ABOUT CEPI

The Confederation of European Paper Industries (CEPI) regroups the European pulp and paper industry and champions its products and achievements. A Brussels-based non-profit making organisation, CEPI's mission is to promote the members' business performance through targeted strategies such as organising, monitoring and analysing activities in the areas of environment, energy, forestry, recycling, research and trade.

CEPI also aims to boost the knowledge of its members in specific technical areas, and to facilitate the flow of information between companies and associations. Its 18 member countries (17 European Union members plus Norway) regroup some 520 pulp, paper and board producing companies across Europe, ranging from small- and medium-sized companies to multinationals, operating some 959 pulp & paper mills between them. Together they represent nearly 23% of world production.

ABOUT THIS REPORT

The full sustainability report is guided by the GRI Sustainability Reporting Guidelines and maintains the B+ requirements with A+ being the highest possible ranking. The Global Reporting Initiative (GRI) provides standardised criteria which public and private bodies can use to benchmark, chart and report progress in their activities from economic, environmental and social perspectives. Plenum provided third party assurance to the report.

CEPI assimilates information and aggregates data from 2011 and 2012 voluntarily provided by companies and member organisations, and it is complemented by CEPI research. CEPI is confident that the process is fully inclusive, transparent and stands up to scrutiny. The last of these biennial reports was published in 2011 and covered 2009 and 2010 data.

More information on our stakeholder engagement, data collection, materiality, report boundaries and reporting methodology is available in the full report at www.cepi-sustainability.eu. The main audiences for this report are European institutions and NGOs. The pulp and paper industry should equally make good use of the facts and figures included here.

This is a summarised version of the full sustainability report. The full report contains the GRI indicator list as well as assurance statements and many more graphs and figures. CEPI sector performance reporting was updated to the GRI 3.1 guidance and reviewed by Plenum, whose constructive analysis has resulted in comprehensive coverage of salient information and key data. The report is endorsed by the CEPI Board.

OUR IMPROVEMENTS

This is our sixth Sustainability Report. With each version we improve our reporting. Stakeholder involvement includes face-to-face discussions and regular meetings in several networks and fora. In response to feedback from a specially organised stakeholder meeting, we decided to provide more information on forestry and raw materials as well as describe more of the challenges our industry faces. We also included direct feedback from stakeholders on the content of this report.

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Subject areas in this report are discussed and explained in further detail at www.cepi.org and www.cepi-sustainability.eu

1 Austria, Belgium, Czech Republic, Finland, France, Germany, Hungary, Italy, the Netherlands, Norway, Poland, Portugal, Romania, Slovak Republic, Slovenia, Spain, Sweden, United Kingdom
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IN THIS PUBLICATION

MADE IN EUROPE
This icon marks examples that show the European paper industry is ‘made in Europe’.

INNOVATION
The icon identifies examples of innovation in the paper industry.

RESOURCE EFFICIENCY
This icon marks figures and examples showcasing particular activities in resource efficiency.
OUR COMMITMENT TO A BIO-BASED FUTURE

A GLOBAL PLAYER 'MADE IN EUROPE'

PRODUCING ORIGINAL BIO-BASED PRODUCTS

SECURING A RESPONSIBLE MATERIAL SUPPLY

REDUCING EMISSIONS AND ENERGY NEEDS

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ABOUT CEPI AND THE EUROPEAN PULP AND PAPER INDUSTRY

ANNEX
DEAR READER,
Sustainability and competitiveness have to go hand in hand for industry to excel. The European paper industry is a leading example of this. Reducing raw material consumption makes both sustainable and economic sense. Using residues from papermaking to produce renewable energy is also a good example. Turning residues from recycling operations into useful products is part of the circular economy that the planet needs to achieve.

This leading role should not be taken for granted; it is the result of systematic and diligent work, based on the uniqueness of our industry, the drive towards continuous improvement and the collaboration with stakeholders.

There is room for improvement, and the industry will have to find ways to move forward in its sustainability approach in spite of the downturn economic situation.

Since the last report in 2011, the crisis has accelerated the structural changes in our industry. Our companies have started looking in a systematic way at new business models and new products. Unfortunately, in a number of cases they also had to close capacity.

Legislation also continues, introducing new rules, driving new processes, sometimes adding new burdens, sometimes driving together sustainability and competitiveness.

Our industry is creating value ‘made in Europe’. At least 82% of our raw materials come from Europe and most of our suppliers are European companies 23% of our products “made in Europe” are exported to the global market.

The European pulp, paper and board industry is at the core of the bioeconomy, producing not only the original bio-based product that paper is, but also products that replace fossil fuel-based products. With this, our industry has become a strategic sector in the EU economy, actively contributing to the re-industrialisation of Europe.

This path to bring together sustainability and competitiveness is well established in the CEPI 2050 Roadmap towards a low carbon economy. It was launched at the end of 2011, and outlines our industry vision into the bioeconomy.

In the last two years we have been rolling out the Roadmap. The establishment of the Bio-based Public Private partnership is one action in that direction. The Two Team Project is another. The Two Team Project was set up to deliver, in one year, breakthrough concepts for our sector to reach 80% CO2 reduction and 50% more value by 2050. The project has delivered very promising results.

Sustainability is precisely that, a vision towards a business development based on sustainable practices that address society’s key challenges, on a long lasting basis.

Sustainable solutions face many challenges ahead: resource scarcity and climate change are amongst the most critical ones. But so is an investment friendly environment that supports jobs and social benefits.

Our industry is addressing those challenges and in transformation for the future, creating new sustainable opportunities and advocating for Europe to defend its industry.

We cannot achieve all this alone and the constant contact with our stakeholders will strengthen the efforts of our industry towards continuous improvement.

We hope you find this CEPI 6th Sustainability Report inspiring and look forward to your comments.

Thank you very much for your interest!

Teresa Presas, CEPI Director General
Jussi Pesonen, CEPI Chairman
OUR COMMITMENT TO A BIOBASED FUTURE
Recent years have focused the attention of our industry on innovation. Innovation has also dominated CEPI’s agenda in Brussels since the launch of the CEPI 2050 Roadmap. The Roadmap showed how the sector could reduce its fossil-based CO₂ emissions by 80% while at the same time creating 50% more added value. However, breakthrough technologies would be needed to achieve the climate target. These technologies must become available by 2030 to be running by 2050.

To help the industry advance, CEPI launched the Two Team Project at the 2012 European Paper Week and with it an internal competition for breakthrough concepts in papermaking.

At the same time the bioeconomy received backing through a European Commission green paper on the subject, which mentions the paper industry as one of the core sectors involved. CEPI initiated a bio-based industry Public Private Partnership with the European Commission, together with other sectors and more than a dozen pulp and paper producers to secure funding for sector specific research in this area. We also got involved in the European Innovation Partnership for raw materials, focusing on recycling related projects.

