higher usage of water for cooling. Cooling water returns to the environment without any impact on its purity.

In 2009 we made good progress to reach our stated target to reduce our COD discharges in 2010 by 25% compared to 2005. The graph below illustrates the progress made so far in our European mill system. In 2009, we had achieved 13% of COD reduction discharges versus 2005.

Water discharges: specific BOD, TSS and COD



The graph also shows the progress made on the other key environment indicators: BOD and TSS. Percentage changes are relative to the base year of 2005.

All water indicators measuring the impact of process water discharges were significantly improved during 2009 compared to the previous year. COD dropped by 16%, BOD by 30% and TSS by 12% compared to the previous year.

The improvements reflect the commissioning of the new treatment plant in one of our UK recycled paper mills and also the full effect of the investments commissioned in 2008. The quality of the water discharges at our kraftliner mill at Piteå in Sweden recovered to a very good level, although there were two small incidents when soap/black liquor seeped into the water. No consequences could be observed but nevertheless action plans have been implemented to ensure no recurrence.

Water discharges in Latin America

Significant improvements have been achieved for our Latin America mill system concerning the COD of the process water discharge. COD reduction was by far the most important target relating to water that we were committed to achieving in 2009.

BOD discharges from our mills increased slightly in 2009 when expressed per tonne of production. This was due to the running of the aerobic treatment facility at the Cali mill.

Excluding Cali, discharges from the remainder of our Latin American mills reduced year on year, well beyond the committed amount.

An investment of US$3.3 million has been approved to build an anaerobic/aerobic water treatment plant in the Bernal mill in Argentina. This will contribute to meeting our commitment of COD, BOD and TSS reduction in Latin America.

Water related data is reported for individual mills in the tables on pages 52, 53 & 55.

New Water Treatment Plant at the SSK paper mill in the UK

The plant was commissioned slightly ahead of schedule at the end of July 2009. The water treatment plant comprises a number of elements:

Biological treatment

This is the core stage of the treatment, which is composed first of an anaerobic reactor, followed then by an aerobic biological reactor. Water is first fed to a reactor which removes the highest percentage of pollution (COD) and then it goes to the aerobic flash aeration reactor which finalises the biological treatment of the water.

The microbiological processes within the reactor break down much of the organic loading and produce biogas, which is captured and used as an energy source. The process also requires minimal energy input and a much smaller footprint than alternative anaerobic processes.

Physical treatment

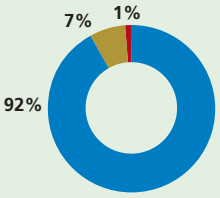
The final treatment of effluent is designed to decrease suspended solids prior to water reuse or discharge. Dissolved Air Flotation is used for suspended solids removal from the aerobically treated wastewater.

The Thiopaq technology is used for the removal of hydrogen sulphide (H_2S) from the biogas, allowing the biogas to be safely used in one of the existing site boilers. This bio-catalysed scrubber process is cost effective. Biogas is collected and fed to an existing boiler which has been converted. The biogas has a calorific value of approximately 70% of that of natural gas. The plant produces 6,000 m^3 of Biogas per day, providing energy savings in the use of purchased natural gas.

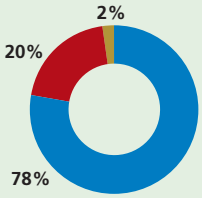
Performance Indicators

The reactor removes 75% of biological contaminants. Final water COD discharge loadings have reduced by 80%.

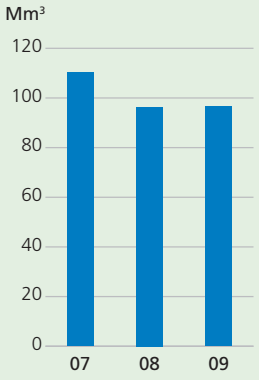
Water sources 2009
European operations



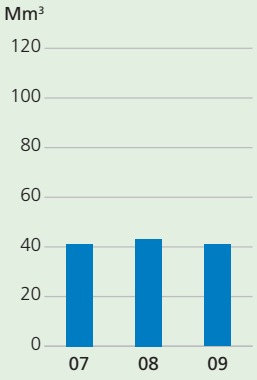
Water sources 2009
Latin American operations



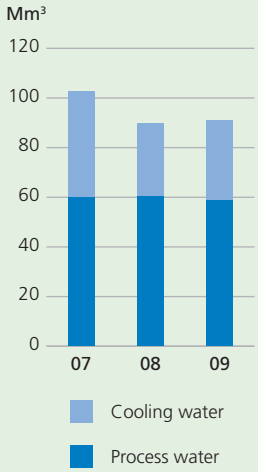
Water intake 2009
European paper and board mills



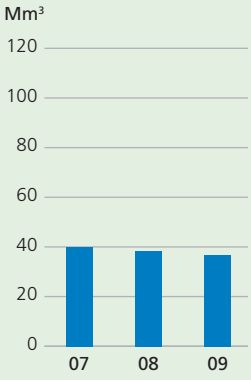
Water intake 2009
Latin American paper and board mills



Total water released
2009 European paper and board mills

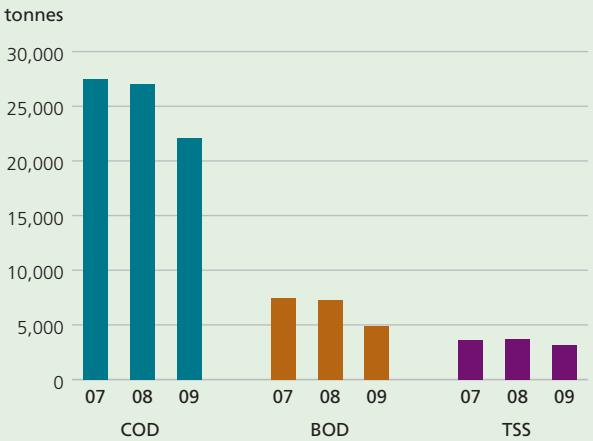


Total water released†
2009 Latin American paper mills

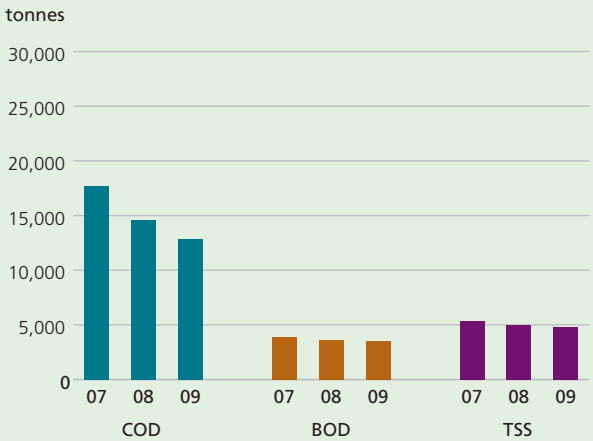


†Breakdown between process and cooling water not available

Process water discharges 2009
European paper and board mills: COD, BOD, TSS



Process water discharges 2009
Latin American paper mills: COD, BOD, TSS



Maintaining an excellent health and safety record in our operations is a key priority for SKG.

Signing of learning and skills agreement in the UK. Front (left to right): Clive Bowers (SK UK), Tony Burke (Unite). Back (left to right): Geoff Southern (Unite), Bernard Rutter (Unite), Alan Alcock (SK UK), Tom Bowtell (Proskills), Keith Sutcliffe (SK UK), Geraint Bowers (SK UK).

SOCIAL DEVELOPMENT

In this section, under the heading of Social Development, we deal with three subjects relating to Corporate Social Responsibility:

1. Social Citizenship
2. Health & Safety
3. Community Involvement.

1 Social Citizenship

SKG is committed to managing its business in accordance with its declared values which recognise that good social citizenship, reflected in the manner in which we interact with our employees, business partners and local communities, is an essential ingredient in creating and maintaining a sustainable future.

This policy statement summarises the Group's commitments in this regard. SKG's Social Citizenship Policy statement covers, among other things:

- human rights
- freedom of association
- child labour
- forced labour and abuse
- employee respect
- diversity and non-discrimination
- fair compensation.

The policy statement can be downloaded from SKG's website www.smurfitkappa.com.

Employee Training and Development

Continuous training and development of our employees is a key objective of the organisation, with each employee encouraged to reach his/her potential.

SKG supports learning and development programmes reflecting the necessity to constantly review and, where necessary, raise the standards of business performance. We also encourage the exchange of best practice, knowledge and skill transfer and health and safety. SKG ensures that the Group's business ethics and standards are fully understood by all and reflected in their day-to-day conduct.

The company promotes opportunities for individual progression and supports development and learning activities which respond to the general business environment, strategy and core values of the company, Group-wide succession planning and individual development needs, all of which aim to deliver:

- better performance
- higher commitment
- greater motivation
- a learning organisation
- a meritocratic organisation.

Participants in the Advanced Management Development Programme.
From left to right: Ignacio Landa, Pernille Bak Larsen, Stéphane Hasselot, Graham Hood and Franca van Dinther.

Christoph Hutwagner, Instrument Technician, Nettingsdorfer paper mill, Austria.

SOCIAL DEVELOPMENT (CONTINUED)

SKG places the development of its people at the top of its agenda. The company seeks to create an environment that facilitates people at all levels of the organisation to grow. This is evident in the range and scope of training & development activities at Group, regional and country level.

At Group level, the Advanced Management Development Programme, which is now running for a decade, helps young managers to develop and further progress within the company. The current programme, which has been continuously improved over the years, will bring the total number of managers who have participated since its inception to 216. The English Immersion Programme, which is run five times a year, is now well established with more than 200 participants since 2007 and forms a crucial part in boosting the language skills of our employees.

The European Corrugated Division has strengthened its link with a reputable international university and various senior executives have completed some highly regarded General Management Programmes. The leadership evaluation process previously introduced to the senior management of the Corrugated Division has experienced great success and has been extended further in the different countries. Input from superiors, colleagues in peer groups, team members and direct reports allow the participants to advance their leadership and management capabilities.

At country level, Smurfit Kappa in the UK has signed a learning and skills agreement with Unite, Britain's biggest trade union. This partnership aims to support and develop our employees, creating a learning culture, which will enhance individual development and business performance. Initially started at one plant as a pilot scheme, the initiative has set an example to spread to other operations, seeing Unite and Smurfit Kappa UK work closely together to invest in our employees.

Smurfit Kappa Benelux implemented a two year Talent Development Programme across all SKG divisions. Participants from line and staff functions address various subjects such as team building, performance stimulation and coaching, and situational leadership. Business cases are discussed with internal speakers and coaches provide guidance and support.

Smurfit Kappa Roermond in the Netherlands has been running a life long learning project since 2006, capturing the knowledge and expertise of the more experienced part of the workforce. As a result, basic workshops for various production areas have been developed in order to pass on the considerable knowledge to new employees.

Internal Communication

We value regular, timely and efficient meetings with our employees and their representatives, conducted in an open and constructive manner, to exchange views on all matters affecting our business including health & safety, working conditions, terms and conditions of employment, the performance of the business, the business outlook, investment decisions and acquisitions & disposals.

Safety Awards 2009. Left to right: Tony Smurfit, Caspar Jan van Schaardenburg, Dick Zant, Pim Wareman, Roberto Villaquiran.

Safety Awards 2009. From left to right: Tony Smurfit, Ad Smit, Jean van Ginkel, Bauke van der Molen Kuipers, Alain Baudant.

We are committed to providing the Group's employees with regular updates on the overall performance of the Group and the individual business units, and on any issues that may potentially have an impact on them. In doing so, we make use of the appropriate media which include departmental and function meetings, site general briefings, management/ employee representative meetings at local, national and regional levels, internet etc.

In addition, there is an extensive network of local employee newsletters as well as a Group-wide internal newsletter. We also publish a high-profile customer magazine "People and Packaging" which is translated into several languages.

European Works Council

The SKG European Works Council (EWC), which covers the entire workforce of the Group in the European Union, was created to assist in the development of an open two way communication process with all employees as prescribed by European regulations.

Following the merger of Smurfit and Kappa, a new agreement was successfully negotiated in May 2006 for a four year period with a special negotiating body nominated by both pre-merger councils.

The council currently consists of 30 members representing all employees. The procedure for selection, nomination and election of the various members is in accordance with national regulations or practices. The EWC is not a negotiating forum, but complements existing local structures where information dissemination and consultation take place.

Management is represented by the Group Chief Operations Officer, the Group VP Human Resources, and the European Divisional CEOs (as appropriate).

It is assisted by representatives of the HR function (Divisional HR Directors and HR staff).

The following matters are covered at such meetings:

- Group financial status
- projected developments
- relocation, curtailment or business closures in any country where there are transnational implications
- environmental protection
- employment opportunities
- health & safety.

For consultation purposes the following matters are covered:

- "transnational" issues affecting employees' interests in two or more businesses in different countries
- transfer of production on a transnational basis resulting in closures
- mergers and/or acquisitions having social impacts.

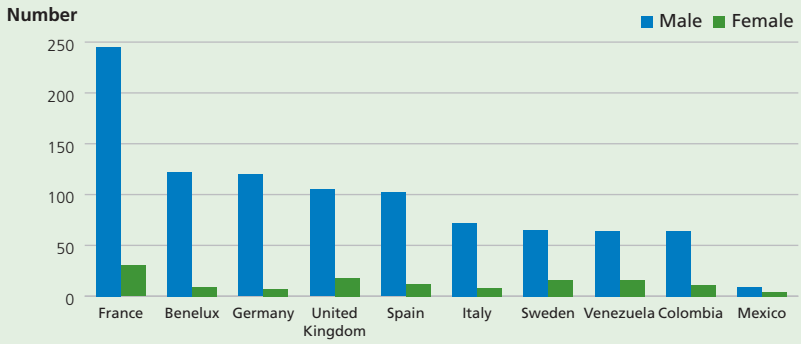
The Council meets at least twice a year. Experts, who may be full-time trade union officials, are allowed to attend a pre-EWC meeting at the request of the relevant EWC member.

