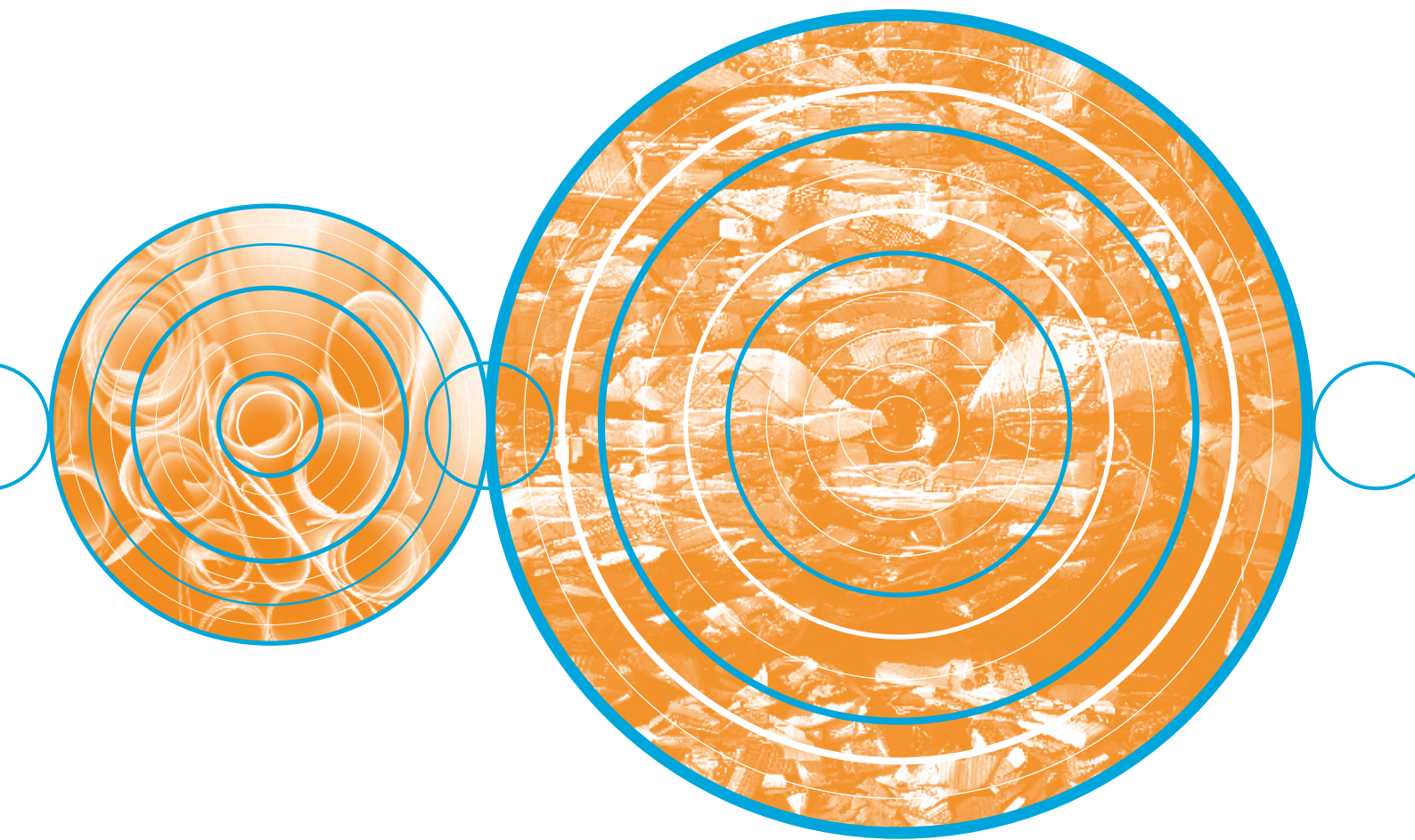


# European Declaration on Paper Recycling 2006 – 2010 Monitoring Report 2008



# Contents

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Breaking the World Record Sustainably

