MONITORING REPORT 2020

European Declaration on Paper Recycling 2016-2020

European Paper Recycling Council

www.paperforrecycling.eu

Table of Contents

1. European Paper Recycling Value Chain Meets its Set Target and Reaches 73.9% Paper Recycling Rate in 2020 2
2. Recycling Rate 2020: 73.9% 3
3. Progress in Qualitative Targets 6
4. 4evergreen: The New Forum for the Fibre-Based Packaging Value Chain 9
5. Data Quality: 2020 data 11

EUROPEAN PAPER RECYCLING VALUE CHAIN MEETS ITS SET TARGET AND REACHES 73.9% PAPER RECYCLING RATE IN 2020

1

Since 2000, the European paper value chain has been committed to the two-fold aim of improving recycling and increasing efforts to remove obstacles hampering paper recycling in Europe. In 2016, the signatories of the European Declaration on Paper Recycling declared their commitment to reach a 74% paper recycling rate by 2020.

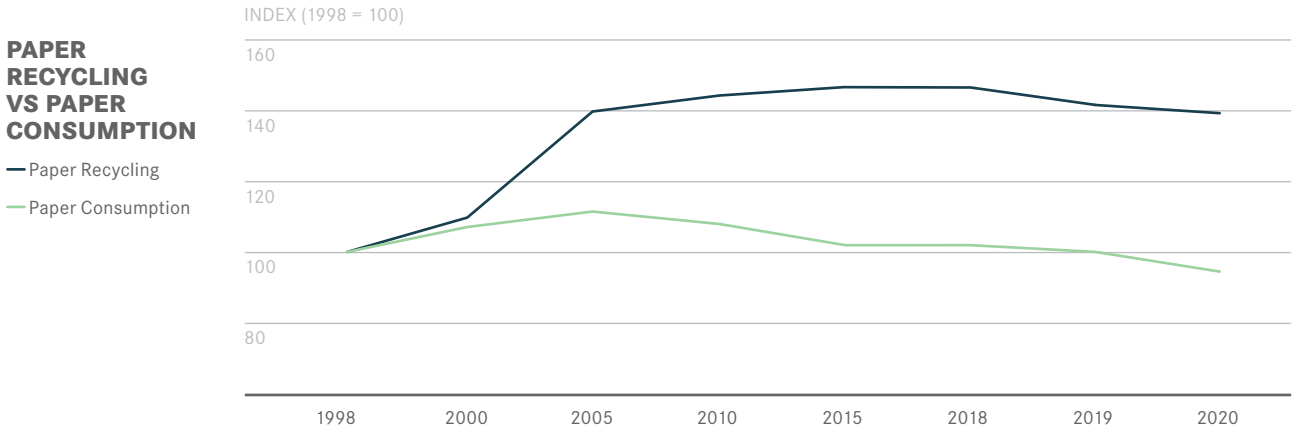
In 2020, 73.9% of all paper and board consumed in Europe was recycled. Due to the Covid-19 crisis, among other factors, less paper and board was consumed and collected for recycling. The collection of paper for recycling decreased by 2.6% compared to 2019 and reached 56 million tonnes. Paper and board consumption decreased more heavily compared to 2019 and reached 75.8 million tonnes. The recycling rate therefore increased from 72.5% in 2019 to 73.9% in 2020. In absolute figures, compared to the base year of the Declaration (2015), the amount of paper and board collected and recycled decreased by 3.1 million tonnes.

In Europe, the paper industry was constant in its use of paper for recycling. The drop in collection can be explained by interruptions in collection especially in the early phase of the Covid-19 crisis, as well as by a further decrease in Chinese demand for paper for recycling, which was not offset by the increased demand from other countries.

The structural change in paper consumption patterns continued in 2020; decline in the consumption of newsprint and graphic papers accelerated in 2020 at a rate of -17.8% while consumption of case materials, the other most recycled paper product, increased by 1.0%.

For the commitment period of 2016-2020 the recycling rate calculations were independently verified by Deloitte.

PAPER RECYCLING VS PAPER CONSUMPTION



At a regional level, the number of countries with a recycling rate below 60% was 7 in 2020, down from 8 in 2019. In 2020, the number of countries exceeding recycling rates of 70% was 16, as in 2019.