The past two years have been very productive and innovative with concrete results. The excellent facts and figures presented in this report were strongly influenced by the European pulp and paper industry commitments and motivations.

CEPI COMMITMENTS

- European Declaration on Paper Recycling: 71.7% recycling rate. Read more on page 22
- Target zero accidents. Reduction of 60% in 5 years! Read more on page 49
- CEPI Roadmap 2050: be part of the low carbon future and investigate 80% CO₂ reductions and 50% value creation by 2050. Read more on page 37
- Zero landfill for recyclable waste. Read more on page 43
- Support the bioeconomy ambitions of the EU Read more on page 19
- Full EMAS certification of mills in Europe, page 40

EUROPEAN PAPER INDUSTRY MOTIVATIONS

- Remain a financially sustainable and strategic industry in Europe
- Be a trusted industry partner in Europe
- Deliver sustainable product solutions
- Combat climate change and minimise our impact on the environment
- Care for the forests - promote the use of certification systems in forest management and responsibility in procurement chains in all our raw materials
- Support the legal logging and sourcing of raw materials
- Increase bioenergy production
- Work on continuous improvement in energy-efficiency
- Utilise raw materials effectively. Study new opportunities for production residues
- Continue to explore industrial symbiosis.
**European Paper Industry**

- **Employees**: 185,000
- **Companies**:
  - Green, White and Blue Collar Jobs: +
  - Few Multinationals: +
  - About 2/3 of SME's: 520
- **Investments**:
  - 3 Billion
  - 4% of Turnover
  - Invested in Europe: 2011
- **Turnover**:
  - Added to the European Economy: 75.3 Billion
  - 2011: €78.0 Billion
  - 2% Share of Global Paper Production
  - 2011: 23.5%
- **EBITDA**:
  - (1) 11.4%
  - (2) 11.4%
  - 2011: 12.1%
- **Millions**:
  - Market Pulp: 13.6
  - Mills: 959
  - Added Value: €15 Billion
  - 2011: 823
- **Million Tones**:
  - Pulps: 2011: 93.6
  - Market Pulp: 2011: 13.0
  - Paper & Board: 2011: 659
- **Added Value**:
  - 2011: 16

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1. European paper industry's contribution to the GDP
2. ROCE: Return On Capital Employed
3. EBITDA: Earnings Before Interest, Taxes, Depreciation and Amortisation

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The European paper industry is a strategic sector, playing an active part in Europe’s sustainable reindustrialisation. Our natural, renewable bio-based resources and our knowledge of wood and fibre chemistry give us a key role in adding value and creating jobs within a long value chain. The many European sectors that use paper-based products or supply goods and services to the paper industry benefit considerably as a result.
Our industry’s European credentials are second to none. At least 82% of our raw materials are sourced in Europe from responsibly managed forests which are more abundant and healthier now than they were 40 years ago. The production equipment in our mills comes from large European manufacturers and we engage with a variety of European-based chemical and mineral suppliers.

Paper and board production in Europe increased gradually until 2007 but suffered significantly from the economic crisis in 2008 and 2009, along with most industrial sectors. European pulp and paper production in 2012 continued to be affected by the economic slowdown that began in mid-2011. However, the European pulp and paper industry remains an important contributor to EU economic growth and job creation, with its performance still stronger than other energy-intensive sectors in Europe.

CEPI has had to address a number of ‘greenwashing’ campaigns by other organisations and European institutions that cast paper as old fashioned and/or environmentally harmful, especially in comparison with digital products. These campaigns misrepresent the truth and they are damaging to the graphic grades in our sector. In fact, paper is the original bio-based product as it is both recyclable and biodegradable and comes from renewable resources.
Incorporating sustainability into innovation activities contributes to resource efficiency, which leads to reduced costs and a smaller environmental footprint. Greater competitiveness and profitability is vital for the European pulp and paper industry as it adjusts to tougher market conditions and tighter regulations. The industry must be able to compete with other packaging materials, such as plastic, in Europe and faces changing consumer behaviour with regards to ICT (Information and Communication Technologies) usage.

It also has to face increased competition from pulp from Brazil and from paper and board from China and US paper products produced with very low energy costs.

The latter half of the last decade turned out to be significantly less profitable for the European pulp and paper industry. In 2011, the business environment slowed down due to declining pulp prices and weakening demand for both pulp and paper. Industry restructuring continued and closures took place. However, paper-based packaging, tissue as well as speciality papers are seeing a rise in popularity with customers and consumers in a world that increasingly focuses on bio-based products.

**GROSS OPERATING RATE IN EU27 (GROSS OPERATING SURPLUS/TURNOVER)**

- **European Pulp & Paper Industry**
  - 2009: 8.0%
  - 2010: 9.7%

- **Whole Manufacturing Industry**
  - 2009: 7.0%
  - 2010: 9.0%

Source: Eurostat
Energy costs are indeed a large part of the paper industry’s cost structure, accounting for almost 17% (electricity + fuels). So are fibres that represent close to 50% of the cash manufacturing cost in our sector. Cash manufacturing percentages have not changed significantly in recent years, while labour productivity has significantly increased.

Labour productivity (gross value added per person employed) is 50% higher in the pulp and paper industry in Europe than in the whole manufacturing sector (80 compared to 46 in 2009) in EU27.

In fact, the European paper industry intends to play a significant role in the EU reindustrialisation scenario, as it matches all the relevant priorities and measures set out in the Industrial Policy Communication of the European Commission.

“We want it (the industry) to play an even bigger role, and we have set the explicit objective of raising the share of industry in GDP from the current 16% to up to 20% by 2020.

(…) For the moment, uncertainty and the lack of confidence are the main obstacles in achieving this goal.

(…) We should also waste no time or effort to deal smartly with natural resources: energy needs and costs are another key challenge for European industry, and one we take very seriously”

European Commission President Jose Manuel Barroso at the Commission’s Industry Policy Conference in Brussels, 6 June 2013

“The factories of the near-future will use highly energy and material efficient processes, employ renewable materials, and adopt business models such as industrial symbiosis that allow the recovery of dissipated heat and energy.”

European Commission, industrial policy communication
“A contribution to growth and economic recovery”
Our industry is a financially sustainable and strategic industry in Europe.

Energy represents 17% of our costs

INVESTMENTS

The investment level in the European paper industry has not returned to pre-crisis levels. Meanwhile, the EU economy continues to face tough challenges. Just like other industrial sectors, the pulp and paper industry needs a positive regulatory environment to attract the necessary investments to develop new sustainable technologies that deliver added-value products. Coherent policies and bold measures are needed to realign Europe’s industrial policy to encourage investment in new areas such as the bioeconomy.

The unfavourable paper market development in Europe led to restructuring: over the last two years, 4.7 million tonnes of pulp and paper capacity were closed down, while 1.5 million tonnes were put on the market.
Economic pressures affecting the industry include its declining added value as a global commodity, and the challenge of investing when faced with increasing costs. The overall output performance of CEPI countries in 2012 was similar to that of other major traditional paper-producing regions (USA, Japan, South Korea and Canada). China and Brazil performed better however.