When queries arise from our employees and/or their representatives or meetings are requested, our policy is to respond in a timely manner.

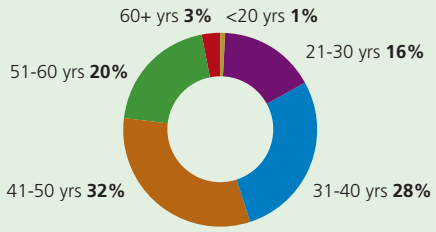
Group Awards

The awards include Company of the Year, Employee of the Year, Safety Plant of the Year and Employee Service Awards.

SKG Management Gender 2009



Total Employees by Age SKG 2009



SOCIAL DEVELOPMENT (CONTINUED)

These awards serve several purposes. The core objective is to recognise, reward and encourage entrepreneurship, innovation and superior performance. The awards are visible to the 39,000 employees that make up the Group and this helps in sharing the objectives of the organisation, subscribing to its priorities and expanding its horizons.

Concern for the environment forms an important part of the priorities of our Group and is embedded in our objectives. By the same token, the definition of innovation has been expanded to cover environmental initiatives that form an important aspect of corporate well-being and good citizenship.

As the imperative for sustainability grows with every passing year, we continue to adapt the criteria by which awards are given.

Retired Employees

It has been a tradition within SKG to maintain regular contact and to give support in a variety of ways to our retired employees and pensioners. They have a special relationship with the company in terms of their contribution to the growth and success of SKG over many years. Today there are over 11,000 pensioners from SKG, and typically there are active associations in different countries that manage a host of social activities which greatly help to maintain the bonds the pensioners enjoyed as working colleagues.

While most of the activities are managed by pensioner associations themselves there is ongoing Group support.

Employee Demographics

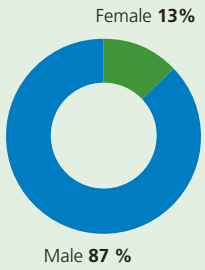
- Around 45% of our employees are aged 40 years and under while more than 75% are aged 50 years and under
- Over 50% of employees have 10 or more years' service while 26% have 20 years or more
- Of the management employees, 87% are male and 13% female
- There are approximately 15 nationalities represented at the most senior level of the Group
- Headcount numbers at the end of 2009 are slightly down by 1.8% compared to 2008, reflecting decreases in Europe and increases in headcount in Latin America.

2 Health & Safety

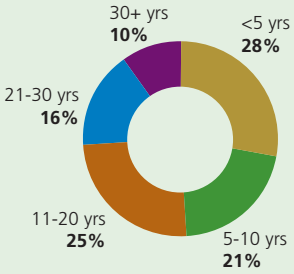
SKG is conscious of its responsibilities towards its employees and towards others with whom the Group comes into contact. At all times SKG promotes safe and healthy working conditions and conduct within the working environment.

Health & Safety is an important agenda item at all Group, regional, divisional and operational board and management meetings. We recognise that a formal statement of our health & safety policy and the appropriate focus on its implementation is an essential feature of the working of the Group.

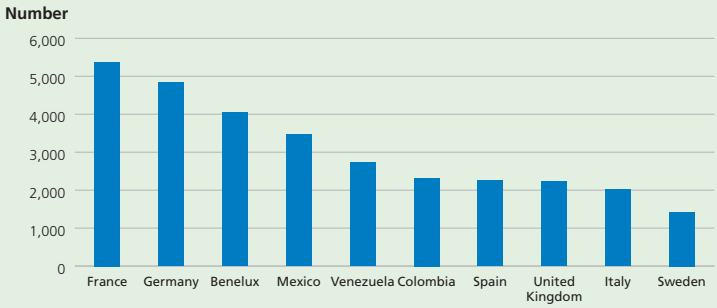
SKG Management
Gender 2009



Length of Service
Total Employees SKG 2009



Top 10 Countries Headcount SKG 2009



The Health & Safety Policy has an opening Declaration of Intent which notes that:

"SKG will conduct its activities in a responsible manner, taking care of the health, safety and welfare of everyone affected by its activities and minimising the impact of the business on the environment. It will be an integral part of our business and we will promote adherence to the highest standards of safety in the operation of our facilities."

To achieve this SKG will:

- measure and benchmark health & safety performance on a continuous basis
- continually assess our processes in order to reduce risks and to seek continuous improvement in health & safety practice and performance
- maintain management systems that help to protect employees, visitors, contractors and the public from injury/ill health
- take all practical steps to develop a positive safety culture and safe behaviour throughout the Group
- include health & safety performance as an important element by which all managers are incentivised.

The elements of the policy and subsequent working standards were designed in accordance with the OHSAS (ISO) 18001 Health & Safety Management System.

The Policy document includes:

- the general requirements
- the policy statement
- planning for risk assessment and control
- implementation and operation
- checking, reporting and corrective action
- management review.

When significant accidents do unfortunately occur, each is reported and details are communicated to every manufacturing plant General Manager. In this way, experiences are shared which in turn can help the prevention of similar accidents elsewhere in the Group.

The Group has drawn up a written document covering an extensive list of Health & Safety Standards which, together with the Policy document, has been issued to every SKG site and made available to every employee via notice boards, intranet, meetings and other appropriate media.

As a minimum, induction programmes must include a review of the company's health & safety policies and regulations, emergency procedures, escape routes, assembly points and the specific rules of the job to be undertaken. These are also given to temporary workers and contractors.

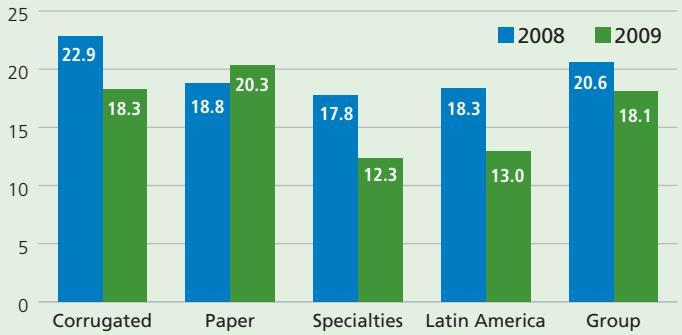
As a common practice the Company performs cross audits in Health & Safety using the in-house Health & Safety coordinators and regularly conducts briefings and training sessions to new employees.

In the specific area of employee health, an appropriate number of trained and people qualified in First Aid are designated for each site. The objectives are to be able to provide:

- initial treatment for injury or ill health until professional medical help arrives
- treatment of minor injuries which would otherwise have no treatment, or which do not require treatment by a medical professional.

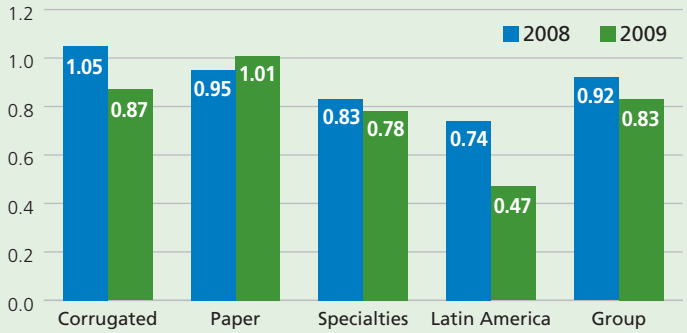
Every site is required to have appropriate equipment and facilities to enable first aid to be carried out.

Severity Rate: Full Year 2009 vs 2008



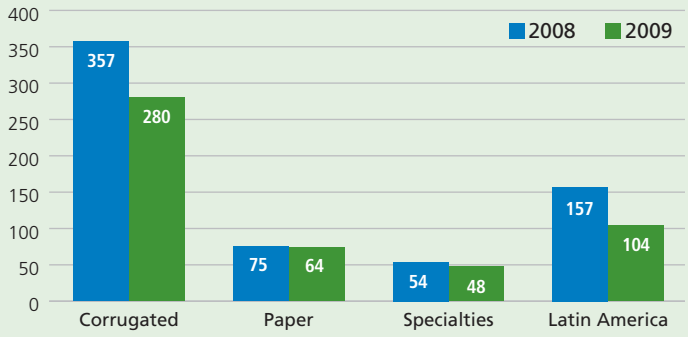
Severity rate: Number of days lost x 100,000/Number of hours worked

Frequency Rate: Full Year 2009 vs 2008

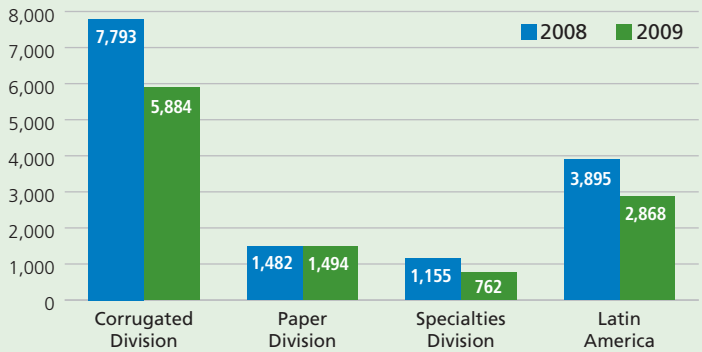


Frequency rate: Number of accidents x 100,000/Number of hours worked

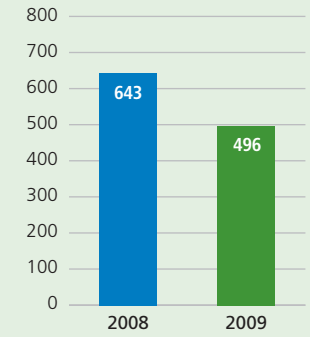
Number of Accidents: Full Year 2009 vs 2008

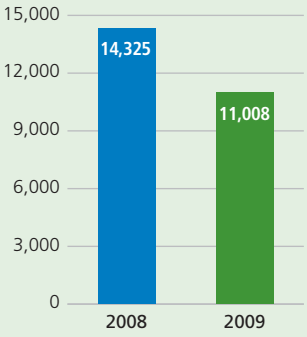


Days Lost Due to Accidents: Full Year 2009 vs 2008



SKG Group: Number of Accidents, and Days Lost 2009 vs 2008





Venezuela. Technical farm school group of students.

In addition, most sites have a medical nurse or doctor who attends for designated periods at regular intervals.

It is obligatory for each site to have a Safety Committee which must include representatives from all levels of the organisation and must be illustrated in the safety organisation chart for the business unit. The safety meetings are chaired by the site General Manager and are required to be held on a regular basis (at a minimum, monthly for the larger plants and quarterly for the smaller plants).

There are safety coordinators at country or subdivision level who liaise with the Group Safety Manager who in turn reports to the Group VP of Human Resources.

The responsibilities of the Group Safety Manager include:

- elaboration of Group safety policy and standards
- measurement of performance through safety statistics, reviews and audits
- communication throughout the network
- development and the fostering of best practices
- provision of communication and fostering assistance to divisions and plants where needed.
- proactively identify developing best practice.

All performance reviews at plant, country, division and regional level have safety as a priority on the agenda. Annual management performance reviews include measurement of progress in safety performance against pre-agreed targets.

Since January 2008, all plants report details to Group on:

- injuries to contracted employees
- restricted workday cases
- medical treatment cases
- first aid cases
- near misses.

The Group presents annual awards to the "safest plant" and the "most improved plants" in each reporting division for their safety achievements.

While there has been progress in our health & safety performance in 2009, there continues to be clear scope for improvement.

Group-wide the accident performance statistics reflect an improvement over 2009. In accident frequency a 9.8% reduction was recorded while in accident severity the improvement achieved was 12.1%. These reductions compare favourably with a target reduction of 10% and took place in every division, except in Paper.

Latin America experienced three fatalities during the year involving employees of subcontracted companies (two in forestry activity and one during work on a high voltage electrical cabinet). One subcontracted company working in building construction in our sack plant in Poland also had a fatality, and in France a fatality occurred in our plywood mill involving one of our employees.

These fatalities are deeply regretted and are sad reminders of the need for all of us to increase our efforts in the area of health & safety. The critical importance of a safe working environment has been re-emphasised at all levels of the Group.

While target improvements going forward vary between divisions and regions, the Group commitment is to continue to improve on our previous year performance by means of an ongoing annual re-check.

Sandra Blanco, student from Primero de Mayo School in Barranquilla, Colombia, smiles when receiving the brochure of Natural Resources to be working as part of the Brigada Planeta curricular programme.

Work Safety

In France, SKG employees in the Corrugated Division received a post card from their management during summer time asking for serious recommendations about safety on their return to work. An invitation was also extended for employees' children to draw pictures illustrating safety at work. A selection of these pictures was then used to make a calendar. The purpose was to reinforce the sense of risk avoidance all the way from home.

At the end of 2009 a Safety Opinion Survey was launched in some of our plants in order to measure safety climate. This survey will permit every plant to identify areas requiring improvement and to raise the profile of health & safety. The renewal of this survey is planned on a regular basis and will enable the measurement of improvements. This safety opinion survey when completed will be released to all our plants in late 2010.

3 Our involvement with the Community

SKG has 350 manufacturing plants in 30 countries. Community activity and involvement is both encouraged and promoted and this element of our social responsibility is mainly delegated to local plant level where managers and staff are best positioned to make a positive contribution in supporting the community.

An important element of a plant manager's role is to represent the company as part of the local community and play a positive part in its development. Activity and community involvement can take many forms and typically includes:

- co-investment in projects of a self-help nature
- charitable donations to local volunteer groups or welfare organisations
- support to local sport organisations
- participation in school initiatives by offering items such as printing material or facilitating school visits for educational purposes
- meeting and giving time to citizen groups that represent local communities
- playing a positive role in supporting and contributing to the disadvantaged
- mentoring small/start-up businesses and co-operatives.

Our particular bias is towards partnership by assisting communities in self help activities.