Recycling Rate 2008

Data Quality

Progress in Qualitative Targets

European Waste Directive: Elements for Becoming a Recycling Society

Glossary

Assurance Report 2008 by PwC

European Recovered Paper Council

## Breaking the World Record Sustainably

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Financial crises hit everyone in the economy, but sometimes the impact is counterintuitive; the recycling rate jumped up, not down, due to the economy's slowdown in the second half of 2008. As the recycling rate is the ratio between the recycling and consumption of paper, the sudden fall in consumption – whereas the recycling continued a steady growth – resulted in a record high 66.6% recycling rate.

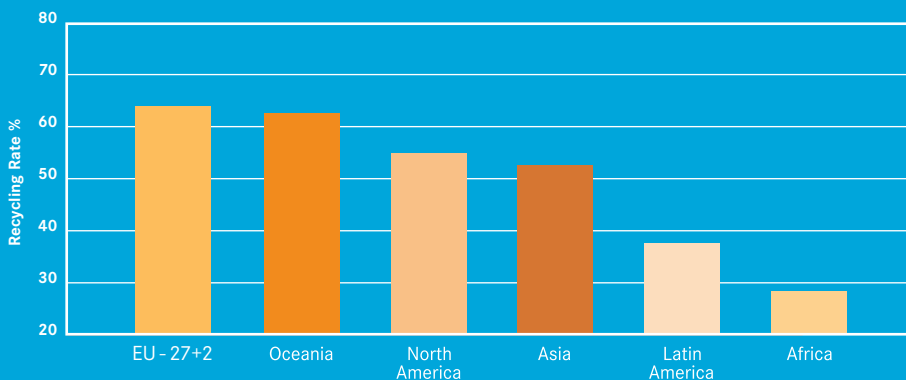
The opposite may occur when the economy recovers as recycling may not be able to immediately match up to the increasing paper consumption and the recycling rate is likely to drop, temporarily. Recycling is intrinsically a self-adjusting mechanism which, with a lag of three to six months, will adapt to any volume of consumption. In the trend, the industry will continue on its path to meeting ambitious targets of recycling paper at a steadily increasing rate in Europe.

For the commitment period of 2006 to 2010, PricewaterhouseCoopers will independently verify recycling rate calculations using the International Standard on Assurance Engagements ISAE 3000; see report on page 7.

In addition to the quantitative progress, much was done in the qualitative work for establishing an eco-design towards improved recyclability and in the area of waste prevention. A particularly successful story was the substitution of a phthalate, DiBP, in adhesives that caused worries about food safety. In a voluntary action the relevant parts of the value chain agreed to and managed to find safe and cost effective substitutes. More on that on pages 4 and 5.

Another highlight of 2008: a completely revised Waste Directive was adopted and entered into force in December. The Directive will give essential support to paper recycling; see page 6.

The ERPC elected Phil Mogel (European Tissue Symposium) as Chairman for the period 2009-2010, replacing Anders Hildeman (CITPA).