The European pulp and paper industry is a trusted industry partner in Europe.
The total world production of paper in 2011 was 400 million tonnes, and of pulp, 185 million tonnes. The map shows the trade flows of paper and pulp to and from CEPI countries, as well as paper production per region and the changes in production in the last 5 years.

Too often in Europe we are faced with regulations that disadvantage our industry in global markets and in international trade. While Europe is fully open to foreign products, approximately half of European paper exports face tariff barriers abroad. Furthermore, not only is the European market open, but there is also weak enforcement of import rules. The lack of rigour in the surveillance of the European paper market penalises the local industry for complying with European standards and legal requirements.

Europe is a net exporter of paper and board: Brazil, China, Russia, Turkey and the US are the main export destinations. But Europe is a net importer of pulp: Brazil, Canada and the US are the main countries of origin.

We export 21.6% of our production.
The European pulp and paper industry produces original bio-based products using wood, a renewable material, and paper for recycling. It is also the biggest single industrial user and producer of renewable energy in the EU: 56% of the industry’s total primary annual energy consumption is biomass-based (see page 36). And the industry has the potential to do even more in the future. It has the experience, technology and supply chain to play a big part in the bioeconomy and to do so in a resource-efficient manner.
The development of the bioeconomy has resulted in the first of a number of new bio-products that include water-repellent fabrics, smart packaging, second generation biofuels and concept cars made fully of cellulose-based material.

With its traditional and new products, the paper industry plays an important role in society, offering efficiently manufactured, fully recyclable products, made from renewable raw materials.

GREEN PRODUCTS

The European pulp and paper industry delivers sustainable product solutions.
PRODUCT ENVIRONMENTAL FOOTPRINT

The European Commission is developing scope and methodologies for product environmental footprint (PEF) in policymaking. It aims particularly at resource efficiency and to resolve the disparity of different methods for measuring environmental performance. The Commission has launched a three-year pilot on product rules, based on PEF. CEPI sees the benefits of having product rules applicable to the whole sector and believes there is a business case for using PEF, e.g. comparing different materials. In 2011, CEPI tested in collaboration with the Commission the process aimed at developing rules for intermediate paper products. Based on experience and results from previous tests and pilots, CEPI volunteered to join the new three year pilot (2013-2016). The CEPI application on piloting intermediate paper products was approved by the Commission. The technical secretariat will be led by the Joint Research Centre of the Commission.

PRODUCT SAFETY

CEPI together with CITPA, the Confederation of Paper and Board Converters in Europe, have revised the Industry Guideline for the compliance of paper and board materials and articles for food contact.

The purpose of the Industry Guideline is, in the absence of a specific measure for paper and board, to enable manufacturers of paper and board materials and articles intended for food contact to demonstrate compliance with the EU Framework Regulation for food contact materials.

The updated guidelines are available in English, Polish, Italian, Dutch, Spanish and German. The uptake of the guideline the Good Manufacturing Practices will be monitored and the documents reviewed periodically.
Since 2000, the European Recovered Paper Council (ERPC), for which CEPI acts as secretariat, has been committed to increase recycling and join efforts to remove obstacles to paper recycling in Europe.

In 2012, 71.7% of paper was recycled. This achievement is remarkable considering that since the pre-crisis peak year of 2007, paper consumption in Europe has dropped by 13% whereas recycling has fallen by only 3.5%. Current paper consumption is at the same level as 1998 but the amount recycled is 1.5 times higher than in 1998 – before the industry’s first commitment to paper recycling.

The recycling rate is starting to level out, however, and maintaining the high rate is becoming a challenge – in particular as it is not only consumption quantities that are changing but also consumption patterns.

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**ERPC Publishes Easy Office Paper Recycling Rules**

Have you ever held a plastic spiral notebook or a used pizza box and wondered if it should go in the recycling bin? Did a windowed envelope end up in your waste bin because you didn’t have time to cut the window out, thinking that it should be removed? The ERPC recently published a poster with nine simple rules for paper recycling, which answers the above questions and more.

The rules are simple and can make a big difference if applied.
Europe is the global paper recycling champion, and recycles almost 58 million tonnes within Europe, an all-time high. And as the below graph shows it is also the most recycled packaging material in Europe – a real European champion!

71.7% – Europe is the paper recycling world champion!

Paper and board is the most recycled packaging in Europe!
Securing a Responsible Material Supply

The pulp and paper industry in Europe is truly European. 82% of our raw materials are sourced in Europe from responsibly managed forests, using paper collected for recycling and engaging with Europe-based mineral and chemical suppliers.
81.5% CEPI area

0.3% Rest of the world

18.5% Imports from outside CEPI

81.1% CEPI area

8.3% Other EU Countries

0.2% Rest of the world

18.9% Imports from outside CEPI
The use of raw materials in papermaking reflects increasing rates of paper recycling: the use of wood pulp has decreased in recent years, while the use of paper for recycling has increased to pre-crisis levels. Of the total raw materials consumed by the European paper industry, paper for recycling represented 44.7% and wood pulp 40%; non-fibrous materials made up most of the rest.

More than 90% of the wood used by CEPI members comes from Europe (EU27 or EU28+Norway+Switzerland). This figure is above 80% for pulp consumption in Europe. This shows the industry’s very significant European base, and contrasts with average import figures for the European manufacturing industry of 70%.

ORIGIN OF WOOD AND PULP CONSUMED IN CEPI COUNTRIES IN 2012 (%)
MATERIAL FLOW OF THE EUROPEAN PAPER RECYCLING LOOP (MILLION TONNES)

INPUT FOR EUROPEAN PAPER RECYCLING (49)

PAPER PRODUCTION

CLAY, CACO3, STARCH (15) OTHER (INCL. CHEMICALS (2))

EXPORTS OF PAPER (16)

PAPER IMPORTS (4)

PRINTING INKS (1)

ADHESIVES (1)

IMPORTS (3)

EXCEPTS (2)

CONVERTING

SCRAP, RESIDUES (11)

BY-PRODUCTS, RESIDUES (15)

PAPER CONVERTING

PAPER CONSUMPTION (78)

RE-USE

NON-COLLECTABLE (6)

MUNICIPAL WASTE

WASTE MANAGEMENT (98)

EXPORTS OF PAPER FOR RECYCLING (9)

FINAL PAPER WASTE (LANDFILL, INCINERATION, OTHER 21)

OTHER WASTE (OTHER RECOVERY OR DISPOSAL 19)

MATERIAL FLOW SOURCES:

- VIRGIN AND OTHER FIBRES (46)
- IMPORTS OF PAPER (16)
- COLLECTION FOR PAPER RECYCLING (57)
- RESIDUES
- EXPORTS OF PAPER FOR RECYCLING (9)
- FINAL PAPER WASTE (LANDFILL, INCINERATION, OTHER 21)
- OTHER WASTE (OTHER RECOVERY OR DISPOSAL 19)

MATERIAL FLOW DESTINATIONS:

- EXPORTS (2)
- IMPORTS (16)
- INDUSTRIAL WASTE
- NON-COLLECTABLE (6)
- MUNICIPAL WASTE
- WASTE MANAGEMENT (98)

Jori Ringman-Beek, CEPI, 2011b; EuPIA 2011; FEICA, 2009, and Eurostat data

(Dotted arrows indicate the points in the life cycle where chemicals are input to the loop.)
PAPER FOR RECYCLING

This illustration depicts the European paper recycling loop as a material flow indicating with dotted lines the input of chemicals along the life cycle and mass balance, quantifying input and output to the system in four steps: paper manufacturing, converting of paper into products, paper consumption and waste management/collection of paper for recycling. Papermaking chemicals are used in a very uniform way throughout European industry, both geographically and across various grades of paper and board. The illustration on the left gives an overview of the complex process of paper recycling and shows the sheer volumes involved as well as the need for virgin fibres in the process.

Not all paper products can be manufactured using recycled fibre, and the system always requires an injection of fresh fibre. Where appropriate, Europe’s papermakers have invested in technology that can extract valuable fibre from the most challenging sources. Overall, 52.6% of the fibres used in new paper and board products are sourced from the ‘urban forest’ of used paper-products.

CHALLENGES

Paper recycling is a perfect example for resource efficiency at its best and the paper industry has both environmental and economic reasons to keep raising the bar. However, some developments may hamper paper recycling in Europe.

Firstly, in waste collection, the organic fibres in paper can be contaminated by other materials if paper is not collected separately. This is why it is essential that the obligation in the 2008 Waste Directive to collect paper and some other materials separately by 2015 in all member states is observed. Likewise, the supply of suitable paper for recycling is threatened by its energy generation potential. Incineration should be the final destination for fibre, only after all possibilities for creating value through new paper products have been exhausted.

Additionally, it was estimated some years ago that 19% of paper products produced annually are not recyclable or collectable. We believe that this share is much higher now, which will lead paper recycling rates to level out soon. CEPI will update this estimate in a new study to verify whether it has changed in the meantime.

THE EUROPEAN PAPER RECYCLING CYCLE

Paper can be recycled up to six or seven times, in theory. The current average rate in Europe is 3.5, while over 50% of the raw material for Europe’s pulp and paper industry is paper for recycling. Paper cannot be recycled indefinitely as fibres get too short and worn out to be useful in creating a new sheet of paper or cardboard box. The cycle must therefore constantly be refilled with new fibres. New virgin fibre and recycled fibre are necessary parts of the European paper recycling process.
WOOD

Wood is the most important raw material in papermaking, and securing a constant and sustainable supply is vital for paper manufacturers in Europe. A few developments in recent years have required CEPI’s attention with regards to the supply of this precious raw material.

The EU Timber Regulation came into force in March 2013. It requires anyone who supplies or sells timber or processed timber products for the first time on the EU market to carry out a due diligence check, assess the potential risks related to the products (origin, species, etc.) and, if needed, mitigate the risks. Any subsequent user of the wood or wood products, once it has been placed on the market, must provide basic information on his supplier and his buyer.

CEPI created a simple decision tree, that can be followed as a video, to check whether one needs to exercise ‘due diligence’ and if so, how to do this. The decision tree brings the issue down to a simple matrix, making it easy for any user of paper or wood products to determine their obligations under the EU Timber Regulation. The EU Timber Regulation Guidance issued by the European Commission currently places an unfair burden on European companies, by confusing the interpretation of the regulation. CEPI is investigating this issue.

WOOD, CHIPS AND SAWMILLING
BY-PRODUCTS FROM CERTIFIED FORESTS

64.6% of wood, chips and sawmilling by-products delivered to European mills are forest management certified by independent forest certification schemes and can be counted in the companies’ chain of custody. (2010: 61.6%)

Because of the regulation on timber legality and potential biomass sustainability requirements, it is likely that this figure will increase further.

PURCHASED PULP

74.7% of pulp delivered to paper and board mills in Europe is forest management certified by independent forest certification schemes and can be counted in their own chain of custody. (2010: 71.1%)

MARKET PULP

68.1% of market pulp is actually sold with chain of custody certificate enabling further labelling (2010: 60.9%).

CERTIFIED PAPER, TISSUE AND BOARD IN MILLS USING WOODPULP AND PAPER FOR RECYCLING

32.3% of total paper tissue and board is sold with a chain of custody certificate enabling further labelling. (2010: 25.6%)

More in the extended sustainability report at www.cepi-sustainability.eu
CERTIFICATION

In 2005 CEPI introduced a Code of Conduct on Legal Logging, which included six principles. The Code was endorsed by all national associations and its implementation began in 2008. It was decided to stop reporting on the update of this Code of Conduct due to the implementation of the EU Timber Regulation, which overlaps with the Code of Conduct, making it redundant.

Chain-of-Custody systems and other third-party verified tracking systems are increasingly used to demonstrate the legality of purchased wood.

CEPI is a member of the two main timber certification bodies (FSC and PEFC) and reports on certification biennially. The CEPI parameters for certification statistics have been further developed to provide more details in line with the evolution of the certification systems themselves.

CASCADING USE OF RAW MATERIALS

A recent study using data from FAO and Eurostat shows how much wood is growing in the EU forests and which fraction of this wood is harvested to be used as a raw material for the production of paper and wood products in Europe. The infographic illustrates the three main uses of wood, which are all interconnected: the pulp and paper chain, the woodworking chain and the energy chain.

It also clearly depicts that already today, the energy use of wood consumes directly a large share of harvested wood, while in the paper industry the recycling loop and the use of residues create more value from the same amount of raw material input. The cascading use of wood in paper making can be brought down to one figure, it is 2.38 times more resource efficient with 1 m³ of wood than the energy alternative. This is resource efficiency at its best!