At an international level, Europe continues to be the world champion in paper recycling followed by North America. The paper recycling rates of other world regions are improving, but from lower levels. In Europe, paper fibres are used 3.8 times on average in 2020, while the world average is 2.4 times.

The EU has increased its targets for the recycling of municipal and packaging waste; it is clear that the functioning paper recycling chain is a key driver for meeting these targets. Paper recycling is a “Made in Europe” industry. It prolongs value creation and job opportunities in Europe from a renewable and predominantly European resource: wood.

Making recycling easy and simple, year after year, requires a huge effort by the paper value chain. We explain these efforts in our annual monitoring reports and are proud of the progress made.

RECYCLING RATE 2020: 73.9%

2

The recycling rate in Europe reached 73.9% in 2020.

In a year to year comparison, the total amount of paper and board collected and recycled in the paper sector decreased by 2.6% to 56 million tonnes, while consumption of paper and board decreased by 4.4% to 75.8 million tonnes.

Looking back at the progress made since 1998 - the base year for the first voluntary commitment set in the European Declaration on Paper Recycling - recycling has increased by 40% (16.0 million tonnes). In strong contrast, consumption since 1998 increased up until 2007 and dropped back below the initial level in the following years.

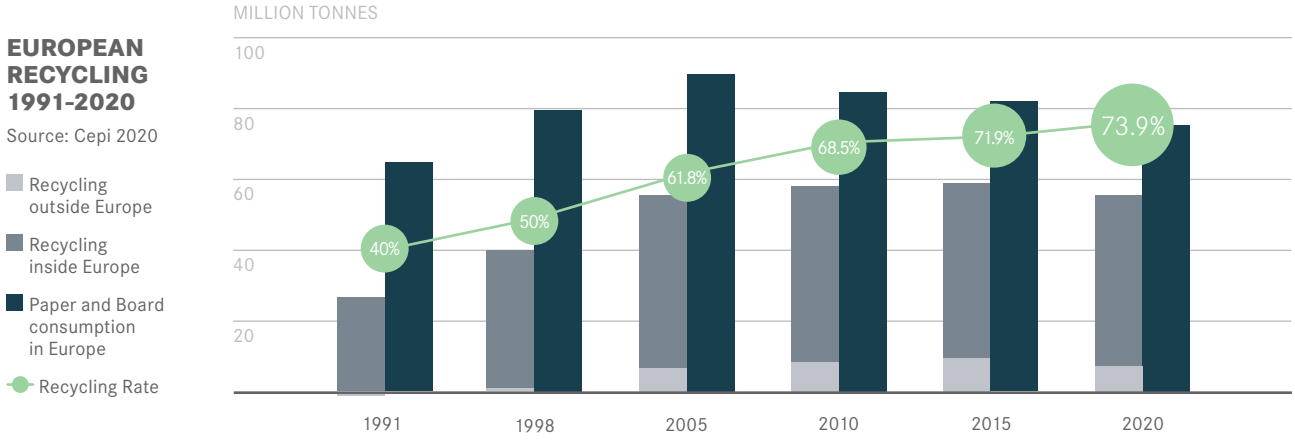
The net trade of paper for recycling is included in the European paper recycling rate (73.9% in 2020). The recycling rate is defined as the ratio between used paper recycling including net trade of paper for recycling and paper and board consumption.

In the European paper industry, the use of paper for recycling was quite stable in 2020 at 49.6 million tonnes, which was a small decline of -2.1%. A net volume of 6.2 million tonnes (11% of the total 56 million tonnes) was bought by third countries, outside the commitment region (EU-27, the United Kingdom, Norway, and Switzerland). There has been a further decrease in Chinese demand for paper for recycling, in line with the Chinese government's decision to reduce its dependency on secondary raw materials originating from third countries by 2020. Thus, China is no longer among the main export destinations of European paper for recycling but has been overtaken by other countries such as India, Turkey and Indonesia. Other countries, such as Vietnam and Thailand, have increased imports of European paper for recycling too, but overall net exports of paper for recycling outside Europe have diminished by -5.6% compared to 2019.

Without taking into account the net trade of paper imported by third countries for recycling outside Europe, the European paper recycling rate 2020 would have been 65.4% (up from 63.9% in 2019 and up from 60.4% in the base year of the Declaration (2015).