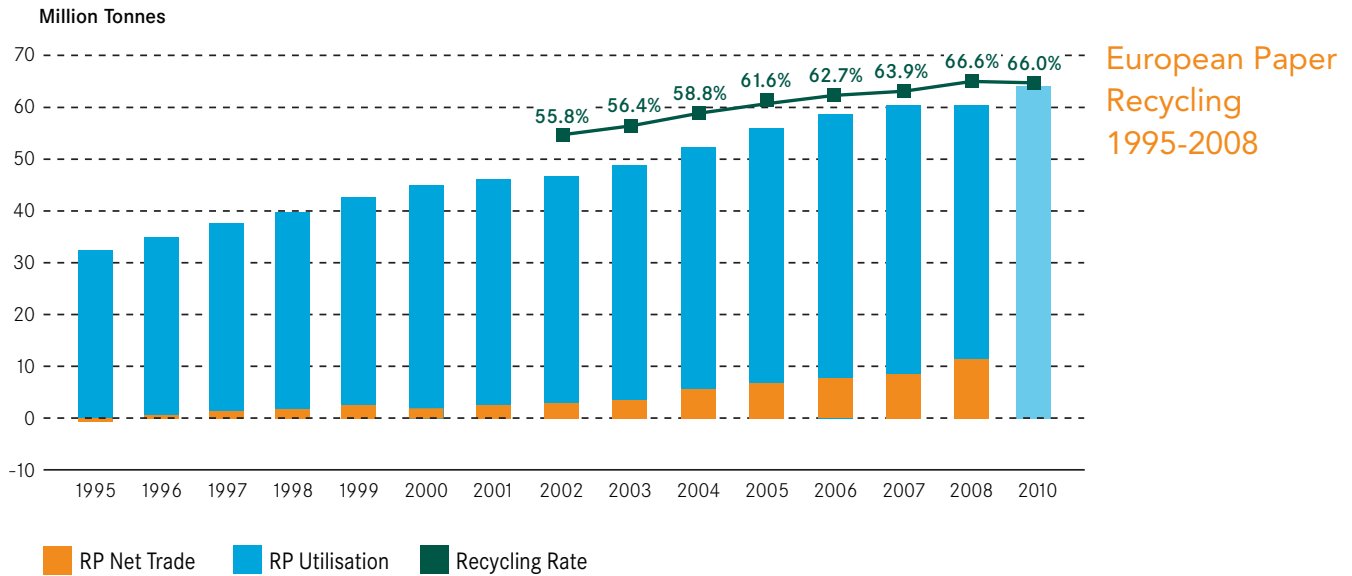
Global Recycling Rates 2007\*  
Source: Pöyry 2009

\* Latest available global figures are 2007.

# Recycling Rate 2008

The recycling rate in Europe reached 66.6%<sup>1</sup> in 2008. The total amount of paper collected and sent to be recycled in paper mills came to 60.3 million tonnes, an increase of 8.2 million tonnes (or +15.8%) since 2004, the base year for the target the industry has set itself for increasing recycling in Europe.

Some 10.4 million tonnes (or 17.2%) of the total 60.3 million tonnes were exported for recycling in third countries outside the commitment region of EU-27 plus Norway and Switzerland.



# Data Quality

## 2009 (2008 Data)

The data used to calculate the recycling rate is collected by CEPI. The data comes from the results of a questionnaire sent by CEPI to its national member associations (Austria, Belgium, Czech Republic, Finland, France, Germany, Hungary, Italy, the Netherlands, Norway, Poland, Portugal, Romania, Slovak Republic, Spain, Sweden, Switzerland and the United Kingdom). The national associations supply the data, which they collect from their member mills/companies plus official sources where appropriate.

The data, including recovered paper utilisation and trade plus paper and board production, trade and consumption for non-CEPI members of the EU-27 (Bulgaria, Cyprus, Denmark, Estonia, Greece, Ireland, Latvia, Lithuania, Luxembourg, Malta and Slovenia) is obtained from Pöyry Consulting.

For certain countries<sup>2</sup>, where the calculation of the mass of recycled paper and board based on recovered paper utilisation and net trade has not produced a result which is considered to be an adequate reflection of reality, recycling has been based on actual paper and board collection for the specific purpose of recycling. This change of methodology is mainly caused by the relatively high trade volumes in the Netherlands, which complicates the exercise of distinguishing domestic utilisation from trade of recovered paper. It should be noted that this change has a reductive impact on the overall recycling rate as the usual calculation method would over estimate actual recycling in the Netherlands.

All historical annual recycling rates have been recomputed based on the revised calculation methodology.

<sup>1</sup> See Assurance Report 2008 by PwC on page 7

<sup>2</sup> France, the Netherlands, Hungary, Sweden

# Progress in Qualitative Targets

By joining the European Declaration on Paper Recycling, European Recovered Paper Council (ERPC) members committed to qualitative actions, in particular by the eco-design of paper products, to improve the recycling rate by 2010. The members represent 14 sectors along the paper value chain. In 2008, like the previous year, ERPC members dedicated a substantial amount of their time to several initiatives that will facilitate the recycling process and increase recycling activity.