CERTIFIED PAPER, TISSUE AND BOARD IN MILLS USING 100% PAPER FOR RECYCLING

45.9% of 100% paper for recycling based paper, tissue and board is sold with chain of custody enabling further labelling. (2008: 0.1%)

Cascading use of wood

Wood used for papermaking is 2.38 times more resource efficient, than simple energy creation with the same 1 m³ of wood.
AROUND 25 DIFFERENT CHEMICALS ARE USED IN PAPERMAKING

- **COATING CHEMICALS**
  - Synth. Binders – Coating additives
  - Rheology modifiers – Starch

- **FUNCTIONAL CHEMICALS**
  - Synth. Sizing Agents – Dyes / ORAs
  - Synth. Strength Agents – Crosslinkers
  - Disperants – Mineral Fillers – Starch

- **PROCESS CHEMICALS**
  - Retention Agents – Drainage Aids
  - Fixatives – Defoamers / Deaerators
  - Synth. Strength Agents – Biocides
  - Cleaners – Bleaching – De-inking

Typical Papermachine Length = 120 m / Highest Speed = 2,000 m/min / Source: BASF
MINERALS AND CHEMICALS

Paper and board consist predominantly of cellulose fibres, naturally-occurring minerals such as calcium carbonate and natural polymers such as starch. The increase in use of non-fibrous raw materials has allowed for a more efficient use of fibres and improved functionalities of finished paper products. The increasing use of calcium carbonate is especially significant: in 2012 more than half of the non-fibrous material used in the paper industry was calcium carbonate. Other minerals used in papermaking include talc, kaolin and bentonite.

Chemicals are used in the paper industry at different stages of the pulp- and papermaking process. They can be divided into three main groups: process chemicals, functional chemicals and coating chemicals. Each has a different function and a different influence on the sustainability of the paper product.

MINERALS

CALCIUM CARBONATE – This is the most widely used mineral in papermaking. It’s used as a filler and coating pigment and helps produce papers with high whiteness and gloss, and good printing properties.

BENTONITE – This mineral is used in pitch control, i.e. absorption of wood resins that tend to obstruct the machines, to make the conversion of pulp into paper more efficient as well as to improve paper quality. Bentonite also offers useful de-inking properties for paper recycling.

TALC – Talc is used with both uncoated and coated rotogravure papers to enhance printability and reduce surface friction, improving productivity at the paper mill and print house. It also improves mattness and reduces ink scuff in offset papers. Used as a pitch control agent as well, talc “cleans” the papermaking process by adsorbing any sticky resinous particles in the pulp.

KAOLIN – This is used as a filler to bulk up paper and coat its surface. Use of kaolin reduces the amount of wood pulp needed, enhances the optical properties of paper and improves its printing characteristics.

SMALL DOSE... BUT LARGE EFFECTS...

- FILLER INCREASE
- OPTIMISATION OF FIBRE COMPOSITION
- BASIS WEIGHT REDUCTION
- REDUCTION OF FIBRE LOSSES

- BETTER DEWATERING
- ELIMINATION OF SIZE PRESS

- PAPER MACHINE SPEED INCREASE
- TIME EFFICIENCY OPTIMISATION (BREAKS, CLEANING)
- MATERIAL EFFICIENCY OPTIMISATION (CLAIMS)
- ELIMINATION OF SIZE PRESS

FIBRE SAVINGS

ENERGY SAVINGS

PRODUCTIVITY INCREASE

Source: BASF
Source: ImaEurope
The paper industry has focused on energy consumption for years. Energy efficiency is seen as the core of good mill performance. It takes centre stage in the performance assessments of machines, mills and countries. The effect of rising energy costs surpasses that of any policy incentive. The key challenge of these economically hard times has been the lower capacity utilisation of machines, with consequent reductions in efficiency per tonne of product produced. Pulp and paper companies have found ways to overcome this aspect of the crisis, by maintaining efficiency, despite lower capacity utilisation.
The industry has become more self-sufficient. Today, 95.2% of electricity is produced on-site in paper mills using the energy-efficient combined heat and power method. Mills’ energy consumption has fallen by 4.7% in the last two years. More and more electricity is supplied to the national grid, too. Specific coal and fuel oil consumption has decreased, as well as gas consumption. However, the consumption of biomass-based energy has increased in recent years, driven by the installation of new biomass boilers in mills.

56% of our energy use is bioenergy

Although the sector is energy intensive, it is less carbon intensive than other sectors. Bioenergy accounts for 56% of our energy use. Our sector is the largest industrial producer of bioenergy, generating 20% of the biomass-based energy in Europe. In fact, the pulp and paper industry operates at the crossroads of policies on CO2 reduction, renewable energy and energy efficiency, which is why CEPI advocates the removal of public support for the use of wood for co-firing in coal plants that only produce electricity.

Biomass such as wood that can be used as raw material should always be used in accordance with the cascade use, which gives preference to material production before energy production.

The paper industry’s use of bioenergy has a dramatic effect on the sector’s emissions profile as CO2 emissions from biomass are considered carbon neutral by the IPCC (Intergovernmental Panel on Climate Change). The potential to use energy from carbon neutral renewable sources in place of fossil carbon fuels and products is an indisputable asset to the sector. Pulp and paper processes and products emit carbon, store carbon and substitute fossil carbon.

Direct CO2 emissions produced by the pulp and paper industry in CEPI countries fell from 37.45 megatonnes (Mt) in 2010 to 36.24 Mt in 2011 and 34.55 Mt in 2012. This downward trend goes hand-in-hand with the fuel-mix change and efficiency improvements.

Since 1990, the specific CO2 emissions per kilotonne of product have fallen by 43%, a major achievement in the current harsh and competitive climate.

Almost all pulp and paper mills are part of the EU Emissions Trading System (ETS), which has been in place since 2005. Their emissions have to be covered by credits, some received for free and the rest bought at government auctions. This is a burden that our competitors in other regions do not have to bear. The EU target is for all industrial sectors to reduce CO2 emissions by 20% by 2020, compared to 2005 levels. CEPI advocates a balance between international competitiveness and further improving the sector’s emissions performance.
We are motivated to help combat climate change and minimise our impact on the environment.

INNOVATION

CEPI set out to boost innovation in low carbon technology by launching the Two Team Project. We established two competing teams (Red and Blue) and gave them the task of identifying breakthrough concepts of technologies and processes to make the pulp and paper manufacturing process more energy efficient and to add more value. The teams applied a unique method of open innovation in a trade association, crowdsourcing ideas from all interested stakeholders.

Breakthrough technologies are at the core of CEPI’s ‘2050 Roadmap to a low-carbon bioeconomy’ report. Such technologies must be available by 2030 if the industry hopes to deliver on the Roadmap’s two objectives: 80% decarbonisation of the sector and 50% value creation by 2050. In November 2013, eight breakthrough technology concepts will be delivered as the outcome of the Two Team Project. One will be crowned by a jury as the most promising.

More information at www.unfoldthefuture.eu

TRANSPORT

Because of the environmental impacts associated with transporting forest products, CEPI issued carbon footprint guidelines in 2010 and has been promoting them ever since, with the goal of helping companies assess the carbon footprint related to the transport of their finished products and raw materials. Innovation, smart solutions and rationalisation in the transport and logistics field can have a great impact on competitiveness and sustainability and must be an important part of the sector’s strategy.