SKG is involved in community activities in many different ways. The Group maintains an active dialogue with the communities that live in close proximity to its plants. In particular, we respond promptly at a senior level to any complaints or issues of concern to such communities and take appropriate remedial action where necessary. In some cases, the local plant manager will personally visit the homes of local residents to try to resolve any problems that arise.

Colombia: During an outdoor training event in the Eco Club activities, Marcia Salazar, from Santo Tomás de Aquino in Guarne, enjoys a recycling competition.

Colombia: A group of sixth grade students from Gabriel Echavarria School, sponsored for our customer Colcerámica, presents some of the experiments they developed as part of the class programme.

The examples which follow illustrate the wide breadth of activities both in Europe and also in Latin America.

These three examples of community activity relate to three of life's most fundamental requirements – education, good health and basic shelter.

Planting seeds at a very young age

Sustainability is fundamentally a question of taking care of the quality of life of future generations. It is therefore important to find ways of involving young people themselves, even in disadvantaged communities, in the need to strive for sustainability.

In Colombia, SKG has introduced an innovative educational "seed" project known as Brigada Planeta, aimed at the children of low income families.

In partnership with OpEPA, a non-profit organisation which concentrates on environmental education and protection, Smurfit Kappa Carton de Colombia's programme includes:

- supporting teachers on subjects such as natural resources, the carbon cycle, water usage and biodiversity
- developing children's everyday awareness of actions that make a difference to the environment
- making a strong contribution to the operation of "Eco Clubs" – whereby children and young people take part in local environmental projects
- organising outdoor activities to improve the ability of young people to make positive decisions for themselves.

20 public schools were selected, concentrating on areas in the vicinity of SKG plants and also near the plants of major customers. 6,000 young people were directly involved in 2009, many of them the children of customers' employees. That number will increase to 13,000 in 2010. Brigada Planeta also supports the work of three major agricultural and forestry institutes with the training of older students.

The early indications are that Brigada Planeta's "seed" programme has been a great success, appreciated very much by customers as well as by local communities.

Health improvements for local communities

As well as being involved in education, SKG is also committed to improving the basic health of some of its poorest local communities. In Venezuela, SKG has introduced a programme of Health Brigades, whereby on a weekly basis medicines and health information are dispensed to people in need. In 2009, some 17,000 people received assistance in areas adjacent to SKG's forestry operations in the states of Portuguesa, Lara and Cojedes.

Venezuela: handing out prescribed medicines to members of the local community.

Venezuela: making building blocks from effluent sludge.

SOCIAL DEVELOPMENT (CONTINUED)

Other businesses are now supporting this SKG initiative. Late in 2009 the Smurfit Kappa folding carton business took their own employees and also the employees of a major customer, Colgate Palmolive, to witness a health brigade day. As a result, Colgate has joined the programme, with dentists taking part on a regular basis and with Colgate products freely available from a sponsored stand. Several other major customers of Smurfit Kappa are now regular contributors to the programme with their own stands and SKG is very grateful for their participation.

Inexpensive local housing

During 2009 SKG's paper mill at Valencia in Venezuela completed the research and development phase of a project to manufacture building blocks from effluent sludge, thereby saving on landfill and producing a practical product for local use.

The challenge was to develop the right composition of sludge to enable it to be added to the mixture used when making cement blocks. The recommended aggregate results in a strong building block which is very much lighter than a normal cement block and therefore easier to handle.

Most importantly, this new aggregate block should cost significantly less than half the price of a typical cement block. This one SKG mill will have the capacity to produce blocks for the construction of 300 new small homes for local families each year.

Tackling the employment needs of young people

In Europe, as in much of the rest of the world, one of the most pressing issues facing society in 2009 was the unemployment caused by recession.

In particular, in almost every country, the employment prospects for young people were severely affected by the economic downturn, raising serious concerns about the very fabric of our modern industrial society in the future.

During the year, many Smurfit Kappa companies joined local initiatives to address this problem, a few of which are described below.

In The Netherlands, SKG Roermond Papier took a leading part in the Roermond Municipality Action Plan for people under 27, organised by the body responsible for employment insurance. The target group was 500 unemployed young adults who needed to be given genuine, worthwhile work experience. SKG Roermond Papier concentrated on providing experience of their process technology expertise.

Every two years SKG Zülpich Papier (Germany), in conjunction with the town of Zülpich, organises a local "job fair" where youngsters can gather information around various jobs to find out which job is the right one for them. In 2009, 31 companies put out enquiries about 58 jobs that reached 600 youngsters and parents. Besides various other activities with schools, this is the major event SKG ZP does to ensure that we continue to source the right young people for our industrial business.

SK Jülich plant receives award from the Bishop of Aachen. From left to right: Dr. Heinrich Mussinghoff (Bishop of Aachen), Heinz Backes (diocesan staff), Volker Abel (SK Wellpappe West), Klaus Burckhardt (SK Wellpappe West).

Ruined Church, L'Aquila, Abruzzo, Italy.

SKG Trimbach (Netherlands) organised professional education days for students from training schools.

In Germany, SKG Jülich received an Excellence 2009 Award from the Bishop of Aachen for the company's programme to further qualify employees up to the level of trade proficiency certification. In times of recession, the bishop observed, such qualifications increase the prospects of people remaining in employment. The Award scheme is led by the bishopric, with the full involvement of businesses, the Chamber of Commerce, Chamber of Crafts and various trade unions.

Elsewhere, Smurfit Kappa companies expressed their involvement with the younger generation in various ways. At Kolding, in Denmark, for example, the business is very much involved with local junior football organisations.

Whatever steps have been taken so far to become involved with young people in education or at the beginning of their working lives, the company is clear that this must be a serious part of its social commitment to local communities.

Responding to Earthquake Disaster

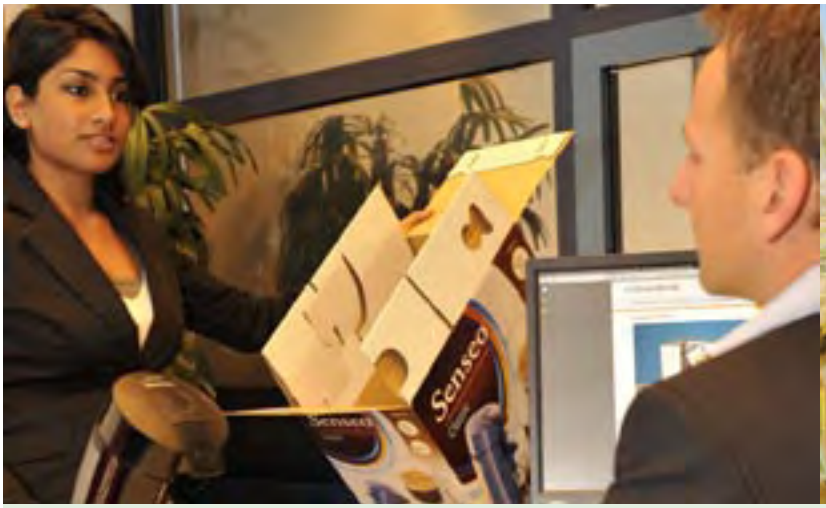
With more spectacular earthquake disasters elsewhere in the world occurring since then, attention may have slipped from the earthquake in L'Aquila, Abruzzo, Italy on 6th April 2009. For Italians, the earthquake, which measured 5.8 on the Richter scale, was a major national disaster, resulting in 308 dead, 1,600 injured, 65,000 homeless, precious frescos and statues damaged or destroyed and general devastation within medieval heritage sites.

Both the Smurfit Kappa companies and employees in Italy responded to this disaster, in cooperation with carton and paper trade associations, competitors and trade unions. Specifically, employees donated wages to the Red Cross which the company matched.

Charitable support is offered by many Smurfit Kappa operations across their communities. In Russia, for example, various charities are funded, including those concerned with senior citizens, while in Austria supporting children at Christmas is the focus.

Often charitable support may take the form of working together with customers.

SKG is also a member of Business in The Community Ireland (BITCI) which is a non-profit organisation specialising in advice and guidance to leading companies on Corporate Responsibility and Corporate Community Involvement. A business driven network, with major social initiatives, its membership is drawn from Ireland's most progressive companies. An external commentary from BITCI can be found on page 63.

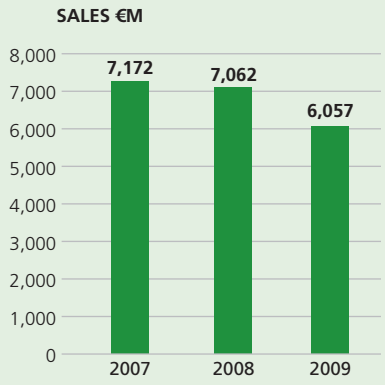


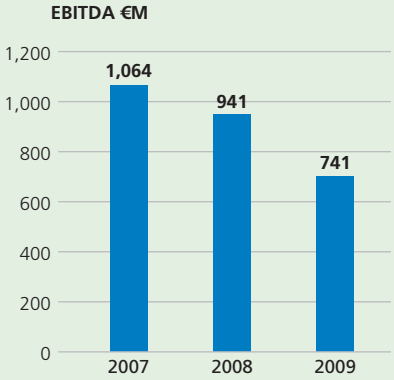
Reshma Bhansing, Quality Development, showing Geo Heetebrij, Account Manager, the latest improvements in the design of a customer's box at SK Zedek.

BUSINESS DEVELOPMENT

Group Performance

Group Sales and Profits



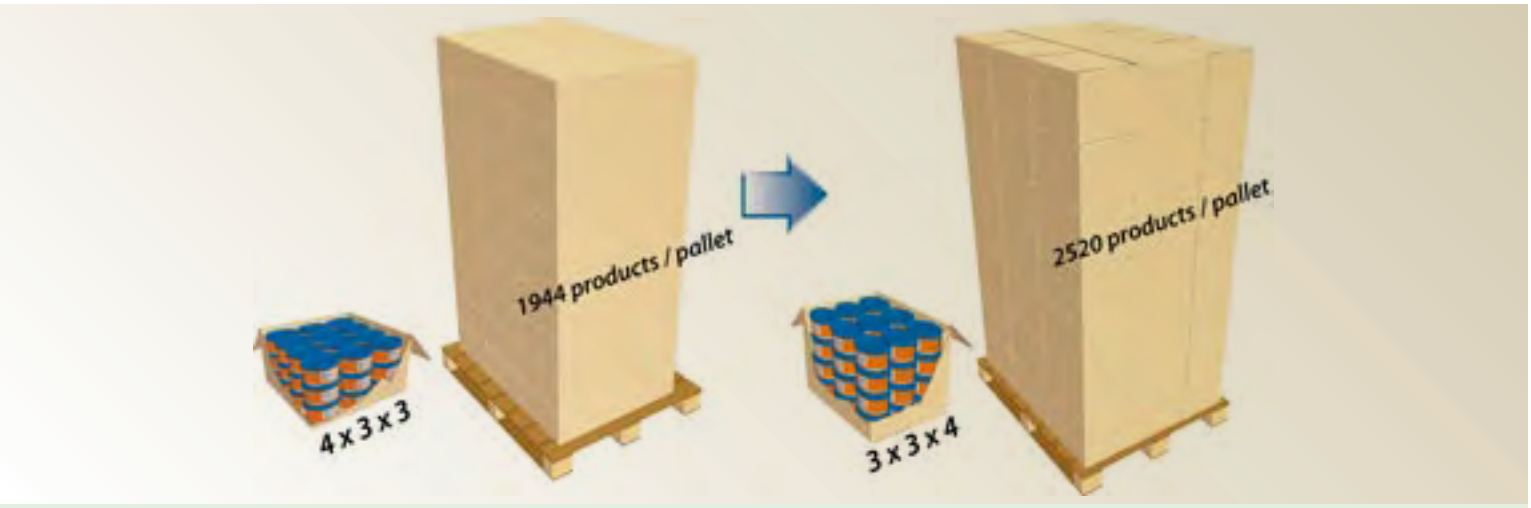


Introduction

SKG is an integrated paper and paperboard manufacturer and converter with operations in Europe and Latin America. Operating in 30 countries on two continents, the Group's activities are divided into Packaging Europe, Specialties Europe and Latin America. In Europe, the Packaging segment, which is highly integrated, includes a system of mills and plants that produce a full line of containerboard that is converted into corrugated containers and display packaging. The Specialties segment comprises paper-based activities dedicated to the needs of alternative packaging markets or niche markets. These areas include solidboard, folding boxboard, paper sacks and plastic bags and taps. The Latin American segment comprises forestry, paper, corrugated, folding cartons and paper sack activities in a number of Latin American countries.

Working together with customers

Increasingly, customers demand packaging to be sustainable, innovative, fit for purposes, as well as cost effective. SKG works closely with customers to achieve more sustainable solutions. For example, delivering packaging which uses less material or lighter material and transit packaging which makes it possible to reduce or even eliminate primary packaging. The creative design team explores what is possible in the most open minded way.



More efficient packaging solutions help to reduce transport and other costs.

Working innovatively together with customers on sustainability has two main aspects. Firstly, SKG gives customers a credible guarantee that the packaging it supplies is produced in the most sustainable way, using materials from sustainable sources and utilising every possible design skill.

But looking at the packaging alone is not enough as the direct CO_2 impact of secondary packaging is only around 4% in a typical customer's supply chain. However the packaging related indirect impact (damage/destruction of the packed product, logistics, waste, disposal, etc) is much more significant for the sustainability of a customer's supply chain. Therefore the second aspect on which we focus is the design and development of packaging which minimises a customer's total sustainability impact per unit of delivered product.

For Smurfit Kappa that means that for many customers we carry out evaluations with the help of Smurfit Kappa Innotools (Pack Expert, Paper-to-Box, Innobook), seeking to optimise the direct and indirect impact of our packaging on sustainability through the entire supply chain. For example, by changing the pallet structure of primary products it is possible to reduce the indirect CO_2 emissions of transportation.