## Eco-design: Deinking Scorecard for Printed Products

In 2008 the ERPC adopted a new assessment scheme, the **deinkability scorecard**<sup>3</sup>, to promote the eco-design of printed products, which will ensure their recyclability and also promote sustainable production processes.

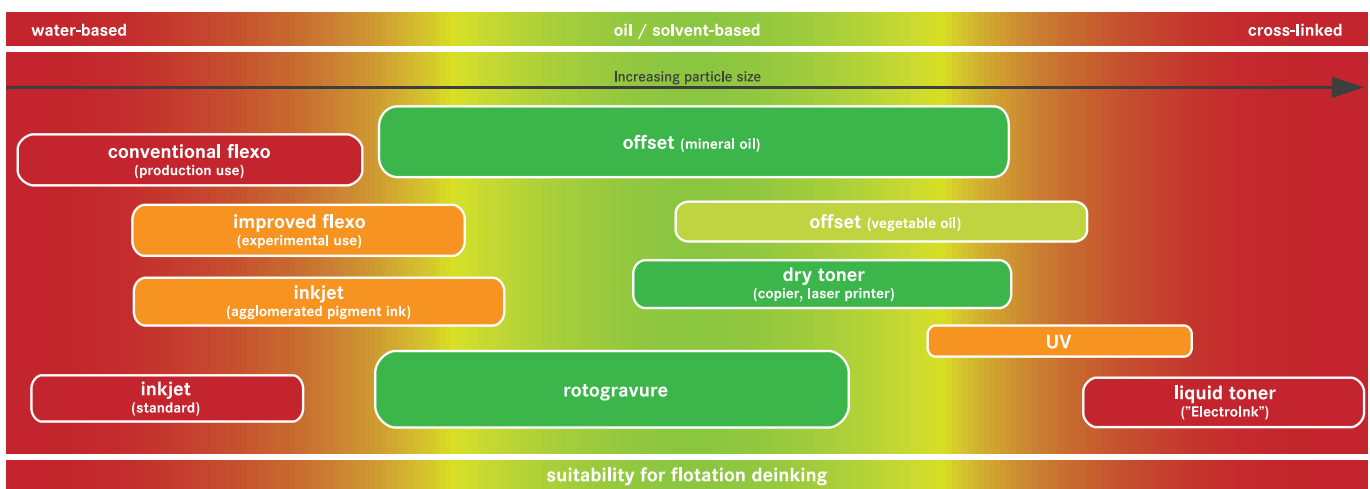
The scheme is designed to allow printers, publishers and other members of the paper value chain to identify which types of printed paper products have the best deinkability when they are recycled. Five parameters – luminosity, colour, cleanliness, ink elimination and filtrate darkening<sup>4</sup> – are considered in a widely accepted standardised test, Method 11, developed by the International Association of the Deinking Industry (INGEDE). The scorecard uses orientation values for recyclability developed under the German Agrapa agreement.

Following laboratory tests the results of the scorecard’s five parameters are weighted according to their importance and displayed either numerically or graphically in a traffic light colour

scheme. There are four categories of results – good, fair, poor and not suitable for deinking. In order to achieve the status of being “fair” or “good” in terms of deinkability, a printed product has to reach at least 51 out of 100 points. A score below zero in any of the parameters leads to the overall assessment “not suitable for deinking”. However, the product may still be recyclable in applications where deinking is not required.

The scheme allows the European paper industry to further improve the quality of recycled paper as well as the sector’s environmental performance. It therefore links to the European policies such as Sustainable Consumption and Production and the recently revised Waste Directive. These include a strong focus on waste prevention, resource efficiency and eco-design. The deinkability scorecard allows the paper industry to respond to these challenges and shows that it has already addressed these issues and is working every day to improve the sustainability profile of its products.