SHIPPING EMISSIONS: PROMOTING GLOBAL SOLUTIONS

CEPI is extremely concerned by the impact of measures taken at International Maritime Organization (IMO) and EU levels to reduce sulphur emissions. The competitiveness of jobs in Northern Europe will be affected, which adds to the adversity of the current economic context. In the absence of alternative fuels such as Liquified Natural Gas (LNG) and reliable abatement technologies, it will substantially distort the playing field within the EU and with the rest of the world. The resulting “modal backshift” – from maritime transport to road transport – and the likely higher greenhouse gas emissions are in contradiction with the objectives of the EU White Paper on Transport.

- 43% CO₂ emissions per tonne of product
Over the past 20 years (1992-2012), paper and board production has increased in CEPI member countries by 38%. While the use of virgin fibre increased by 16%, recycled fibre use nearly doubled (78% increase) in the same period.

The many business start-ups and shut-downs during the economic turmoil of recent years have temporarily increased the level of emissions from paper manufacturing, but the industry’s overall emission reductions remain remarkable: two digit reductions in all emissions in the past 20 years, and up to a 95% cut in emissions of chlorinated organic compounds (AOX).
The graph shows a reduction in the industry’s total environmental impact as well as a relative decoupling of production and environmental impact, i.e. an efficiency improvement has been achieved.

With a long-term trend in the industry to produce lighter paper, performance per tonne of paper does not give an accurate picture of resource efficient improvements. Calculating paper production and sales per square metre instead of per tonne would make water and energy savings in paper production more visible.

ENVIRONMENTAL MANAGEMENT SYSTEMS
By systematically managing the environmental impact of pulp and papermaking, along with that of its related activities and the products and services produced, overall environmental performance continually improves.

Among CEPI members, 88% of production capacity is certified or registered according to internationally recognised environmental management standards ISO 14001 and EMAS. This figure has fallen by 5% in the last two years. In 2003, CEPI set the aspirational goal to have all pulp and paper mills in CEPI member countries certified to an internationally recognised environmental management system. However, mergers and the high percentage of SMEs in our industry make it difficult to increase further the proportion of EMAS or ISO standard use, but CEPI will continue to promote its use.

SMEs represent about two-thirds of pulp and paper companies operating in Europe. This is according to the Eurostat definition of SMEs: companies with less than 250 employees and less than €50 million turnover. This estimate is based on RISI mill asset database figures.
BREF – THE PERMIT TO OPERATE

The reference document for best available techniques (BAT) for pulp and paper manufacturing, the so-called BREF-PP document, is under review by the European IPPC (Integrated Pollution Prevention Control) Bureau. The revision process started in 2006 but finalisation of the document has been delayed. The new BAT conclusions are expected to be adopted at the end of 2013, and will be followed by a four-year implementation process by member states.

WHAT IS BREF?
AN INTRODUCTION

The purpose of the EU Industrial Emissions Directive (IED) is to minimise pollution and emissions to the environment from industrial sources throughout the European Union. The IED requires all operators of industrial installations to obtain an integrated permit from national authorities. The operating permit must be based on the Best Available Techniques reference document (BREF).

IED and BAT Conclusions will set legally binding emission levels for all operators. Whereas in the past BAT were references for local permitting authorities, now all operators must comply with them within four years of the BREF being adopted.
Policymakers have increased their focus on Europe’s forests in recent years. In fact, even though the EU has no mandate on the topic, it has recently published an EU Forest strategy to respond to the new challenges facing forests and the forest sector. CEPI has also stepped up efforts in this area and signed a Memorandum of Understanding with the Confederation of European Forest Owners (CEPF), the European State Forest Association (EUSTAFOR) and the European Confederation of Woodworking Industries (CEI-Bois). The organisations formally committed to strengthen their cooperation.

The good news for European forests is that they are growing: 512,000 hectares from 2005-2010. Forests today are over 30% larger than in the 1950s.

To ensure the continuing health and sustainable use of forest raw material in Europe, solid biomass should only be eligible for subsidies when it is proven to be efficient. If biomass is procured from countries with no mandatory forest accounting, credible proof should be provided that the harvesting rate in the country does not exceed 100% and the biomass does not come from land conversion. Forest biomass should come from legal sources and creating bioenergy from wood should only be considered when the “cascading principle” applies. This principle promotes the most efficient use of natural resources, optimising value creation and using the material ideally firstly for food, then products and finally for energy.

CEPI also advocates a biomass supply policy that would improve wood supply from forests in a sustainable manner to cover the increasing bioenergy demand for wood. While Eurostat stated that “a possible further increase in the demand for fuelwood would be sustainable” as sustainable forest management ensures a growing forest in Europe, the paper industry is making policymakers aware that we have long used easily accessible forest biomass. The remaining forest resources are mostly located in small and scattered private properties or areas that are difficult to access, making the mobilisation of such biomass more difficult and less cost competitive. To gain access to such resources, a relevant biomass supply policy is required.

We care for the forest and promote the use of certification systems and sustainable forest management.
Production residues can be measured per tonne of finished product. Reducing this volume will increase resource efficiency and help avoid greenhouse gas emissions. Over the past decade, residues to landfill from the pulp and paper industry fell 55%, from 32.7 kg/tonne of product to 14.3 kg/t.

Research into waste streams from paper production has revealed that the waste contains useful elements for delivering value-added products or energy. Some paper producers are already capitalising on these opportunities, but even current best practices are far from gaining the maximum value from paper sources.

Since the start of 2013 CEPI has been a partner in an EU-funded project, Refibre, which is looking into this area and at how to apply principles of industrial ecology. By 2015 this project should also give an updated picture on recovery and disposal methods for by-products in our industry.

CEPI has made an inventory of current best practice for sustainable material management of fibre in the light of existing EU policies and identified areas of improvement. These include, in particular, setting collection targets for paper and restrictions for landfilling or incinerating recyclable paper.

CEPI advocates an EU-wide ban on landfilling and incinerating recyclable paper by 2015, in line with the Waste Framework Directive that prioritises recycling over energy recovery and disposal. The Roadmap for a Resource Efficient Europe also foresees that by 2020 waste is managed as a resource and energy recovery is limited to non-recyclable materials. Europe needs to step up its efforts to achieve this milestone in time.
WATER PROFILE FOR THE PULP AND PAPER INDUSTRY – CEPI COUNTRIES 2012 (MILLION m³)

- Surface Water: 3,281
- Groundwater: 68
- Municipal Water: 315
- Evaporation to Surface Water: 47
- Recycle and Imported Pulp: 5
- Other Water Inputs: 7
- Products: 8
- Water in Solid Residuals: 4.9

MANUFACTURING

TO MUNICIPAL & OTHERS

3,154

285

271
CEPI has paid close attention to recent developments and policy debates on water sustainability, which policymakers view as a useful indicator of climate change adaptation.

Private initiatives on water stewardship, management standards and footprinting calculations have proliferated. CEPI participates in the Alliance for Water Stewardship, the European Water Partnership and the Water Footprint Network. The European pulp and paper industry has focused to date on water abstraction by mills. The trend over the past two decades has been to reduce freshwater withdrawal, by 20% in total volume and by 47% when calculated as a specific value, per m³/t of product.