Innovation in sustainable packaging solutions

As a market-focused company, SKG knows innovation is of strategic importance in securing and retaining our customers' business, especially in current challenging times. Innovative design is a unique selling point for the Group and serves to differentiate us in the marketplace. To foster innovation, we share best practice among the plants and divisions in the Group using our web-based tools such as Innobook. Internal Innovation Award competitions to assess the innovativeness of our designs are held in both Europe and Latin America with judging panels drawn from our key customer base. These measures promote the pursuit of excellence in design and a close alignment with the needs of our customers.

During the course of 2009 a selection process was undertaken throughout Europe to identify the designs which would be considered for European Awards. To demonstrate the importance of sustainability within SKG, the impact on environment was one of the main criteria used in the selection processes. The results of the competition will be announced in 2010.

BUSINESS DEVELOPMENT (CONTINUED)

The award jury looks for a trade-off between the ability of packaging to protect products, transport them efficiently and to ensure the effectiveness of packaging to assist in the marketing of the customer's product at point of sale. Sustainability is also a key consideration.

All of the designs considered in the European competition will be added to Innobook, the unique SKG design resource, thereby further enriching the database.

As part of the process of using design innovation as a means of developing sustainable packaging, we continue to work with customers to:

- design packaging solutions that are both efficient and user friendly
- optimise the supply chain including palletisation, warehousing and distribution
- reduce "over-packing" by looking at "fit for purpose" specifications based on optimisation rather than the use of historical data
- reduce complexity in the packaging portfolio as this leads to higher productivity, less material and less waste.

Product Responsibility

SKG produces both packaging and material for manufacturing packaging and is a Business-to-Business company. Most packaging produced by SKG is used for distribution, transportation and retail display purposes.

Product Safety

SKG has always demonstrated a strong commitment to product safety.

SKG had no recorded incidents of non compliance with regulations in the area of product safety.

A significant part of our packaging is intended for the agro-food industry. For this sector the product responsibility is mainly to ensure the food contact safety of the final packaging.

Our Product Safety Department was set up to manage such issues, in particular for food contact end use. This department was accredited according to the ISO 17025 standard during 2009.

The knowledge developed has been transferred throughout all production operations of the Group in Europe and Latin America.

The department is equipped with a laboratory that tests the purity of papers, conducts research, and implements development projects in the area of food contact. Developments are driven by both legislation and by customer requests.

We follow the evolution of regulations and are very active at association level within the paper industry with regard to product safety issues.

European regulations that apply for packaging intended for food contact application have been revised and reinforced over recent years. Implementation of a Guide for Good Manufacturing Practice (GMP) in paper mills and converting operations producing packaging for food applications is now required by law.

GMP that fulfils the requirements of EU regulations is now implemented at all our European paper mills. Moreover, we started to have a third party certification of the paper mills against the new standard developed at the European level (CEN standard) on management of hygiene in the production of packaging for foodstuffs.

Currently, GMP is applied to our European operations only. In Colombia legislation is being prepared and will be based on EU and FDA legislation.

Driven by customer needs, some 38% of our converting plants now have processes in place and are certified by one of the following recognised hygiene codes: BRC (British Retail Consortium), AIB (American Institute of Baking) or International Good Manufacturing Practice for Corrugated and Solidboard Packaging. It is our aim to certify all our converting plants for which this is relevant (predominantly when producing food packaging).

As a result of this central organisation, we are able to monitor our progress in performance with regard to both safety and hygiene for food and this in turn allows us to respond to any market concerns.

Our Product Safety department follows food safety alerts coming from European or National authorities. Our analyses and knowledge permit us to modify our papers in response to these alerts in the shortest possible time.

Recently, the strong involvement in product safety of the entire paper-based packaging industry has been demonstrated in the phthalate alert.

Recovered paper is the source for phthalates in the paper produced from recycled fibres. These phthalates come mainly from glues used by converting plants and packers and are, therefore, present in all recovered packaging papers at trace levels. Since 2007, our own product safety laboratory regularly assesses the concentration of phthalates in our papers intended for food contact applications. All papers produced by Smurfit Kappa mills are compliant with the strictest requirements of food contact regulations in this regard. As a result of the significant involvement of our industry with its suppliers, the concentration of di-isobutyl phthalate has been reduced by two thirds since 2007 in our fully recycled grades.

REACH – Registration, Evaluation Authorisation and restriction of Chemicals

We are mainly affected by REACH as downstream users of chemicals and we therefore liaise closely with our suppliers of chemicals to ensure that they fulfil their obligation (towards REACH in particular) with regard to assurances that the chemicals we introduce in our products do not contain any "substances of high concern" in concentrations above the permitted level of 0.1%. Our centralised sourcing organisation provides us with an efficient way to accomplish this task.

Additionally, our kraft mills are themselves producers of chemicals (liquors, tall oil, tall oil soap, turpentine).

Early in 2009, SKG joined the different specific consortia which deal with the substances we need to register. Within these consortia our representatives participate actively in the preparation of the chemical safety assessment of these substances.

Extensive research on product safety is evidence of SKG's commitment to this important topic.

Planting pine seedlings in the forestry nursery, Colombia.

BUSINESS DEVELOPMENT (CONTINUED)

The due date of registration for some substances and some of our operations will be November 2010 and we are satisfied that we will be fully compliant.

SKG has appointed a REACH Implementation Specialist to ensure timely REACH compliance by all our EU operations. Duties include the careful assessment of the impact of the legislation on our business and our product portfolio.

The SKG REACH specialist's main task is also to make available for our customers complete and updated information on the position of our products with regard to this regulation and is the contact person to respond to any further request.

Working together with customers: TimSafe Boxes

13.4 million used vaccinations syringes have been safely transported in one shipping container on behalf of the UN in the last year. This is an example of a small but significant contribution made by Smurfit Kappa to the wellbeing of millions of people living in less developed regions of the world or in regions struck by disaster. The boxes are empty when sent to the location, erected at the location and filled with used syringes.

Smurfit Kappa Solid Board supplies TimSafe Safety Boxes to one of the UN organisations for the transportation of used vaccination syringes and needles, with the packaging utilising material from Smurfit Kappa Lagamill in Sweden.

With the development of a unique tool referred to as TimSafe Optimised Logistics Solution (TOLS), Smurfit Kappa has enabled this organisation to double the quantity of safety boxes loaded into any container – thereby halving the transportation cost for deliveries across the world. The packaging format involves 25 packs to a master case, which is an ideal size and weight for carrying by hand at the final destination. The master cases fit into containers with little or no wasted space.

This is but one example of packaging fulfilling its most important function of delivering vital products to where they are most needed in a safe, cost efficient, and timely manner.

Working together with customers: Blueberries from fields in Argentina to global markets

In 2009 Smurfit Kappa Argentina developed a new large corrugated container to transport blueberries all the way from the fields where they are picked to the markets of Europe, Japan and the USA. Branded as the "Harvester", the SKG pack consists of 9 separate parts, easily assembled by hand, with all the characteristics necessary for safe transportation – ventilation optimisation, bulge resistance and careful use of various board grades to meet changes of temperature throughout the distribution chain.

The result has been the elimination of the use of non-renewable materials for local deliveries and the opening up of new international markets, making use of the excess production of blueberries which formerly went to waste.

Developing sustainable packaging

The Bag-in-Box division made good progress in 2009 in further developing sustainable packaging solutions for wine, edible oil, juices, detergents and dairy products which are currently packaged in glass and/or plastic bottles. These solutions are more environmentally friendly because of improvements in storage and transport and much lower recycling costs after use. In the area of bottling of water and fruit juices in particular, these sustainable packaging solutions have a very high potential.

With plastic 3 litre bags and newly developed outer corrugated containers, there is reduced product volume and weight of 25% and consequently less transport is needed to ship these bags. Another good example of a sustainable action is the shipping of VITOP taps by train instead of by lorry, which saves a substantial amount of carbon emission.

Replacing polystyrene and plastic packaging

Work continued during 2009 to introduce new corrugated and/or solidboard packaging to replace other packaging materials, thereby providing more sustainable packaging solutions.

Examples include packaging for "wet "products such as meat, fish, frozen foods and flowers. In many instances it has been possible to replace plastic crates, other plastic packaging or composites with paper-based packaging solutions.

Likewise there were developments to produce solidboard packs for hospital waste thus encouraging more environmentally friendly incineration.

BUSINESS DEVELOPMENT (CONTINUED)

Replacing polystyrene inserts with fibreboard inserts to protect consumer durables and industrial products has also been a major area of focus and progress.

Developing our products locally to meet customers' requirements for more sustainable packaging

Part of our business development is to develop paper products that meet customers' requirements in a more sustainable way. This usually involves design and development at corrugated plants but it is also a matter of focusing our paper development towards the needs of the ultimate customer. SKG, as an integrated business, is constantly looking for ways to minimise the need to send paper on long journeys between mill and box plants. An outstanding example of this integrated focus occurred in Mexico in 2009.

Improved local fluting for produce packaging in Mexico

Corrugated packaging used for packing produce, especially for export markets, has to be of exceptional quality to perform in conditions assocated with cold chain distribution, which involves high levels of humidity and extreme temperature changes. In particular, the fluting, often referred to as the "medium", needs to have special performance characteristics to achieve adequate ECT (edge crush test) and BCT (box compression test) results.

The SKG corrugated plant at Culiacan in Mexico is heavily involved in produce packaging but until 2009 depended upon imported fluting from the USA to achieve the performance required. During 2009, a development programme with SKG mills resulted in local production of a fluting material which offers superior performance compared to the imported US sourced material and also offered improved runability on corrugators, with resulting cost benefits. This is a good example of improved sustainability, by significantly reducing the need for transporting raw materials over long distances.

Stakeholder engagement

SKG engages extensively with its key stakeholders on a range of issues in order to agree common objectives on sustainability and ways to achieve those. We have already described earlier in the report the level of interaction with employees, customers, suppliers and local communities. In the context of suppliers, it is important to note that SKG operations are encouraged to source products and services from local suppliers where possible, consistent with the need to ensure appropriate quality at the right price.

In addition, key stakeholders include shareholders and the investment community. Top management meets regularly with the investor community and shareholders to discuss a wide range of issues of mutual interest, including the Group's operational and financial performance as well as its overall strategy.

The ultimate aim of engagement with stakeholders is to reconcile their expectations and demands with the achievement by SKG of appropriate environmental and other standards and adequate economic returns.

Memberships in organisations

SKG is an active member of a number of industry and business organisations. These include the Confederation of European Paper Industries (CEPI) through various national paper organisations, the European Federation of Corrugated Board Manufacturers (FEFCO) through a number of national corrugated organisations, the International Corrugated Cases Association (ICCA), the European Solid Board Organisation (ESBO), the European sack kraft manufacturers' association (Eurokraft) and the European paper sack manufacturers' association (Eurosac). The Group CEO, Gary McGann, is on the Executive Board of CEPI and the Group COO, Anthony Smurfit, is on the board of ICCA. Several senior SKG executives are board members of CEPI Containerboard, FEFCO and ESBO. In addition, a number of executives play an active role on the committees of CEPI, FEFCO and other relevant industry organisations.

The Group CEO is a member of the ERT (European Round Table) a forum of over 40 chief executives and chairmen of major multinational companies of European parentage covering a wide range of industrial and technological sectors.

SKG's subsidiary companies are also members of a large number of national industry and business associations in both Europe and Latin America.

INPUT/OUTPUT FOR 2009
ALL EUROPEAN OPERATIONS

INPUT

WOOD AND FIBRE		
Wood (1)	4,534	k tonnes ar
Market virgin pulp	88	k tonnes ar
Recovered Paper	4,109	k tonnes ar
Paper or Board purchased	1,463	k tonnes ar
Plastic films, other plastic item (BIB)	11	k tonnes ar
Starch (all types)	261	k tonnes ar
Inorganic raw materials	263	k tonnes ar
Other organic raw materials	184	k tonnes ar

ENERGY		
Energy from fossil fuels	32,478	TJ
Energy from biofuels	1,690	TJ
Electricity from grid	1,994	GWh

WATER		
Fresh water	99	Mm^3

OUTPUT

PRODUCTION		
Papers (all grades)	4,586	ktonnes
Corrugated Packaging *	4,303	ktonnes
Board and laminated Boards *	875	ktonnes
Converted Board *	323	ktonnes
Sacks *	69	ktonnes
Other packaging	25	ktonnes

EMISSIONS TO AIR		
CO_2 fossil	1,970	ktonnes
CO_2 biogenic	2,600	ktonnes
Dust from fuels	0.88	ktonnes
SO_x from processes	1.2	ktonnes
NO_x from processes	5.3	ktonnes

ENERGY OUTPUT		
Electricity to third party	149	GWh
Thermal energy to third party	487	TJ
Biomass sold	2,305	TJ

WASTES		
Hazardous wastes	7.8	ktonnes
Non hazardous wastes sent to landfill	190	ktonnes
Non hazardous wastes recovered	433	ktonnes

DISCHARGES TO WATER		
Water released	92	Mm^3
COD	23	ktonnes
BOD	5.2	ktonnes
Total Suspended Solids	3.3	ktonnes
AOX	0.01	ktonnes
N	0.4	ktonnes
P	0.08	ktonnes

ktonnes ar: kilotonnes as received
(1): wood & sawmill chips as delivered to the mill

** partly produced with SKG paper or board*

The table reports total energy consumption of the site, taking into account the fuels used to produce electricity and/or thermal energy sold externally. This results in different figures for these parameters compared to those on pages 52 to 54. The latter pages show the energy consumption for the production of the paper or board manufactured.