## Suitability of Various Printing Methods for Flotation Deinking



<sup>3</sup> A full description of how the scorecard works, as well as how the results of the tests are presented and interpreted, can be downloaded from [www.paperrecovery.eu](http://www.paperrecovery.eu)

<sup>4</sup> A sixth parameter, large visible dirt particles, was added to the scheme in a later update of the scheme in 2009

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The scorecard is accompanied by a MS Excel-based **calculator** and an **issue sheet on deinkability**, addressed to printers and publishers. In addition, a revision of the **Guide to an Optimum Recyclability of Printed Graphic Paper**, issued originally by six of the current ERPC members in 2002, was finalised and the document was adopted by the ERPC in September. This package of four documents provides science-based knowledge as well as an easy understanding of the issue's importance.

### Eco-design: Phase-out of Di-isobutylphthalate

In April 2008, FEICA published a recommendation<sup>5</sup> to all its members to phase out di-isobutylphthalate (DIBP) in adhesives for paper and board applications in order to avoid it coming back in to the paper cycle through the recycling process; a potential risk for food contact applications. Several other associations in the value chain, including CEPI and CITPA, made similar recommendations, and in Germany, where the issue arose originally, the relevant parts of the value chain signed a voluntary agreement declaring to abstain from using the plasticiser DIBP in the formulation of adhesives, adhesives raw materials, and adhesives tapes which are intended to be used in the production and processing of paper products as well as in the print finishing. The companies supplying such materials have confirmed a complete phase-out of DIBP in their products and supplies of DIBP-free adhesive systems have been made available on a website ([www.klebstoffe.com](http://www.klebstoffe.com)). The voluntary agreement has been successfully repeated in several other countries, and recent studies have confirmed a significant reduction in the levels of DIBP in Europe.

### Research and Development

CEPI and INGEDE actively participated in the COST E48 action on "limits of paper recycling"; a scientific exchange between universities, research organisations and industry from 18 European countries aiming to map the necessary efforts to be undertaken to extend paper recycling and safeguard recovered paper as a valuable raw material for the European paper industry.

In Germany, companies within the ERPC, such as EuPIA, were involved in a project<sup>6</sup> for improving the deinkability of printed products by industry-wide strategies for the sustainable recycling of recovered paper, funded by the German federal ministry of education and research. Results of the project were presented to the printing industry in public presentations.

CEPI developed a system for recovered paper traceability that was agreed to by ERPA and FEAD and launched in November 2008. The European Recovered Paper Identification System contributes to the traceability of used paper and improves safe and secure paper production processes. A specific website<sup>7</sup> was developed by CEPI allowing suppliers of recovered paper to register and receive an identification code valid throughout Europe (and globally). This code enables linking individual bales to the supplier and, where needed, passing information up and down the supply chain.

### Education

In Belgium, the Paper Chain Forum<sup>8</sup> wants to increase awareness of paper and motivate people to deal with this 'precious' good in a sensible way.

The Paper Chain Forum, in collaboration with a non-governmental organisation Green Belgium, supports an education project in which 8-12 year old pupils are being sensitised on how the paper chain functions. The pupils are gaining an insight into the production of paper and board as well as sustainable forest management and the balance between virgin fibres and recycling. They are also learning how to sort paper and board at school and at home. 30 schools enrolled for the school term 2008-2009 and each school received three half-days' training.