EUROPEAN RECYCLING 1991-2020

Source: Cepi 2020



TIMELINE OF ACHIEVEMENTS

Milestones in Paper Recycling since 1st European Declaration

2000

November 2000, **the European Declaration on Paper Recovery was launched** by the European paper industry. **Its first target was to increase the level of paper recycling in Europe to 56% in 2005,** and the overall environmental performance of the industry.

For the first time there was an agreed calculation methodology for paper recycling rates within the industry; Recycling rate = recovered paper utilisation/apparent paper and board consumption in Europe.

2001

The European Recovered Paper Council was fully established, its founding members were Cepi, FEFCO and ERPA. The work programme included: collection, communication and consumer awareness, free movement of recovered paper, quality of recovered paper, stimulation of research and development, reduction of residues during the recovery chain, and monitoring the recycling rate and data reliability.

2003

The industry focused on the collection and quality of recovered paper. The industry drafted a guidance for responsible sourcing of recovered paper covering everything from collection, sorting and transportation, from storage to end-use of recovered paper. A project to find ways to improve the recyclability of paper and board products was launched.

2004

A set of quality guidelines for recovered paper was launched. Work was also done on drafting guidance for responsible sourcing and supply of recovered paper. The waste management industry got involved in the work carried out by EPRC signatories and supporters regarding recovered paper quality controls and responsible sourcing.

2005

End year of the European Declaration on Paper Recycling 2000-2005
2005 Recycling Rate in Europe: 61.8%

2006

A European de-inkability survey was launched. Tests were performed on the recyclability of individual print products and a Technical Committee was set on Deinking with the paper chain in Germany and continued a recyclability survey with around 300 European newspapers and magazines.

2007

1st European Paper Recycling Awards. Brussels November 2007, the first European Paper Recycling Awards ceremony takes places in the context of the European Paper Week. An independent jury from the European Parliament, WWF, EPRC, and ACR+ awarded three winners.

2008

Introduction of the Waste Hierarchy. With the publication of the Waste Framework Directive 2008/98/EC, the Waste Hierarchy was introduced, placing recycling as a priority in the waste prevention and management legislation, and policy. Paper for recycling is no longer considered waste but a vital component of the circular economy.

EPRC

The revision and adoption of the Guide to an Optimum Recyclability of Printed Graphic Paper was finalised in September 2008.

2010

The EU-funded project, “Migresives” developed a science-based concept to ensure consumer safety related to adhesives used in food contact materials. A freeware multilayer modelling software was developed and is available to all stakeholders and an extensive programme of workshops and training were carried out.

EPRC members participated in EU project, “FACET” which aimed at producing realistic modelling of the exposure of consumers to substances present in food.

2011

End year of the European Declaration on Paper Recycling 2006-2010
2010 Recycling Rate in Europe: 68.5%

“Paper for recycling” is coined. After the revision of the Waste Framework Directive in 2008, the European Commission indicated that “recovered paper”, a term coined in 1995 to indicate the valuable nature of “waste paper” as a secondary material, was no longer acceptable in light of the definitions of the new Directive. EPRC signatories and supporters agreed on a new name: “paper for recycling” . A self-explanatory name for everyone, including citizens ,from the beginning of the recycling chain up to the final recycling in the paper mill. A beloved child has many names.

2012

A new EU Ecolabel on printed paper, was published in August 2012. The European flower would appear on printed products that met strict environmental criteria. According to these criteria, printed paper applying for the EU Ecolabel had to be recyclable and the non-paper constituents easily removable. The EPRC Deinking Scorecard was acknowledged as a reference for recyclability in EU legislation for awarding the EU Ecolabel for printed paper.[1]

EcoPaperLoop was lauched, as part of the transnational programme "Central Europe", co-funded by the EU/ European Fund for Regional Development. EPRC signatories and supporters became members of the project's Advisory Board. One of its main achievements was the publication of a new recyclability test method for paper-based packaging - Ecopaperloop method 1.

2014

The new EN643 revised version is published. The new text includes several major improvements, inlcuding grade-specific tolerance level for non-paper components and more detailed descriptions per grade.

The EU Ecolabel for paper carrier bags and stationery products, including paper envelopes was created. EPRC signatories and supporters were strongly involved and closely supported the process of certification and promoted the uptake of this EU Ecolabel to envelope manufacturers and stationery companies.