INPUT/OUTPUT FOR 2009
LATIN AMERICAN OPERATIONS

INPUT

WOOD AND FIBRE		
Wood (1)	857	ktonnes ar
Market virgin pulp	3.7	ktonnes ar
Recovered Paper	827	ktonnes ar
Paper or Board purchased	169	ktonnes ar
Starch (all types)	261	ktonnes ar
Inorganic raw materials	83	ktonnes ar
Other organic raw materials	91	ktonnes ar

ENERGY		
Energy from fossil fuels	14,838	TJ
Electricity from grid	639	GWh

WATER		
Fresh water	42	Mm^3

OUTPUT

PRODUCTION		
Papers (all grades)	1,023	ktonnes
Corrugated Packaging *	765	ktonnes
Converted Board *	46	ktonnes
Sacks *	51	ktonnes

EMISSIONS TO AIR		
CO_2 fossil	952	ktonnes
CO_2 biogenic	432	ktonnes
Dust from fuels	0.1	ktonnes
SO_x from processes	1.2	ktonnes
NO_x from processes	1.3	ktonnes

ENERGY OUTPUT		
Electricity to third party	0	GWh
Thermal energy to third party	218	TJ

WASTES		
Hazardous wastes	2.5	ktonnes
Non hazardous wastes sent to landfill	154	ktonnes
Non hazardous wastes recovered	56	ktonnes

DISCHARGES TO WATER		
Water released	37	Mm^3
COD	13	ktonnes
BOD	3.6	ktonnes
Total Suspended Solids	5.1	ktonnes
AOX	N/A	
N	0.05	ktonnes
P	0.01	ktonnes

ktonnes ar: kilotonnes as received
(1): wood & sawmill chips as delivered to the mill

** partly produced with SKG paper or board*

The table reports total energy consumption of the site, taking into account the fuels used to produce electricity and/or thermal energy sold externally. This results in different figures for these parameters compared to those on pages 55 and 56. The latter pages show the energy consumption for the production of the paper or board manufactured.

CERTIFICATION OF MANAGEMENT SYSTEMS

Forestry *Latin America*		Forest Management*
CO	COLOMBIA FOREST	FSC
VE	VENEZUELA FOREST	

Wood Sourcing		Chain of Custody*
ES	CENTRAL FORESTAL	PEFC
FR	SK COMPTOIR DU PIN AQUITAINE	PEFC

Wood Products Division		Quality Management System **ISO 9001**	Environmental Management System **ISO 14001**	Chain of Custody*
FR	SK ROL PIN LABOUHEYRE	●		PEFC
	SK ROL PIN MOURENX	●		PEFC

European Mills		Quality Management System **ISO 9001**	Environmental Management System **ISO 14001**	Chain of Custody*
Virgin mills				
AT	SK NETTINGSDORFER	●	●	PEFC
ES	SK NAVARRA	●	●	PEFC
	SK NERVION	●	●	PEFC
FR	SK CELLULOSE du PIN	●	●	PEFC
SE	SK PITEÅ	●	●	FSC
SKG	SK STUROVO	●	●	PEFC
Recycled mills				
CZ	SK MORAVA	●	●	
DE	SK BADEN KARTON	●	●	
	SK CD HAUPT	●	●	FSC recycled
	SK HERZBERGER	●	●	FSC recycled
	SK HOYA	●	●	
	SK VIERSEN	●	●	
	SK ZÜLPICH	●	●	
ES	SK MENGIBAR	●	●	

** Within KPMG assurance scope. The assurance report can be found on page 65 and 66..*

European Mills		Quality Management System **ISO 9001**	Environmental Management System **ISO 14001**	Chain of Custody*
Recycled mills				
FR	SK Papier Recycle France - Papeterie d'ALFA	●	●	
	SK Papier Recycle France - Papeterie de La SEINE	●	●	
	SK Papier Recycle France - Papeterie de RETHEL	●	●	
	SK Papier Recycle France - Papeterie de SAILLAT	●	●	
IT	SK ANIA	●	●	
NL	SK SBM COEVORDEN	●	●	FSC recycled
	SK SBM HOOGKERK	●	●	FSC recycled
	SK SBM NIEUWESCHANS	●	●	FSC recycled
	SK SBM OUDE PEKELA	●	●	FSC recycled
	SK ROERMOND	●	●	
UK	SK SSK	●	●	PEFC & FSC recycled
	SK TOWNSEND HOOK	●	●	PEFC & FSC recycled

Latin American Mills		Quality Management System **ISO 9001**	Environmental Management System **ISO 14001**	Chain of Custody*
Virgin mills				
CO	SK CALI		●	FSC
VE	SK SAN FELIPE			
Recycled mills				
AR	SK CORONEL SUAREZ		● (1)	
	SKG BERNAL			
CO	SK BARRANQUILLA		●	FSC
	SK PAPELSA		●	FSC
MX	SK CERRO GORDO	●		
	SK Los REYES	●		
	SK MONTERREY	●		
VE	SK CARACAS			
	SK VALENCIA			

(1): national scheme

** Within KPMG assurance scope. The assurance report can be found on page 65 and 66.*

EUROPEAN MILLS 2009 ENVIRONMENTAL DATA

		Nettingsdorfer, AT	Navarra, ES	Cellulose du Pin, FR	Sturovo, SKG	Piteå, SE	Morava, CZ	CD Haupt, DE	Hoya, DE	Viersen, DE	Zülpich, DE	Mengibar, ES	Alfa D'Avignon, FR
		bkl, tl	tl, mg paper	bkl, wtkl, wttl, tl	sc fl	wtkl, bkl, wttl	tl, fl	fl, tl, sb, wttl	tl, fl, cart	fl, tl	fl, tl	fl, wttl, tl	tl
PRODUCTION													
	ktonnes	398	99	475	173	621	54	283	350	71	407	196	70
ENERGY													
Electricity													
Co generation	GWh	156	62	134	109	287	-	60	91	-	156	100 (1)	12 (1)
Hydro power	GWh	0.1	-	-	-	-	4.5	0.2	-	-	-	-	-
Grid supply	GWh	137	70	246	46	285	18	46	54	23	19	3 (2)	16 (2)
Total electricity	GWh	294	132	379	155	572	22	106	145	23	175	103	28
Fuels													
Biofuels	TJ fuel	3,385	1,989	8,099	512	9,001	10	34	59	-	190	22	-
Fossil fuels	TJ fuel	1,104	483	690	2,614	262	284	1,397	2,220	313	2,777	1,495	453
Total fuels	TJ fuel	4,488 (3)	2,472	8,789	3,127 (3)	9,264 (3)	293 (3)	1,430	2,278	313	2,967	1,516	453
WATER WITHDRAWAL													
Surface	m^3	9.6	5.1	9.5	11	32	0.3	0.1	-	-	1.4	1.2	0.8
Ground	m^3	-	-	0.9	0.1	-	0.0	0.5	2.3	0.3	0.4	0.0	-
Grid	m^3	0.0	0.3	0.0	-	0.1	0.0	0.0	0.3	0.0	0.0	0.1	-
Total	m^3	9.7	5.4	10	12	33	0.3	0.6	2.5	0.3	1.8	1.4	0.8
DISCHARGES													
To air													
CO_2 fossil direct	ktonnes	67	33	37	218	25	16	78	124	18	190	84	26
CO_2 fossil indirect	ktonnes	28	27	22	10	11	10	20	23	10	8.3	1.1	1.4
CO_2 biogenic	ktonnes	302	197	772	42	883	0.7	2.5	4.4	-	16	1.6	-
Dust	tonnes	39	19	21	18	374	0.1	0.1	0.3	-	0.0	-	0.7
NO_x as NO_2	tonnes	236	122	994	563	742	8.8	62	88	8.0	196	443	26
SO_2	tonnes	20	34	10	693	111	1.1	4.4	1.1	-	67	16	1.0
To water													
Process water	Mm^3	5.4	3.2	9.7	11	12	0.3	0.3	2.0	0.3	-	0.9	0.6
Cooling water	Mm^3	6.1	1.9	-	-	21	-	0.1	0.1	-	1.0	-	-
COD	tonnes	*6,223*	1,426	3,893	1,475	1,471	27	91	295	*N/A*	-	234	44
BOD	tonnes	*N/A*	767	1,055	141	104	2.5	5.6	18	*N/A*	-	39	2.4
Total Suspended Solids	tonnes	*203*	190	742	467	118	4.2	N/A	N/A	*N/A*	-	85	5.6
Total N	tonnes	*39*	N/A	64	34	40	4.7	0.5	12	*N/A*	-	11	N/A
Total P	tonnes	*11*	N/A	17	9.8	11	0.2	0.3	1.4	*N/A*	-	1.8	2.1
AOX	tonnes	*0.4*	N/A	2.8	0.7	0.9	0.0	0.0	0.2	*0.1*	-	1.9	N/A
Sold wastes													
Landfill	tonnes	4,327	2,825	24,139	18,521	8,634	4,370	-	-	-	4,696	26,541	-
Recovery	tonnes	14,797	7,957	24,585	25,977	32,024	2,188	22,991	18,213	5,815	11,637	976	5,473
Hazardous	tonnes	153	8.8	194	28	78	1.4	9.0	88	3.0	69	12	-

bkl: brown kraftliner
cart: carton board
fl: recycled flute
mg: machine glazed

N/A: not available
sb: solidboard
sc fl: semi-chemical flute

tl: testliner
wtkl: white top kraftliner
wttl: white top testliner

(1): CHP is outsourced
(2): net electricity export by CHP
(3): part of heat exported
water emissions in grey italic: external water treatment

	Rethel, FR	Saillat, FR	La Seine, FR	Ania, IT	Roermond, NL	SSK, UK	Townsend Hook, UK	Badenkarton, DE	Herzberger, DE	Oude Pekela, NL	Hoogkerk, NL	Coevorden, NL	Nieuweschans, NL	Nervion, ES	Sum all mills
	tl	fl, tl	fl	fl, tl	tl, fl	tl, fl	fl, tl	cart	sb	sb	sb	sb	sb	sack paper, bkl	
	62	189	67	200	488	189	217	144	237	46	87	93	115	129	5,461
	-	30 (1)	34 (1)	36	115	64	101 (1)	65	83	17	-	18	-	79	1,811
	-	2.9	-	-	-	-	-	2.1	1.4	-	-	-	-	-	11.1
	22	54 (2)	6 (2)	39	33	2.5	- (2)	-	10	- (2)	18	6.5	35	92	1,281
	22	87	40	74	148	67	101	67	95	17	18	25	35	172	3,103
	-	18	-	-	143	-	-	-	-	-	-	-	3.6	2,590	26,054
	287	1,183	784	1,216	2,645	1,166	2,252	1,184	1,492	345	394	392	511	116	28,057
	287	1,200	784	1,216	2,788	1,166	2,252	1,184 (3)	1,492 (3)	345	394	392	514	2,706	54,111
	-	1.7	1.1	1.7	2.1	-	1.2	2.3	2.8	-	0.4	0.3	0.3	2.4	88
	0.4	-	-	-	-	0.9	0.7	-	0.0	0.2	-	0.2	-	-	6.9
	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	1.4
	0.4	1.7	1.1	1.7	2.2	1.0	1.9	2.4	2.9	0.2	0.4	0.6	0.5	2.4	96
	16	68	45	68	150	66	126	66	85	20	22	22	29	5.5	1,705
	2.0	4.9	0.6	15	13	1.2	-	-	4.2	-	7.4	2.6	14	36	274
	-	1.3	-	-	10	-	-	-	-	-	-	-	0.3	254	2,487
	0.1	-	-	-	-	-	-	-	1.3	-	-	-	-	12	486
	22	62	222	78	121	120	511	58	72	19	7.8	16	15	303	5,116
	1.5	0.3	0.7	-	17	-	-	0.5	20	-	-	-	-	1.4	1,001
	0.4	1.4	0.7	1.5	1.7	0.6	1.2	1.6	1.4	0.1	0.3	0.1	0.3	1.8	59
	-	-	0.1	-	-	-	-	0.6	1.3	-	-	0.3	-	-	32
	96	686	*N/A*	184	247	*3,226*	134	206	143	20	50	*952*	61	*889*	22,072
	11	158	*N/A*	21	6.9	*2,099*	15	16	8.5	0.7	1.6	*414*	2.4	*N/A*	4,887
	7.4	300	*N/A*	52	23	*838*	30	16	15	2.9	2.8	*17*	4.1	*77*	3,201
	3.7	65	*N/A*	19	32	*11*	0.9	0.9	1.5	1.2	2.1	*3.1*	1.9	*N/A*	348
	0.3	10	*N/A*	2.7	2.7	*4.3*	0.4	0.1	0.2	0.1	0.3	*0.2*	0.3	*N/A*	77
	N/A	N/A	*N/A*	0.3	N/A	*N/A*	0.0	0.2	0.1	0.1	N/A	*0.1*	N/A	*N/A*	7.9
	2,070	12,347	6,454	25	4,096	18,034	31,888	-	468	120	-	-	-	11,023	180,579
	3,173	1,460	25,596	20,858	32,417	4,844	4,852	16,938	19,849	9,619	2,061	4,728	9,286	54,853	383,166
	2.0	15	6.7	5.8	-	15	161	254	9.0	5.7	5.0	25	8.5	12	1,168