<sup>5</sup> The FEICA recommendation can be downloaded from [www.feica.com](http://www.feica.com)

<sup>6</sup> Bundesministerium für Bildung und Forschung, Projekt Deinkbarkeit Druckerzeugnisse: Verbesserung der Deinkbarkeit von Druckerzeugnissen durch Industriezweig übergreifende Strategien für ein nachhaltiges Altpapier-Recycling

<sup>7</sup> [www.recoveredpaper-id.eu](http://www.recoveredpaper-id.eu)

<sup>8</sup> The Paper Chain Forum is an association regrouping the Belgian associations and federations of forest owners, pulp, paper and board manufacturers, paper and board converters, printers, publishers and the paper and board recovery industry (Benecell, Cobelpa, Coberec, Febelgra, Febem-Fege, Fetra, Grape, JFB, Vlaamse Dagbladpers, Procarton, KBBM, Landelijk Vlaanderen, The press, UEPP)

# European Waste Directive

## Elements for Becoming a Recycling Society

The EU has adopted a new Waste Directive replacing the previous Directive from 1975. In 30 years the thinking has changed from seeing waste as a problem to managing it as a valuable material for reuse and recycling.

The new measure, Directive 2008/98/EC, sets stream-specific recycling targets for 2020, modernises and clarifies definitions, introduces a mechanism for waste ceasing to be waste, and makes provisions for collecting paper in a segregated stream and for prioritising recycling over incineration.

Waste materials shall be collected separately and shall not be mixed with other waste or other material with different properties where appropriate to meet the quality standards for the relevant recycling sectors. In particular, member states have an obligation to set up separate collection for paper and other materials in all member states by 2015.

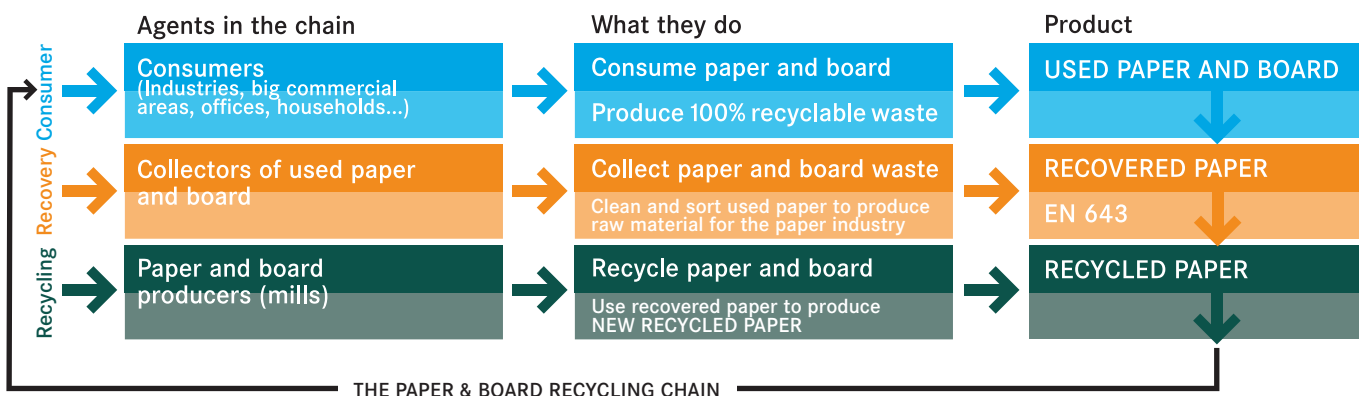
The Directive states that member states should support the use of recyclates, such as recovered paper, in line with the waste hierarchy and with the aim of a recycling society, and should not support the landfilling or incineration of such recyclates whenever possible. The Directive sets a target of a 50% recycling rate for domestic waste.

The member states have to transpose the Directive into their national law by 12 December 2010. CEPI has published guidance on the transposition and implementation. An annex to the guidance is legal advice on how to interpret the degree of discretion in setting up separate collection systems.