Water issues are local and carry different weight across Europe. Starting from a local mill level, but with the entire value-chain of the paper product in mind, CEPI, together with NCASI¹, developed new definitions on water use with a local perspective, using 2008 data. Reporting in 2012 using the same methodology, water consumption amounts to 298 million m³ (2012), or 7.7% of the water abstracted. Water consumption in the European paper industry is the sum of evaporative losses from process operation and secondary waste treatment, water in solid residuals and water in products.

In 2012, the pulp and paper industry within CEPI member countries withdrew approximately 3.71 million m³ of water from surface and ground water sources; of which 92.3% were returned to surface water supplies cleaner than before.

Water is fundamental for pulp and paper manufacturing, and CEPI gives the water issue a high priority. With the purpose of supporting the paper industry and its value chain in its commitment to improving water management, CEPI and the University of Twente, Netherlands, will further apply and improve the 2010 Water Footprint Assessment (WFA) methodology for the sector published by UNESCO-IHE (Institute for Water Education). A number of important issues remain to be explored, including calculations on forestry in green water footprint, comparison of grey water footprint with life cycle assessment (LCA), and allocation methods when considering the recycling of paper and board in WFA. The result of the project is expected in 2014.

CEPI is closely following the development of the international water footprint standard ISO 14046. Several issues are relevant for the paper industry, especially the definition of water consumption. The new standard is expected to be issued early 2014.

MAINTAINING A SAFE WORKPLACE

As a result of the economic downturn the number of people employed by the European paper industry decreased by 4.8% to 185,112 between 2010 and 2012. Recent initiatives emphasise the importance the industry attaches to its social responsibilities through investment in forest certification and continuous improvements in safety standards.
The European paper industry contributes to people’s livelihoods through direct and indirect employment especially in rural areas. According to a recent study\(^1\) the indirect employment figure derived through the paper value chain is seven times that of direct employment in the paper industry, with 1,597,200 people involved in Europe.

Additionally, the extensive use of certification systems in sustainable forest management adds to social benefits and improvements for forest owners and workers with systematic inclusion of social requirements. Certification can improve representation, discussion of social issues, and relationships with stakeholder groups.

In 2010, CEPI initiated a European social dialogue with the European Mining, Chemical and Energy Workers Federation (EMCEF) under the auspices of the European Commission. In the meantime EMCEF became part of IndustriAll Europe. The dialogue continues and the two organisations developed a guide of good health and safety practices for the paper industry in 2012 (details under ‘Health and Safety’).

Social Dialogue is a platform to address new challenges faced by the industry: ageing staff, lack of appeal in the industry among young workers and gap in knowledge transmission.
CEPI and IndustriAll Europe launched the good practice report on health and safety in the European paper industry in Germany in 2012. The organisations worked jointly on this new report compiling a set of 22 exemplary practices, collected from members under the auspices of the paper sector Social Dialogue, funded with the support of the European Commission.

The good practice report addresses different types of pulp and/or paper mills and their associated health and safety issues, as well as various kinds of activities (daily operation, transport and handling, maintenance) and can in most cases be adapted and transposed.

The health and occupational safety of its workers is of paramount importance for the paper industry. In 2003, CEPI committed to a target of zero accidents in the workplace. The decrease in the number of accidents causing an absence of more than three days off work can be partly attributed to falling employment levels but is also due to the ever present awareness and diligent work in mills regarding safety and incident prevention. More efficient alert systems have been introduced and companies are increasingly aware of the role prevention has to play in reducing the number of days lost as a result of health and safety issues.²

- 60% accidents since 2002

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GUIDELINES TO PROMOTE LOAD SAFETY ON ROAD

Because load safety on road is essential, CEPI is developing guidelines on storage and securing of paper products according to the principles included in the revised European standard EN 12195-1 in 2010. They mainly include an interpretation of the EN 12195-1 specifically dedicated to the European pulp and paper industry. These guidelines will be made available to all pulp and paper companies and translated in several EU languages to secure a good understanding and a broad implementation by companies and supply chain partners (consignors, operators and drivers).
EDUCATION AND TRAINING

Paper consumption is closely correlated to a country's development stage. The graph below shows that developed countries and regions such as the US, Europe and Japan consume larger amounts of paper and board (though falling), while developing countries such as Brazil, China or India are low in paper consumption at present, but show a continuous upward trend.

PAPER AND BOARD CONSUMPTION PER CAPITA

Paper and board consumption per capita has remained relatively stable in Europe compared to the US. The potential for higher consumption in emerging countries is substantial. New emerging markets offer a great opportunity for European companies. The focus on bioeconomy development in Europe also offers many opportunities for the European pulp and paper sector as an employer.
CEPI has continued to invite stakeholders from the European institutions, suppliers, NGOs, trade unions, and the value chain as well as members to join small roundtable sessions at CEPI’s office to discuss their views on how our sustainability reporting can gain value and credence as a reference source. The European Commission, forestry, publishing, paper board converting, suppliers, trade unions, NGOs and printing sectors that attended the event provided views on which issues the report should cover and areas for improvement. CEPI also heard how it could reinforce relationships with stakeholders.
Feedback was extensive, but it mainly focused on the structure of the report and audience rather than additional information, suggesting that we have reached a good level of information content. We at CEPI looked at the wish list of our stakeholders and identified the items that we could already implement in this year’s report. Not all wishes can be fulfilled due to missing data (more under ‘Data collection’), difficulties in obtaining the data or data which was intended to be reported for a specific stakeholder group and was not material for the bigger part of the readers of this report.

Our stakeholders wanted to see the innovation activities highlighted as well as resource efficiency, which we did through special icons throughout the report. Furthermore, stakeholders requested more information about the challenges our industry faces and details about the minerals and chemicals the paper industry uses. Both issues have been addressed in this report already.

Here a list of other interesting subjects that summarise the discussions at our stakeholder meeting:
- Insist on the need for profitability
- Add data about investments outside Europe
- Address the energy cost issue
- Tell the ‘made in Europe’ story of our industry
- Address the social aspects of forests
- Stronger communication on the naturalness of the raw materials
- Address the continuous threat of greenwashing by digital service providers.

CEPI staff members keep in touch with various stakeholder groups to discuss specific topics such as energy, water or social affairs in more details and meet them when needed.
ABOUT CEPI AND THE EUROPEAN PULP AND PAPER INDUSTRY
WHAT WE DO
CEPI coordinates activities across the entire pulp and paper industry in Europe. The organisation responds to EU institutions’ consultations and represents the European paper industry in discussions with these institutions. Our approach and structure ensures that we are open, flexible and responsive. CEPI organises several events each year and publishes trade publications on various topics and interests. We also conduct a large amount of projects, most recently the Two Team Project on breakthrough technologies.