EUROPEAN OPERATIONS 2009

		PAPER & BOARD MILLS	INTEGRATED CORRUGATED OPERATIONS	OTHER PACKAGING CONVERTERS	OTHER OPERATIONS	SUM EU OPERATIONS
PRODUCTION						
	ktonnes	5,461	4,055	665	1,811	
ENERGY						
Electricity						
Co generation	GWh	1,811	19	0.3	-	**1,831**
Hydro power	GWh	11.1	-	0.2	-	**11**
Grid supply	GWh	1,281	455	93	16	**1,845**
Total electricity	GWh	3,103	475	93	16	**3,687**
Fuels						
Biofuels	TJ fuel	26,054	117	-	436	**26,608**
Fossil fuels	TJ fuel	28,057	4,102	195	118	**32,471**
Total fuels	TJ fuel	54,111	4,219	195	554	**59,079**
WATER WITHDRAWAL						
Surface	Mm^3	88	0.1	-	-	**88**
Ground	Mm^3	6.9	0.4	0.0	0.1	**7.5**
Grid	Mm^3	1.4	1.4	0.2	0.0	**3.0**
Total	Mm^3	96	1.9	0.2	0.2	**99**
DISCHARGES						
To air						
CO_2 fossil direct	ktonnes	1,705	243	15	7.4	**1,971**
CO_2 fossil indirect	ktonnes	274	143	28	2.6	**448**
CO_2 biogenic	ktonnes	2,487	12	-	49	**2,548**
Dust	tonnes	486	11	0.5	386	**883**
NO_x as NO_2	tonnes	5,116	112	5.2	25	**5,257**
SO_2	tonnes	1,001	172	5.8	4.6	**1,183**
To water						
Process water	Mm^3	59	0.8	0.1	0.0	**60**
Cooling water	Mm^3	32	0.2	0.0	0.0	**32**
COD	tonnes	22,072	1,182	N/A	20	**23,274**
BOD	tonnes	4,887	287	N/A	6.9	**5,180**
Total Suspended Solids	tonnes	3,201	140	N/A	4.0	**3,345**
Total N	tonnes	348	17	N/A	N/A	**365**
Total P	tonnes	77	1.4	N/A	N/A	**79**
AOX	tonnes	7.9	0.1	N/A	N/A	**8.0**
Solid wastes						
Landfill	tonnes	180,579	6,028	1,103	2,660	**190,370**
Recovery	tonnes	383,166	41,207	7,268	1,333	**432,974**
Hazardous	tonnes	1,168	5,060	1,497	85	**7,811**

N/A: not available

LATIN AMERICAN 2009 ENVIRONMENTAL DATA

		Bernal, Argentina	Suarez, Argentina	Cali, Colombia	Barranquilla, Colombia	Barbosa, Colombia	Los Reyes, Mexico	Cerro Gordo, Mexico	Monterrey, Mexico	Caracas, Venezuela	Valencia, Venezuela	San Felipe, Venezuela	Summ 11 mills
		fl, tl	fl, tl	P&W, cart, sack paper, bkl, tl, sc fl, wttl, wtkl	tl, fl	tl, fl	tl, fl	tl, wttl, fl	fl, tl	cart	cart	bkl, fl, sc fl	
PRODUCTION													
	ktonnes	63	50	228	59	64	77	268	36	16	51	111	1,023
ENERGY													
Electricity													
Co generation	GWh	-	-	193	35	-	-	-	-	-	25	89	342
Hydro power	GWh	-	-	-	-	-	-	-	-	-	-	-	-
Grid supply	GWh	25	19	120	2.3	32	51	151	20	11	21	87	537
Total electricity	GWh	25	19	313	37	32	51	151	20	11	45	176	880
Fuels													
Biofuels	TJ fuel	-	-	3,823	-	-	-	-	-	-	-	713	4,536
Fossil fuels	TJ fuel	407	273	4,963	1,050	337	678	1,366	205	159	1,297	3,054	13,790
Total fuels	TJ fuel	407 (1)	273	8,786	1,050	337	678	1,366	205	159 (1)	1,297	3,767	18,327
WATER WITHDRAWAL													
Surface	Mm^3	0.9	-	29	1.1	0.6	-	-	-	0.6	-	-	32
Ground	Mm^3	-	0.4	0.3	-	-	0.4	1.6	0.2	-	0.7	4.3	7.9
Grid	Mm^3	-	-	-	0.0	-	-	-	0.0	0.2	0.3	-	0.6
Total	Mm^3	0.9	0.4	30	1.1	0.6	0.4	1.6	0.2	0.8	1.0	4.3	41
DISCHARGES													
To air													
CO_2 fossil direct	ktonnes	23	15	386	59	28	38	78	12	8.9	73	170	891
CO_2 fossil indirect	ktonnes	8.6	6.6	15	0.3	4.0	28	82	11	2.4	4.3	18	181
CO_2 biogenic	ktonnes	-	-	364	-	-	-	-	-	-	-	68	432
Dust	tonnes	-	3.4	62	44	3.0	1.4	1.3	-	-	-	-	116
NO_x as NO_2	tonnes	20	10	221	11	27	11	833	8.4	16	14	104	1,289
SO_2	tonnes	0.1	0.2	1,042	34	84	-	0.4	-	-	-	8.1	1,169
To water													
Process water*	Mm^3	0.8	0.3	28	0.9	0.4	0.1	0.6	0.2	0.8	0.7	3.8	37
Cooling water*	Mm^3	-	-	-	-	-	-	-	-	-	-	-	-
COD	tonnes	491	117	6,712	1,601	1,234	*21*	272	*125*	531	138	1,599	12,841
BOD	tonnes	164	20	1,274	832	643	*0.16*	21	*63*	201	24	244	3,485
Total Suspended Solids	tonnes	93	7.7	2,977	523	62	*5.0*	26	*158*	483	46	434	4,815
Total N	tonnes	N/A	0.3	N/A	N/A	N/A	*0.4*	4.7	*N/A*	N/A	N/A	33	38
Total P	tonnes	N/A	0.3	N/A	0.2	N/A	*0.017*	0.3	*1.1*	0.5	0.7	3.3	6.3
Solid wastes													
Landfill	tonnes	5,720	1,784	90,127	2,979	2,456	53	17,308	3,906	252	15,546	11,195	151,326
Recovery	tonnes	1.5	3,395	2,930	44	759	2,379	23,942	1,347	369	138	6,838	43,733
Hazardous	tonnes	4.7	10	195	5.5	9.4	3.2	13	3.9	5.0	14	1,898	2,162

bkl: brown kraftliner
cart: carton board
fl: recycled flute

N/A: not available
P&W: printing and writing grade
sc fl: semi-chemical flute

tl: testliner
wttl: white top testliner
wtkl: white top kraftliner

(1): part of heat exported
water emissions in grey italic: external water treatment

** Breakdown between process and cooling water not available.*

LATIN AMERICAN OPERATIONS 2009

		PAPER & BOARD MILLS	INTEGRATED CORRUGATED AND OTHER OPERATIONS	**SUM LA OPERATIONS**
PRODUCTION				
	ktonnes	1,023	2,150	
ENERGY				
Electricity				
Co generation	GWh	342	-	**342**
Hydro power	GWh	-	-	**-**
Grid supply	GWh	537	102	**639**
Total electricity	GWh	880	102	**982**
Fuels				
Biofuels	TJ fuel	4,536	-	**4,536**
Fossil fuels	TJ fuel	13,790	805	**14,596**
Total fuels	TJ fuel	18,327	805	**19,132**
WATER WITHDRAWAL				
Surface	Mm^3	32	0.0	**32**
Ground	Mm^3	7.9	0.5	**8.4**
Grid	Mm^3	0.6	0.3	**0.9**
Total	Mm^3	41	0.9	**42**
DISCHARGES				
To air				
CO_2 fossil direct	ktonnes	891	48	**939**
CO_2 fossil indirect	ktonnes	181	41	**221**
CO_2 biogenic	ktonnes	432	-	**432**
Dust	tonnes	116	2	**118**
NO_x as NO_2	tonnes	1,289	19	**1,309**
SO_2	tonnes	1,169	23	**1,192**
To water				
Process water	Mm^3	37	0.2	**37**
Cooling water	Mm^3	-	0.0	**0.0**
COD	tonnes	12,841	172	**13,012**
BOD	tonnes	3,485	78	**3,564**
Total Suspended Solids	tonnes	4,815	301	**5,116**
Total N	tonnes	38	7.3	**45**
Total P	tonnes	6.3	1.6	**7.9**
Solid wastes				
Landfill	tonnes	151,326	3,054	**154,381**
Recovery	tonnes	43,733	11,798	**55,531**
Hazardous	tonnes	2,162	316	**2,478**

TOTAL GROUP OPERATIONS 2009

ENERGY		
Electricity		
Co generation	GWh	2,173
Hydro power	GWh	11
Grid supply	GWh	2,484
Total electricity *	GWh	4,669
Fuels		
Biofuels	TJ fuel	31,144
Fossil fuels	TJ fuel	47,067
Total fuels*	TJ fuel	78,211
WATER WITHDRAWAL		
Surface	Mm3	121
Ground	Mm3	16
Grid	Mm3	3.9
Total*	Mm3	141
DISCHARGES		
To air		
CO_2 fossil direct*	ktonnes	2,909
CO_2 fossil indirect*	ktonnes	669
CO_2 biogenic*	ktonnes	2,980
Dust	tonnes	1,000
NO_x as NO_2	tonnes	6,566
SO_2	tonnes	2,375
To water		
Process water	Mm3	97
Cooling water	Mm3	32
COD*	tonnes	36,286
BOD	tonnes	8,744
Total Suspended Solids*	tonnes	8,461
Total N	tonnes	410
Total P	tonnes	87
Solid wastes		
Landfill	tonnes	344,751
Recovery	tonnes	488,506
Hazardous	tonnes	10,289

** Within KPMG assurance scope. The assurance report can be found on page 65 and 66..*

RELATIONSHIP TO GRI GUIDELINES

The Global Reporting Initiative (GRI) is a large worldwide network of experts whose mission is to provide the global standards for sustainability reporting.

The GRI network has developed a Sustainability Reporting Framework, the core of which is Sustainability Reporting Guidelines. The Guidelines consist of principles for defining report content and ensuring the quality of reported information as well as standard disclosures comprising performance indicators and other disclosure items. These guidelines provide an internationally recognised framework for voluntary reporting on an organisation's economic, environmental and social performance.

The index below has been prepared using the current GRI Sustainability Reporting Guidelines (version G3) and it provides a list of the GRI indicators reported by SKG for 2009. Core indicators that are not measured are also included in the table. The index refers to information in our 2009 Sustainable Development Report (SDR), our 2009 Annual Report (AR) and our website: www.smurfitkappa.com.

We declare that our 2009 reporting applies to a GRI "B+" application level. A "B" application level requires reporting on a specified range of criteria, the management approach to disclosures for each Indicator category and a minimum of 20 performance indicators including at least one from each of Economic, Environment, Human Rights, Labour, Society and Product Responsibility. For the 2009 report, we decided to seek assurance from an external party which expands the application level to "B+".

We will continue to work to extend the number of GRI indicators for which we can report full compliance with the aim of achieving an "A+" application level over time.

GRI-G3	Description	Source/comment	Page(s)
Profile			
1.1	CEO Statement on relevance of sustainability to the organisation and its strategy	SDR	3
1.2	Description of key impacts, risks, and opportunities	SDR	9-11
Organisational Profile			
2.1	Name of the organisation	SDR	Cover
2.2	Primary brands, products, and/or services	SDR AR	2 4-5
2.3	Operational structure of the organisation	Website	
2.4	Location of organisation's headquarters	SDR	Inside back cover
2.5	Countries where the organisation operates	AR	4-5
2.6	Nature of ownership and legal form	AR	152, 155
2.7	Markets served	Website	
2.8	Scale of the reporting organisation	SDR AR	42 4-5
2.9	Significant changes during the reporting period in size, structure, ownership	AR	10-13
2.10	Awards received in the reporting period	Website	
Report Parameters			
3.1	Reporting period (e.g., fiscal/calendar year) for information provided	SDR	3
3.2	Date of most recent previous report (if any)	SDR	1, 3
3.3	Reporting cycle (annual, biennial, etc.)	SDR	3

GRI-G3	Description	Source/comment	Page(s)
3.4	Contact point for questions regarding the report or its contents	SDR	Inside back cover
3.5	Process for defining report content	SDR	7
3.6	Boundary of the report	SDR	7
3.7	Any specific limitations on the scope or boundary of the report	SDR	7
3.8	Basis for reporting on joint ventures, subsidiaries, etc.	SDR	7
3.9	Data measurement techniques and the bases of calculations	SDR	7, 22
3.10	Explanation of effect of re-statements of information provided previously	SDR	7
3.11	Significant changes in scope, boundary, or measurement methods	SDR	7, 22
3.12	Table identifying the location of the Standard Disclosures in the report	SDR	58-62
3.13	Policy and current practice on seeking external assurance for the report	SDR	3, 58, 65-66
Governance, Commitments, and Engagement			
4.1	Governance structure of the organisation	AR	28-35
4.2	Indicate if Chair of the Board is also an executive officer	AR	29
4.3	The Board members that are independent and/or non-executive members	AR	28
4.4	Ways for shareholders and employees to provide recommendations or direction to the Board	SDR AR	30-31 32
4.5	Link between compensation of Board and management with SDR performance	AR	38
4.6	Processes in place for the Board to ensure conflicts of interest are avoided	Website	
4.7	Process for determining the qualifications and expertise of the Board	AR	30-31
4.8	Internally developed statements of mission or values, codes of conduct, and principles	SDR AR Website	5 28-33
4.9	Procedures of the Board for overseeing identification and management of performance	AR	30
4.10	Processes for evaluating the Board's own SDR performance	AR	30
4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organisation	AR	33-35
4.12	Externally developed economic, environmental and social charters & principles	SDR	5
4.13	Memberships in associations	SDR	47
4.14	List of stakeholder groups engaged by the organisation	SDR	46-47
4.15	Basis for identification and selection of stakeholders with whom to engage	SDR	46-47
4.16	Approaches to stakeholder engagement	SDR	30-31, 36, 46-47
4.17	Key topics and concerns raised through stakeholder engagement	SDR	30-31, 36

RELATIONSHIP TO GRI GUIDELINES (CONTINUED)