CEPI has also published a generic “Safety Information Sheet” on recovered paper for the purposes of the REACH regulation. ([www.cepi.org](http://www.cepi.org), [www.recoveredpaper-id.eu](http://www.recoveredpaper-id.eu))

## Glossary

- **Consumption of paper and board:** internal deliveries to particular countries plus imports from countries outside this list of countries.
- **Europe:** for the purposes of the declaration, ‘Europe’ means the 27 EU member states plus Norway and Switzerland.
- **Net trade in recovered paper:** the difference between recovered paper exports to and imports from the defined area.
- **Recovered paper:** used paper and board separately collected and, in general; processed according to the European Standard List of Recovered Paper and Board Grades (EN 643) for paper recycling.
- **Recycling:** the reprocessing of recovered paper in a production process into new paper and board.
- **Recycled paper:** new paper and board where fibres originate from recovered paper.
- **Recycling rate:** the ratio of recovered paper utilised for recycling including recovered paper net trade, and paper and board consumption.
- **Utilisation:** the use of recovered paper in a paper mill while producing recycled paper.



# Assurance Report by PwC

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To the Managing Director of CEPI

## Assurance report on the calculation of the paper recycling rate in Europe for 2008 in the Monitoring Report 2008

### *Scope of our engagement*

We have been engaged by the Managing Director of CEPI to express an independent opinion on the calculation of the paper recycling rate in Europe over 2008 as presented on page 3 of the European Declaration on Paper Recycling 2006-2010 Monitoring Report 2008.

The paper recycling rate over 2008 in the Monitoring Report 2008 has been prepared under the responsibility of the Managing Director of CEPI. The paper recycling rate is calculated by CEPI based on information received directly from CEPI member associations, directly from individual companies, or in specific circumstances based on estimates provided by paper industry consultants.

It is our responsibility to express an opinion on the accurate calculation of the paper recycling rate over 2008 as presented on page 3 of the Monitoring Report.

### *Limitations*

The scope of our assurance engagement as described above does not include an assessment of the reliability of the underlying data provided to CEPI – by the CEPI member associations, individual companies and industry consultants – nor does it include an assessment of the calculation of the paper recycling rates for the years 1995-2005 as presented on page 3 of the Monitoring Report.

### *Criteria*

The paper recycling rate in Europe is defined by CEPI on page 6 of the Monitoring Report 2008. We consider the reporting criteria for the European paper recycling rate to be relevant and sufficient for our engagement.

### *Procedures performed*

We performed our procedures in accordance with Dutch Law and the International Standard on Assurance Engagements (ISAE 3000) 'Assurance engagements other than audits or reviews of historical financial information'. These standards require that we plan and perform our procedures to obtain reasonable assurance about whether the European paper recycling rate over 2008 on page 3 of the Monitoring Report 2008 is accurately calculated.

Our procedures included:

- interviews with CEPI management to obtain an understanding of the procedures and methods applied for data collection, estimations and calculation of the paper recycling rate;
- reconciliation of the data used for the calculation with data provided by CEPI member associations, individual companies and estimates from paper industry consultants; and
- recalculation of the paper recycling rate over 2008.

We believe that the assurance information we have obtained is sufficient and appropriate to provide a basis for our conclusion.

### *Conclusion*

Based on the procedures we have performed, we conclude with a reasonable level of assurance that the European paper recycling rate over 2008 presented on page 3 of the Monitoring Report 2008 has, in all material aspects, been accurately calculated in accordance with the CEPI reporting definition for the European paper recycling rate.

### *Use of this assurance report*

This report is addressed to the Managing Director of CEPI only and was prepared on CEPI's instructions as set out in our terms of engagement with them. Notwithstanding our consent to the inclusion of this report in the Monitoring Report 2008, our report remains addressed to the Managing Director of CEPI to whom we owe a duty of care under the terms of our engagement. Consequently, we do not accept or assume and deny any liability or duty of care to any third parties who may wish to rely on this report.

Amsterdam, 11 September 2009  
PricewaterhouseCoopers Accountants N.V.  
Original has been signed by J. van der Hilst RA

# European Recovered Paper Council

## Signatories



[www.cepi.org](http://www.cepi.org)  
[www.paperrecovery.org](http://www.paperrecovery.org)



[www.citpa-europe.org](http://www.citpa-europe.org)



[www.erpa.info](http://www.erpa.info)



[www.europeantissue.com](http://www.europeantissue.com)



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