2015

Implementation of the revised standard EN 643 was promoted within EPRC membership. Work was also done in CEN towards a standard method for taking samples from paper for recycling. This allowed a more harmonised method of measuring and dealing with moisture and unwanted material in paper for recycling.

End year of the European Declaration on Paper Recycling 2010-2015
2015 Recycling Rate in Europe: 71.9%

2016

February 2016 **the IMPACTPapeRec project was launched,** the EU-funded Horizon 2020 programme, aimed to further increase the separate collection of paper for recycling and to promote appropriate schemes to avoid landfilling and incineration. "IMPACT – Introduction and Improvement of Separate Paper Collection to avoid landfilling and incineration". A consortium of 19 partners, from municipalities, companies in the waste management, paper and retail industry, extended producer responsibility schemes, research institutes and NGOs, was formed and EPRC signatories and supporters played a leading role.

2017

EPRC
A new version of the EPRC Deinking Scorecard, including an annex listing exemptions to the deinkability test was completed.

Important developments included the review process of the EU Ecolabel for printed paper and the work on the ISO standardisation level to develop a standard for guiding and/or assessing deinkability.

2018

In early 2018, the **final conference to mark IMPACTPapeRec project** success brought together 19 partners across the value chain from several European countries. As its legacy the "Good and Best Practice Handbook for the Collection of Paper and Board for Recycling" was published, providing municipalities with practical tools and guidance on how to improve paper and board collection in Europe.

2019

November 2019 **4evergreen is launched**. 4evergreen is an ambitious cross-value chain alliance, which in 2019 already had 52 members across the fibre-based packaging value chain. Its aim is to improve circularity at every stage of the packaging life cycle, seek innovation in packaging performance and packaging functionality, and improve performance in recycling systems to reach the full potential of the circular economy.

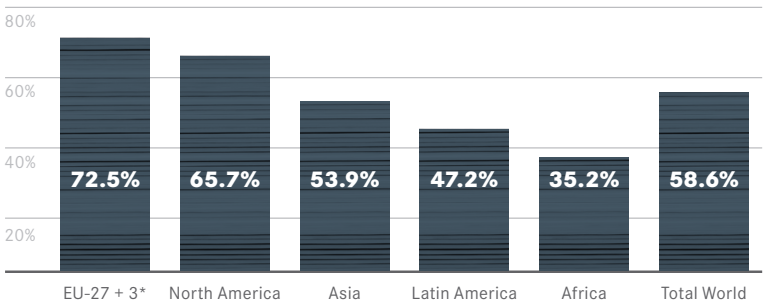
DID YOU KNOW? ♻

Paper Industry Pioneering the Recycling Society:
Few people know that the origin of the recycling logo, one of the most recognisable graphic symbols in the world, originates in the paper industry. Since the late 1960s, a new environmental awareness emerged across the US and in April 1970 the very first Earth Day was held. The handdrawn design we now know as the recycling symbol won a contest (1970) sponsored by the paper industry, to create a design symbolising the recycling process. Since then, the recycling symbol was widely used by the largest paper recycler (CCA) in the US to identify packages made from recycled and recyclable fibres and to promote paper recycling as an effective way to stretch natural resources.

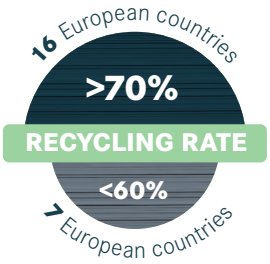
RECYCLING RATE IN WORLD REGIONS IN 2019

Source:
Cepi, RISI – 2019

*EU-27 + 3: EU-27 + Norway, Switzerland and the United Kingdom



Europe is the paper recycling champion!



NATIONAL RECYCLING RATES IN EUROPE

16 European countries exceeded the 70% recycling rate (16 in 2019).

7 European countries were below 60% (8 in 2019).

Source: Cepi 2020

[1] Commission Decision 2012/481/EU, Annex, EU Ecolabel Criteria, Criterion 3 (d).

PROGRESS IN QUALITATIVE TARGETS

3

The EPRC members, representing 15 sectors along the European paper recycling value chain, have committed to improving the recycling rate by 2020. By joining the European Declaration on Paper Recycling, they demonstrate their commitment to qualitative targets. EPRC members are involved in initiatives to facilitate the recycling process and increase recycling activity. These notably include collection, sorting, handling paper for recycling, and applying ecodesign to paper products.