GRI-G3	Description	Source/comment	Page(s)
Economic			
	Disclosure on management approach	SDR AR	7-8 58-59, 74-77
EC1	Direct economic value generated and distributed	AR	86-88
EC2	Financial implications and other risks and opportunities for the organisations's activities due to climate change	Not yet measured	
EC3	Coverage of the organisation's defined benefit plan obligations	AR	74-75, 89, 116-122
EC4	Significant financial assistance received from government	No significant assistance	
EC6	Policy, practices and proportion of spending on locally-based suppliers at significant locations of operation	SDR	46
EC7	Local hiring and proportion of senior management hired from the local community at significant locations of operation	Not accurately measured	
EC8	Development and infrastructure provided primarily for public benefit	Not applicable	
Environmental			
	Disclosure on management approach	SDR	3, 7, 13, 22
EN1	Materials used by weight or volume	SDR	48-49
EN2	Percentage of materials used that are recycled input materials	SDR	6
EN3	Direct energy consumption by primary energy source tables	SDR	52-57
EN5	Energy saved due to conservation and efficiency improvements	SDR	20-21
EN6	Energy-efficient or renewable energy products and services	SDR	20-21
EN8	Total water withdrawal by source	SDR	52-57
EN10	Percentage and total volume of water recycled and reused	SDR	24, 52-57
EN11	Location and size of land by protected areas and areas of high biodiversity value	SDR Website	20
EN12	Description of significant impacts of activities, products and services on biodiversity	SDR	19
EN16	Total direct and indirect greenhouse gas emissions by weight	SDR	52-57
EN17	Other relevant indirect greenhouse gas emissions by weight	Not measured	
EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved	SDR	22-24, 26
EN19	Emissions of ozone-depleting substances by weight	No significant emissions	
EN20	NO_x, SO_x, and other significant air emissions by type and weight	SDR	52-57
EN21	Total water discharge by quality and destination	SDR	52-57
EN22	Total weight of waste by type and disposal method	SDR	52-57
EN23	Total number and volume of significant spills	SDR	27
EN24	Weight of waste deemed hazardous	SDR	52-57
EN25	Details of water and habitats significantly affected by discharges of water and runoff	No significant issues	
EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation	Not applicable	

GRI-G3	Description	Source/comment	Page(s)
EN27	Percentage of products sold and their packaging materials that are reclaimed by category	High level of recycling but difficult to measure accurately	
EN28	Significant fines and non-monetary sanctions for non-compliance with environmental law	SDR	16
EN29	Significant environmental impact from transport	SDR	23-24
Labour Practices			
	Disclosure on management approach	SDR	8, 13, 32-34
LA1	Total workforce by employment type and region	SDR	32-33
LA2	Total number of employees by age group, gender, and region	SDR	32-33
LA4	Percentage of employees covered by collective bargaining agreements	Not accurately measured	
LA5	Minimum notice period(s) regarding significant operational changes	Not accurately measured	
LA7	Rates of injury, occupational diseases, lost days and absenteeism, and number of work-related fatalities by region	SDR	34-35
LA8	Education, training, counselling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases	Not applicable in SKG countries of operation	
LA10	Average hours hours of training per year per employee by employee category	Not accurately measured	
LA13	Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity	AR SDR	26-27 32-33
LA14	Ratio of basic salary of men to women by employee category	Same job, same pay	
Human Rights			
	Disclosure on management approach	SDR	8, 13
HR1	Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening	Not measured	
HR2	Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken	Not measured	
HR4	Total number of incidents of discrimination and actions taken	SDR Website	29
HR5	Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights	Not measured	
HR6	Operations with significant risk for incidents of child labour, and measures taken to eliminate	No known issues	
HR7	Operations with significant risk of forced or compulsory labour, and measures to eliminate	No known issues	
HR8	Percentage of security personnel trained in the organisation's policies or procedures concerning aspects of human rights that are relevant to operations	Not applicable	

RELATIONSHIP TO GRI GUIDELINES (CONTINUED)

GRI-G3	Description	Source/comment	Page(s)
HR9	Incidents of violations involving rights of indigenous people and actions taken	No significant issues	
Social			
	Disclosure on management approach	SDR	8, 13, 36
SO1	Nature, scope, and effectiveness of any programmes and practices that assess and manage the impacts of operations on communities, including entering, operating, and exiting	SDR	36-39
SO3	Percentage of employees trained in organisation's anti-corruption policies and procedures	Not measured	
SO4	Actions taken in response to incidents of corruption	No significant issues	
SO5	Public policy positions and participation in public policy development and lobbying	SKG takes public positions that are relevant to its operations	
SO6	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country	No significant donations	
SO7	Total number of legal actions for anti-competitive behaviour, anti-trust, and monopoly practices and their outcomes	No significant issues	
SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	No significant issues	
Product Responsibility			
	Disclosure on management approach	SDR	11, 13, 42
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	Not applicable	
PR2	Incidents of non-compliance with regulations and voluntary codes on health & safety impacts of products and services during their life cycle, by type of outcomes	SDR	42
PR3	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements	SDR	42
PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labelling, by type of outcomes	No incidents reported	
PR6	Programmes for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship	Not applicable to paper-based packaging sector	
PR7	Total number of incidents of non-compliance with regulations and voluntary codes on marketing communications, including advertising, promotion, and sponsorship by type of outcomes	No incidents reported	
PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	No incidents reported	
PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services	No incidents reported	

BUSINESS IN THE COMMUNITY IRELAND

External Commentary – Smurfit Kappa Group plc
Sustainable Development Report 2009

This is the third full-spectrum report issued by Smurfit Kappa Group and there are several new elements featured in the report that clearly show how the process of corporate responsibility reporting is progressing in the company and how the reporting is progressively being used as a management tool within the company.

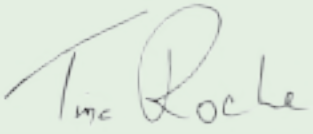
In relation to some of the formal elements of the report, it is worth noting that the report has been subject to third party assurance, a growing trend within global companies and in this sense we look forward to understanding how the external assurance is being used not only as a source of external endorsement but mainly as a learning process to optimise practices and procedures. Secondly, this report has been prepared in accordance to the G3 Guidelines of the Global Reporting Initiative, a key tool for benchmarking in sustainability reporting and we can see the progress in the quality and type of information presented that has increased the overall G3 score of this report to B+ from C last year. Finally, we welcome the incorporation of Smurfit Kappa Group to the United Nations Global Compact. As one of the few Irish headquartered global companies in the Global Compact, we look forward to the communications on progress to be issued in coming years and for further evidence of the impact that company practices have on the fundamental Global Compact principles, especially around human rights, labour standards and anti-corruption.

In relation to the content and structure of the report, there are several additions and new sections of importance. Key to keeping a balance between the various areas or pillars of corporate responsibility is the development of a section on Business Development, with information on the marketplace dimensions of product and service development including efforts to reduce the carbon footprint of products and relations with customers and business partners. This is critical as Smurfit Kappa Group is increasingly seen as a key partner for the delivery of the sustainability targets of its customers. Another development in this report is the section on sustainability governance and the incorporation of a sustainability component to the calculation of the annual incentive plan at management level. We look forward to future communications addressing the impact of this initiative on company performance. The 2009 report also incorporates case studies that present a particular practice and its impact for clear understanding of specific initiatives in place, especially around environmental activities. Also in this section we note the incorporation of quotes of external endorsement that add value to the communication and to the impact of the practices described, particularly the endorsement by the Carbon Trust in the UK.

Environmental performance is critical for the sustainability of the Group and it is encouraging to see progress on targets under energy, including use of renewable energy and combined heat and power as well as water consumption and biodiversity. This is coupled with ISO 14001 environmental certification of production mills in Europe and chain of custody certification of all virgin mills. On other areas of the business we note good examples of initiatives in practice such as the learning and skills agreement in the UK with the Unite trade union.

There are indeed several challenges ahead for the company, most notably in health & safety performance and in the incorporation of measurable performance targets under key workplace and community areas that we would recommend are addressed in future reports. We would also be keen to see further evidence of how this report is used as a tool to promote the company and its best practices and how it promotes a process of two-way communication with key stakeholders.

We welcome the publication of this report and commend the company and in particular their management and Sustainability Working Group for advancing the responsible business agenda across the organisation.



Tina Roche
Chief Executive
Business in the Community Ireland

Business in the Community Ireland

UN GLOBAL COMPACT

In May 2010, SKG became a participant in the United Nations Global Compact, a worldwide corporate citizenship initiative, joining a network of more than 6,500 businesses and other participants in promoting ten core principles in the areas of human rights, labour, environment and anti-corruption. These principles are listed below.

As a part of this commitment, SKG will report on the company's corporate responsibility activities and performance in an annual Communication on Progress (COP), using the 2010 Sustainable Development Report as a starting point for this communication.

The ten principles of the United Nations Global Compact are as follows:-

HUMAN RIGHTS

Principle 1 Businesses should support and respect the protection of internationally proclaimed human rights; and

Principle 2 make sure that they are not complicit in human rights abuses.

LABOUR

Principle 3 Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;

Principle 4 the elimination of all forms of forced and compulsory labour;

Principle 5 the effective abolition of child labour; and

Principle 6 the elimination of discrimination in respect of employment and occupation.

ENVIRONMENT

Principle 7 Businesses are asked to support a precautionary approach to environmental challenges;

Principle 8 undertake initiatives to promote greater environmental responsibility; and

Principle 9 encourage the development and diffusion of environmentally friendly technologies.

ANTI-CORRUPTION

Principle 10 Businesses should work against corruption in all its forms, including extortion and bribery.

INDEPENDENT ASSURANCE REPORT TO SMURFIT KAPPA GROUP PLC

Introduction

We were engaged by the management of Smurfit Kappa Group plc (SKG) to provide assurance on the 2009 data for selected environmental indicators in the SKG Sustainable Development Report 2009 (further referred to as the 'Report'). The Report, including the identification of material issues, is the responsibility of the Company's management. Our responsibility is to issue an independent assurance report.

Our engagement was designed to provide limited assurance on whether the 2009 data for the following environmental indicators are, in all material respects, presented in accordance with SKG's reporting principles:

- Energy consumption: total electricity and total fuels (page 57);
- CO_2 emissions: CO_2 fossil direct, CO_2 fossil indirect and CO_2 biogenic (page 57);
- Water withdrawal: total water withdrawal (page 57);
- Water discharge: Chemical Oxygen Demand (COD) and Total Suspended Solids (page 57);
- Fibre certification (page 18 and pages 50-51).

The data for these indicators are shown by an asterisk (*) on the pages mentioned above, together with the text 'Within KPMG assurance scope'.

Procedures performed to obtain a limited level of assurance are aimed at determining the plausibility of information and are less extensive than those for a reasonable level of assurance.

Reporting criteria and assurance standard

SKG applies the Sustainability Reporting Guidelines of the Global Reporting Initiative (G3) together with internal corporate guidelines, as detailed in approach to sustainability reporting in the section Scope of the Report on page 7. It is important to view the performance data within the assurance scope in the context of this explanatory information. We believe that these criteria are suitable in view of the purpose of our assurance engagement.

We conducted our engagement in accordance with the International Standard for Assurance Engagements (ISAE) 3000: Assurance Engagements other than Audits or Reviews of Historical Financial Information, issued by the International Auditing and Assurance Standards Board. This standard requires, amongst others, that the assurance team members possess the specific knowledge, skills and professional competencies needed to understand and review the information and that they comply with ethical requirements, including independence requirements.

Work undertaken

We made inquiries, primarily of persons responsible for the preparation of data for the selected environmental indicators, and we applied analytical and other evidence gathering procedures, as appropriate. These procedures included:

- Reviewed the systems and processes for collecting and processing the information for the selected environmental indicators as well as internal controls at corporate level relating to this information.
- Interviewed relevant staff at corporate level responsible for the reported information on the selected indicators.
- Reviewed the data submitted by all sites for central aggregation for the selected environmental indicators, together with an assessment of the indicator calculations and the quality of the data validation process at corporate level.
- Reviewed the reliability of the local data and the design and implementation of local validation processes at four sites: Facture (France), Herzberg am Harz (Germany), Roermond (the Netherlands) and Cali (Colombia).

INDEPENDENT ASSURANCE REPORT TO SMURFIT KAPPA GROUP PLC (CONTINUED)

Conclusion

Based on the procedures performed, as described above, nothing came to our attention to indicate that the 2009 data for the selected indicators are not, in all material respects, presented in accordance with the reporting criteria, as described in the section Scope of the Report on page 7.

Other observations

Without affecting the conclusions presented above, we would like to draw the readers' attention to the following:

The environmental data management systems at the operations of SKG can be further enhanced in terms of documenting data management procedures and recording the results of these procedures, such as the data review by local management. We recommend improving the local environmental data management systems to further strengthen the monitoring of performance against sustainability goals.

Amstelveen, 18 June 2010
KPMG Sustainability

W.J. Bartels
Partner

GLOSSARY

AOX	Absorbable Organic Halogens: amount of organic compounds containing chlorine and other halogens. AOX can be produced during bleaching of pulp when using halogenated bleaching agents.
Bar	The bar is a measurement unit of pressure, equal to ten newtons per square centimetre. The preferred SI unit of pressure is the pascal (Pa), which is one newton per square metre. 1 bar is equal to 100,000 Pa. The bar is still widely used by the general public and in industry because 1 bar is so close to atmospheric pressure and for everyday purposes can be taken as equivalent.
BOD	Biochemical Oxygen Demand (one element of the COD, unit: mg O_2/litre) refers to the level of oxygen uptake by micro-organisms in a sample of water measured over a period of five days.
Biodiversity	General term to describe the variety of life forms (flora and fauna) in an ecosystem.
Biofuels	Fuels coming from biomass (wood rejects, bark, black liquor produced during the production of virgin pulps, pitch oil, biomass part of mixed wastes, biogas produced during the anaerobic treatment of water).
Black liquor	Liquid residue from pulping that contains organic compounds (like lignin). This residue is burnt in paper mills to produce energy. The energy recovered is classified as renewable as it is coming from biomass.
Carbon Trust	The Carbon Trust is an independent not for profit company set up by the UK Government with support from business to take the lead on low carbon technology. Carbon Trust International Limited, one of the Carbon Trust subsidiaries, provides services to international companies in calculating and certifying carbon footprints of their products.
CEN	Comite Européen de Normalisation. The European Committee for Standardisation is major provider of European standards and technical specifications.
CEPI	CEPI, the Confederation of European Paper Industries, is located in Brussels. It is a non profit organisation regrouping the European pulp and paper producers. CEPI's mission is to promote the members' business sector by taking specific actions and analysing activities in the areas of environment, energy, forestry, recycling and research.
CHP	Combined Heat and Power: A combination of a boiler and a gas and/or steam turbine that simultaneously produces electricity and thermal energy (steam) by burning fuels. This system is considered to be the most efficient technology in industries using both steam and electricity. When mills sell part of their produced steam to an external party or have net electricity export (selling more to an external party than purchasing), the consumption of fuel and emissions reported for this mill is adjusted to report only that part used to produce paper. This adjustment is based on a reference heat boiler with an efficiency of 90%, which is also used by CEPI and the European Commission for EU ETS benchmark calculations.
CHP (outsourced)	A CHP installation, belonging to an external party, located at or near an SKG site for delivering electricity and steam to the SKG production facility. All fuels and electricity used for the production of paper as well as emissions related to that are included in the figures for the SKG production facility.
COD	Chemical Oxygen Demand is the most commonly used test to measure the amount of organic compounds in water (unit: mg O_2/litre). The result indicates the level of all organic compounds that can be oxidised by a strong oxidising agent.
CoC	Chain of Custody Certification applying to wood-based products. A certified chain of custody is a way of proving that an enterprise has a system to track the wood flow in the production process all the way from the certified forests to a workshop or factory. Every enterprise is a link in the overall 'chain' for the wood from forest to the finished product. All enterprises dealing with wood need to be certified to ensure that this 'chain' is complete.