WHO WE ARE
The CEPI secretariat is located in Brussels where Director General Teresa Presas heads a 20-strong team. Directors and managers are appointed for their expertise and skills in key policy areas for the industry; namely forestry and research, environment, energy and climate change, competitiveness and trade, recycling and products, social affairs as well as in communication. The national associations nominate members to standing committees, which take strategic views on these six areas of interest, supported by Issue Groups. Social affairs, research, food contact, statistics, trade and transport issues are covered by specially formed groups. The CEPI Board of Directors comprises national association chairpersons and company chief executives. The current chairman is Jussi Pesonen, CEO of UPM.
The CEPI Board is the ultimate decision-making and governance body in CEPI. It is assisted by a more operational Executive Committee. The Associations Directors Group (ADG) is the senior advisory group to the CEPI Director General. The secretariat implements board decisions recommended by the committees. Sustainability strategy and communication are transversal issues under the Director General. Innovation and social affairs are supervised by the ADG. The Committees are responsible for strategy and political perspective in the policy areas. Issue Groups are formed as needed, to work on problems/issues identified by the Committees.
OUR SUSTAINABILITY REPORTING

Report Boundary
For this report the GRI ‘Profile Disclosures’ and ‘Disclosures on management approach’ are reported for CEPI as the reporting organisation, but as a European industry association the ‘Performance indicators’ relate to the performance of the paper industry in the CEPI region as a whole.

Report Methodology
Data generation at CEPI relies on our national association members and pulp and paper company measurements. Information is collected from the available sources and with a view to ensure accuracy and robustness to avoid risks of overlapping and gaps. Standardised definitions were developed for all indicators. CEPI’s Statistics department confirms the completeness and accuracy of reported data. Cross-checks (with other sources used for industry specific data) are performed systematically. Feedback and commenting loops with the reporting members ensure high data quality. If we identify limitations in the coverage or reliability of data, we disclose them and introduce measures to improve the reporting process.

Data Quality
Responsibility for the collection of environmental data lies with the statistics department, which is constantly working to improve the quality of the data reported. Due to revisions of some national associations’ data, we had to adjust our data on energy consumption, biomass use and emissions reported in recent years.

Our figures in this edition cover the years up to 2012 or 2010. Environmental figures exclude data from Romania, Hungary and Slovenia, as we were unable to obtain relevant data from those countries (except for CO2 emission data, which include all CEPI countries); and we do not include figures from Poland before 2003. The Environment Committee is investigating possibilities to improve data collection. Sometimes indicators do not apply to all our members; exceptions are explained in footnotes. Occasionally, updates on economic indicators necessarily rely on data from external consultancies; in each case the source is credited in a footnote. In some instances consultancy figures cover a different spectrum of Europe (not CEPI countries, but EU 27 or other); this is explained when relevant.

2012 Figures from Belgium, the Czech Republic and Slovakia have not been received and have been estimated by CEPI, based on specific figures from 2011. Ernst & Young issued a limited assurance statement on the data quality rating (DQR that CEPI made on some of the core indicators in the full sustainability report. The detailed assurance statement and the full sustainability report can be downloaded at www.cepi-sustainability.eu
ANNEX
CEPI PARTNERS

The Partnership Programme is open to stakeholders in the pulp, and paper or cardboard industry, namely machine and/or chemical suppliers with a direct link to paper manufacturing. Current CEPI Partners are:

**VOITH**

**Engineered Reliability**

Founded in 1867, Voith employs almost 40,000 people, generates €5.6 billion in sales, operates in about 50 countries around the world and is today one of the biggest family-owned companies in Europe.

Paper making has a long tradition at Voith. As early as 1859, Johann Matthäus Voith built the first wood grinder for the production of paper from wood fiber. Today, a large proportion of the world’s paper production is performed on Voith paper machines. The company focuses on solutions for an efficient, resource-sparing paper production. Using new processes and concepts, Voith is working intensively on the paper production of the future. The company is a pioneer in waste paper preparation. After developing the technology decades ago, Voith was the first to make the production of paper from waste paper actually possible. Since then, Voith engineers have continually improved and refined the process.

www.voith.com

**OMYA**

Omya is a leading global producer of industrial minerals, mainly fillers and pigments derived from calcium carbonate and dolomite, and a worldwide distributor of chemical products. Its main segments of activity are: Paper, Paints, Coatings, Adhesives, Plastics, Animal Feed, Food, Construction, Environment and Agriculture. Omya’s roots date back to 1884 when the company was founded by Gottfried Plüss-Stauffer in Oftringen, Switzerland. In the beginning the company engaged in the production of glazier’s putty by combining fine chalk with linseed oil.

The use of minerals in papermaking is a practice that has long been known. Owing to the acidic conditions of paper making in former times, kaolin clay and talc were the main materials used as filler. But highly cost efficient and abundant calcium carbonate in combination with a lot of pioneer work of Omya changed the process conditions from acidic to neutral and alkaline some 30 years ago. Its use spread and today it is the most important filler and coating pigment for the paper making process. Today it is natural that almost all paper and cardboard contain calcium carbonate: coated and uncoated, wood-free and wood-containing papers as well as to an increasing extent, board and packaging grades.

www.omya.com
Imerys, world leader in mineral-based specialty solutions for industry, transforms a unique range of minerals to deliver essential functions (heat resistance, mechanical strength, conductivity, coverage, barrier effect, etc.) that are essential to its customers’ products and manufacturing processes. Whether mineral components, functional additives, process enablers or finished products, Imerys’ solutions contribute to the quality of a great number of applications in consumer goods, industrial equipment or construction. Combining expertise, creativity and attentiveness to customers’ needs, the Group’s international teams constantly identify new applications and develop high value-added solutions under a determined approach to responsible development.

The Pigments for Paper & Packaging business group provides kaolin, calcium carbonates and talc to paper and paper-based packaging manufacturers. It ranks world number 1 in kaolin and talc, and world number 2 in ground calcium carbonate (GCC) for paper.

www.imerys-paper.com

Buckman
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Buckman is a privately held, ISO-certified, global specialty chemical company headquartered in Memphis, Tennessee, USA. The company was founded in 1945 and conducts business in over 90 countries. It operates 10 manufacturing sites (Memphis, TN; Cadet, MO; Canada, Europe, Mexico, Brasil, Australia, South Africa, Singapore and China), and employs approximately 1500. Core industries include performance chemicals (paint, coatings, plastics, water, formulators, wood treatment and agriculture). An early pioneer in microorganism control, Buckman has grown to be a leading supplier of new-generation water treatment solutions for the pulp an paper industry, including:

• Influent and effluent treatment using our innovative green chemistries that have full regulatory approval
• Water recovery and reuse processes, including liquid-solid separation, filtration, thermal and membrane desalination
• Cooling and boiler water treatment
• Energy efficiencies to reduce your carbon footprint
• Equipment maintenance
• Process integrity
• Odor control

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