COLLECTION

In view of the Covid-19 pandemic and its financial impact on the economy, the EPRC communicated with a press release to all authorities the dire need to enable crucial industries, such as paper and board, to continue production and facilitate transport and cross-border shipments for the supply of goods. Furthermore, the EPRC called on the European Commission to recognise separate collection of paper for recycling from households and retailers but also its sorting and transport to paper mills as a prerequisite and an essential part of the circular economy, as defined in the new circular economy action plan.

In addition, Cepi (the Confederation of European Paper Industries) has been in close contact with the European Commission, keeping them informed about the Covid-19 impact on the paper sector in Europe. In particular, Cepi provided updates on the impact on production and exports, the operation status and working conditions in pulp and paper mills, and the repercussions due to the economic instability along the supply chain. Cepi promoted the sector's resilience and ability to deliver on its competitiveness and sustainability agenda in various conferences during the pandemic, always highlighting the circular nature of the industry and the bio and digital aspects of its activities.

After publishing "Guidance on how to implement separate collection of paper for recycling", Cepi has actively promoted the guidance document to both institutional and non-institutional stakeholders on various occasions, such as conferences and press releases. The guidance document builds on the European Horizon 2020 project "IMPACTPapeRec" and Cepi's position on separate collection of paper for recycling. The guidance underlines that paper and board should be collected not only separately from residual waste but also from other recyclables, such as metal and plastic packaging. Separate collection is required by European legislation and the guidance aims at higher homogeneity, therefore higher economic and environmental value. It optimises cost in the recycling value chain and is simple and easy for consumers. Besides examples of recycling routes for specific products, it contains action points for the municipalities.

EuRIC (European Recycling Industries' Confederation) has encouraged its members and local authorities to adopt separate collection and better-quality control in collection and acceptance processes.

INGEDE (the International Association of the Deinking Industry), Cepi and EuRIC are continuously involved in establishing European Standards for the sampling and quality assessment of paper for recycling. EN 17085 – sampling procedures for paper and board for recycling – was finalised and published in August 2019. A new work item is in progress, the "Determination of Composition of Paper and Board for Recycling". The first draft was based on INGEDE Method 14. The discussion about a revision of EN 643 – the European list of standard grades of paper and board for recycling – has gained momentum. As an interim step, guidance is under development on how to handle stains and minuscule food remains as well as used hand towels (selectively collected and recycled), as these items are listed under prohibited materials in EN 643.

A further activity is the revision of ISO 638 – the determination of dry matter content – with the objective of extending the scope to paper and board for recycling.

INGEDE runs a Paper for Recycling Working Group for its members and partners with subgroups to increase availability, safeguard quality and establish a certification of sorting plants. The Working Group carried out activities in camera-based quality control. In Germany, INGEDE provided some input to a project on EPR fees, organised by the Federal Environmental Agency.

EuRIC and its members continuously support separate collection of paper in order to prevent cross-contamination at source and safeguard material recovery. EuRIC's Dutch member FNOI (The Recovered Paper Association) created a new paper fibre covenant in which arrangements are made between municipalities and paper recyclers, concerning collection, quality and fees. Part of the covenant is a participation agreement concerning the maximum amount of pollution accepted in recovered paper. A new monitoring protocol is in the making in which all parties concerned agree on the method of measuring the amount of impurities. In Sweden collection from households is going towards increased door-to-door collection or closer to home bring banks, which results in an improved quality of the collected material. This will be an on ongoing process for the coming years. Collection rates for industrial and household materials are high in Sweden and are further improving.

ACE (The Alliance for Beverage Cartons and the Environment) members have adopted their 2030 Roadmap setting out an ambitious vision for 2030 and beyond, by which they will deliver the most sustainable packaging for resilient food supply systems which is renewable, climate positive and circular. ACE members have adopted 10 commitments from sourcing and forestry to recycling. They have committed to having 90% of beverage cartons collected and a minimum of 70% of beverage cartons recycled by 2030. The Beverage Carton industry will have its recycling rates verified by an external third party as from 2020. Collecting all packaging materials separately significantly increases the volume of materials available for recycling, which in turn creates a more predictable, high quality waste stream and a strong incentive for investment and innovation in sorting and recycling technologies, creating green economic growth. The Beverage Carton industry has actively advocated at national level in favour of a national collection target for BCs. It would ensure that BCs are duly collected and recycled and would support transparency on collected/recycled materials and accurate reporting of collection and/or recycling rates. This is also what would meet consumers' expectations.