GLOSSARY (CONTINUED)

Co-generation	Electricity generated by a CHP system.
Containerboard	Papers and boards mainly used in the manufacture of corrugated board. They are made from virgin or recovered fibres. Included are Kraftliner, Testliner, semi-chemical fluting and recycled fluting.
Corrugated board	Structured board made by a corrugator formed by gluing one fluting to two flat-facing sheets of containerboard (Kraftliner or Testliner).
CO_2 biogenic	Carbon dioxide emitted when burning biofuels. This CO_2 is considered to be carbon neutral as it is removed from the atmosphere and stored in biomass within a short period of time.
CO_2 fossil	Carbon dioxide emitted when burning fossil fuels for the production of paper. The calculation is made according to international guidelines from the carbon content of each fuel.
CO_2 indirect	Fossil carbon dioxide generated, externally to the site, to produce the electricity purchased from the grid by the company. Source: International Energy Agency Data Services. 2008. "CO_2 Emissions from Fuel combustion (2008 Edition)".
Carbon dioxide equivalent CO_2-eq	A metric measure used to compare the emissions from various greenhouse gases based upon their climate change potential (CCP). The CO_2-eq carbon dioxide equivalent for other emissions is derived by multiplying the amount of the emission by the associated CCP factor. For example, the CCP factor for methane is 21 and for nitrous oxide 310.
CSR	Corporate Social Responsibility: a concept whereby organisations consider the interests of society by taking responsibility for the impact of their activities on customers, suppliers, employees, shareholders, communities and the environment in all aspects of their operations.
Dust	Particles coming from the combustion of fuels. Dust emissions are measured mainly by the mills. Where dust is not measured (converting plants), emissions are calculated from fuel consumption using the emission factors listed in the Ecoinvent database version 2.1.
EBITDA	Earnings before interest, taxes, depreciation and amortisation.
ECHA	European Chemicals Agency. The Agency, located in Helsinki, Finland, will manage the registration, evaluation, authorisation and restriction processes for chemical substances to ensure consistency across the European Union. These REACH processes are designed to provide additional information on chemicals to ensure their safe use and to ensure the competitiveness of European industry.
Ecoinvent	The ecoinvent centre is a Swiss organisation that provides scientific and transparent international life cycle assessment (LCA) and life cycle management (LCM) data and services to industry and other interested parties. The ecoinvent database has more than 4,000 industrial life cycle inventory (LCI) datasets for a wide range of industrial processes including many relevant to environmental operations.
EIA	Energy Information Administration. The EIA is part of the US Department of Energy and collects, analyses, and disseminates independent and impartial energy information to promote policymaking, efficient markets, and public understanding of energy and its interaction with the economy and the environment.
ELCD	European Reference Life Cycle Database. The ELCD has been developed within the "European Platform on Life Cycle Assessment" that is a project of the European Commission, carried out by the Commission's Joint Research Centre, Institute for Environment and Sustainability (JRC-IES) in collaboration with DG Environment, Directorate for Sustainable Development and Integration.
EMS	Environmental Management Systems. A set of processes and practices that enable an organisation to reduce its environmental impact and increase its operating efficiency.

ETS	Emission Trading Scheme: a scheme calculated to allocate greenhouse gas allowances for a list of specific activities. The "allowance" means the entitlement to emit 1 tonne of carbon dioxide. This scheme was created to follow the guidelines of the Kyoto Protocol to promote reduction of greenhouse gas emissions.
Fluting	The undulating middle layer in corrugated board.
Fossil fuels	Fuels consumed originating from natural resources (gas, oil, and coal).
FSC	Forestry Stewardship Council. The FSC is an independent, non-governmental, organisation established to promote the responsible management of the world's forests. The FSC has developed internationally-recognised forestry certification principles and a system of tracing, verifying and labelling timber and wood products which is based on FSC-certified forests.
Gigajoule	Unit of energy that generally applies to fuel. 1 gigajoule (GJ) = one billion joules = 10^9 joules.
GRI	The GRI (Global Reporting Initiative) reporting framework is the generally accepted framework for reporting on an organisation's economic, environmental and social performance. The sustainability reporting guidelines give the reporting principles, and the list of performance indicators, for each of the three key areas that should be disclosed in a sustainability report.
Grid supply	Electricity purchased from a national distribution network.
GWh	Unit of energy, generally applies to electricity – 1 GWh (GigaWatt hour) = 1 Million KWh (KiloWatt hour).
Hazardous	Residues of oils and other hazardous wastes (building wastes containing asbestos, old fuels, ink residues, etc.). All these wastes are treated by external authorised companies.
Hectare	A unit of area. One hectare (Ha) = 10,000 m^2. One hectare = 2.471 acres.
Hydropower	Electricity generated internally on site from the energy of water courses.
ILO	International Labour Organisation.
Inorganic raw materials	Raw material used for manufacturing our products that are not organic such as: fillers, sodium hydroxide, sodium sulphate, calcium oxide.
IPPC	Integrated Pollution and Prevention Control. The IPPC Directive (Directive 96/61/EC recently codified as Directive 2008/1/EC) aims to prevent or, where that is not possible, reduce pollution from a range of industrial and other installations by means of an integrated approach based on the application of Best Available Techniques (BAT) as defined in the Directive.
ISO 9001	Scheme certified by independent third party that ensures that the operation certified applies internationally recognised standards and procedures during the production process.
ISO 14001	Scheme certified by independent third party that ensures that the operation certified applies internationally recognised standards and procedures of environmental management.
ISO 17025	This International standard lists the requirements to allow the accreditation by authorised third party of a testing laboratory and to verify its proficiency.
ktonne	One ktonne = 1,000 tonnes, where one tonne (metric tonne) = 1,000 kilograms.
Kraftliner	Paper made from virgin wood fibres.
Landfill	The disposal of solid waste in either internal or external landfill in accordance with national legislation.
Mm^3	1 million cubic metres.

GLOSSARY (CONTINUED)

MJ	Megajoule, a unit of energy. 1 megajoule (MJ) = 1 million joules = 10^6 joules.
MWh	Unit of energy, generally applies to electricity – 1 MWh (MegaWatt hour) = 1,000 KWh (KiloWatt hour).
Natura 2000	Natura 2000 is an ecological network of protected areas in the territory of the European Union. In May 1992, governments of the European Union adopted legislation designed to protect the most seriously threatened habitats and species across Europe. This legislation is called the Habitats Directive and complements the Birds Directive adopted in 1979.
NCASI	The National Council for Air and Stream Improvement is an independent, non-profit research institute that focuses on environmental topics of interest to the forest products industry. Established in 1943, NCASI is recognised as the leading source of reliable data on environmental issues affecting this industry and has more than 75 member companies throughout the US and Canada.
NGOs	A non-governmental organisation (NGO) is a legally constituted organisation created by private persons or organisations with no participation or representation of any government. In those cases where NGOs are funded totally or partially by governments, the NGO maintains its non-governmental status insofar as it excludes government representatives from membership of the organisation.
NO_x	Mix of nitrogen oxides (NO and NO_2) calculated as NO_2 (nitrogen dioxide) coming from combustion of fuels. They can contribute to the acidification of soil and water. NO_x emissions are measured mainly by the mills. Where NO_x is not measured (converting plants), emissions are calculated from fuel consumption using the emission factors listed in the Ecoinvent database version 2.1.
OECD	Organisation for Economic Co-operation and Development
OHSAS 18001	Scheme certified by independent third party that ensures that the operation certified applies internationally recognised standards and procedures of safety management.
Other organic	Raw materials used for manufacturing our products that are organic excluding fibres, starch or plastic raw materials which are reported individually. This category includes oil, lubricant and organic additives such as colourant dyes.
PEFC	Programme for the Endorsement of Forest Certification . The PEFC is an independent, non-governmental organisation which promotes sustainably managed forests through independent third party certification.
PJ	Petajoule, a unit of energy. 1 petajoule = 1,000 terajoules = 10^{15} joules.
Process water	Quantity of water containing organic compounds released to the environment (river, sea) after internal water treatment or released directly for external treatment (municipal water treatment). In all cases, levels of pollutants released are reported as outputs of the company even in the case of operations that send process water to external treatment.
Purchased pulp	Pulp produced by other companies and purchased by our mills to produce paper or board (the pulps are mainly bleached).
REACH	REACH is the Regulation for Registration, Evaluation, Authorisation and Restriction of Chemicals. It entered into force on 1 June 2007 to streamline and improve the former legislative framework on the use of chemicals within the European Union (EU). REACH places greater responsibility on industry to manage the risks that chemicals may pose to the health and the environment. In principle REACH applies to all chemicals: not only chemicals used in industrial processes but also in our day-to-day life, for example in cleaning products, paints as well as in articles such as clothes, paper, and packaging.

Recovered paper	Used paper and board separately collected and classified for the purpose of recycling. Mechanical treatment is used to remove unusable materials.
Recovery	Part of wastes that are recycled, used in agricultural uses or incinerated with recovery of energy.
Renewable energy	Energy coming from sources that are naturally renewable (e.g. biomass, hydro electricity).
Sludge	A solid waste that is produced during water treatment from biological activity (mainly aerobic stage).
Sedex	Sedex, the Supplier Ethical Data Exchange, is a membership organisation for businesses committed to continuous improvement of the ethical performance of their supply chains. Sedex is a not-for-profit organisation based in London, UK. Sedex enables member companies to manage efficiently the ethical and responsible practices of their global supply chains, generating transparency through the provision of a secure, robust, and user-friendly data exchange. Sedex focuses on four pillars: Labour Standards, Health & Safety, Environment and Business Integrity
SO_x	Mix of sulphur oxides calculated as SO_2 coming from combustion of fuels. Sulphur dioxide contributes to the acidification of soil and water. SO_x emissions are measured mainly by the mills. Where SO_x is not measured (converting plants), emissions are calculated from fuel consumption using the emission factors listed in the Ecoinvent database version 2.1.
SRI	Socially Responsible Investment.
SVHC	Substances of Very High Concern are defined in Article 57 of REACH Regulation (EC) No 1907/2006 and include substances which are: • Carcinogenic, Mutagenic or toxic to Reproduction (CMR), meeting the criteria for classification in category 1 or 2 in accordance with Directive 67/548/EEC, • Persistent, Bioaccumulative and Toxic (PBT) or very Persistent and very Bioaccumulative (vPvB) according to the criteria in Annex XIII of the REACH Regulation, and/or • Identified, on a case-by-case basis, from scientific evidence as causing probable serious effects to human health or the environment of an equivalent level of concern as those above (e.g. endocrine disrupters).
Testliner	Paper manufactured from recycled fibres.
TJ	Terajoule, a unit of energy that generally applies to fuel. 1 terajoule = 1,000 gigajoules = 10^{12} joules.
Total nitrogen	Total Kjeldahl Nitrogen or TKN is the sum of organic nitrogen, ammonia, NH_3 and ammonium, NH_4^+ in biological water release.
Total phosphorous	Total phosphorous is the sum of phosphorous compounds in biological water release.
TSS	Total Suspended Solids refers to the level of small solid particles released with process water.
Virgin fibre	Pulp obtained through a chemical process used to remove lignin from wood. As a result, the fibre can be used to produce paper. The lignin residue and other organic compounds are subsequently collected and used in the formation of black liquor.
Wastes	The wastes taken into account are all solid wastes and oil residues that are sent to external/internal landfill or collected for recovery. Wood wastes and corrugated board shavings are excluded.

GLOSSARY (CONTINUED)

WBCSD	The World Business Council for Sustainable Development is a CEO-led, global association of some 200 companies dealing exclusively with business and sustainable development. The Council provides a platform for companies to explore sustainable development, share knowledge, experiences and best practices, and to advocate business positions on these issues in a variety of forums, working with governments, non-governmental and intergovernmental organisations.
WRI	World Resources Institute. The WRI is an independent organisation that undertakes research and analysis addressed to global resource and environmental issues.
WRI/WBCSD GHG Protocol	The WBCSD and the WRI have worked together to develop the Greenhouse Gas Protocol. The GHG Protocol is the most widely used international accounting tool for government and business leaders to understand, quantify, and manage greenhouse gas emissions.
WTP	Water Treatment Plant: facility that treats process water by a combination of physical, chemical and biological processes before discharging the water to the environment.

Smurfit Kappa Group plc
Beech Hill
Clonskeagh
Dublin 4
Ireland
Tel: +353 (0)1 202 7000
Fax: +353 (0)1 269 4481
email: sustainability@smurfitkappa.com

Printed on recycled paper