ECODESIGN

Cepi, ACE and CITPA (International Confederation of Paper and Board Converters in Europe) together with FEFCO (The European Federation of Corrugated Board Manufacturers) have published guidelines on the recyclability of paper-based packaging. The document guides retailers and brand owners when designing new packaging with improved functionality. As well as explaining the reality of European collection schemes and the paper recycling infrastructure in Europe, it raises awareness of the main challenges for paper recycling and gives concrete recommendations on issues such as laminates, alternative barrier solutions, inks, adhesives and special papers. www.cepi.org

Cepi has developed a harmonised recyclability laboratory test method[2], emulating the most common phases of the industrial processes, to measure the main parameters of recyclability of paper and board-based materials and other cellulose fibre-based products based on current knowledge and technology.

The Cepi harmonised recyclability laboratory test method is currently used by 4evergreen (see separate chapter below) as a basis to develop recyclability assessments for fibre-based packaging .

In Germany, INGEDE prepared the launch of a technical committee for paper and board manufacturers and converters (as a first step) with a view to establishing ecodesign criteria for fibre-based packaging. The concept has subsequently been taken over by VDP, Cepi's German member.

EUROPEAN ECOLABEL FOR PRINTED PAPER PRODUCTS:

Most printers in Europe are able to offer ecolabelled printed products to customers willing to have their products labelled. Existing ecolabel schemes include national ecolabels as well as, since 2012, the European Ecolabel for printed paper products.

The EU Ecolabel is granted to printed products that meet strict environmental criteria, in particular on the ecodesign of printed products. These include a recycled content criterion and a recyclability criterion. Regarding recyclability, printed paper applying for the EU Ecolabel should be recyclable and the non-paper components easily removable. It also has to prove deinkability according to the EPRC Deinking Scorecard. The EU Ecolabel for printed paper goes beyond existing high environmental standards and promotes environmental excellence. More than 130 licences of the EU Ecolabel for printed paper have been granted at European level, covering more than 330 printed products.

The revised EU Ecolabel criteria for printed paper, stationery paper, and paper carrier bag products were published in November 2020. Intergraf (European Federation for Print and Digital Communication), EuPIA (European Printing Ink Association, a sector for CEPE) and INGEDE were active stakeholders in the review process which started in 2018. This new EU Ecolabel covers a larger scope. In addition to printed paper, it includes stationery products, paper bags, envelopes and wrapping paper. The new criteria are more ambitious and provide the European Commission with a tool to enforce its ambitious product policy.

Intergraf produced a guide for its members to support them in adopting the new criteria and apply for the EU Ecolabel for printed paper.

EuPIA provided expertise to the revision process of the criteria of the Nordic Ecolabelling and the Blue Angel for printed matter.

INGEDE conducted, funded and co-funded several projects to assess and improve the recyclability of graphic but also of packaging products, including relevant test methods and often in cooperation with the respective suppliers. Within ISO standardisation, INGEDE finalised its activities in testing and assessing deinkability. Providing input for the revision of Ecolabels on printed matter was also on INGEDE's agenda.

CITPA member (Pro Carton - The European Association of Carton and Cartonboard Manufacturers) runs three design award schemes that promote ecodesign and the versatility and sustainability of using cartonboard.

Pro Carton Young Designers Award – entries were received from over 55 students from 85 universities in 25 different European countries in 2020. Students are invited to submit innovative and inspiring designs made from cartonboard (which is renewable, recyclable and biodegradable). The "Save the Planet" category challenges students to submit entries that show how recyclable cartonboard can reduce waste by replacing non-sustainable materials and; in doing so, help save the planet!

Pro Carton Student Video Award – full-time students are invited to create a short video promoting the benefits of cartons or cartonboard. The high-quality submissions received demonstrate the passion students have for a better future with sustainable packaging.

European Carton Excellence Award – this award, run in conjunction with ECMA, is open to the whole supply chain to submit the best cartonboard products that have been sold on the European market. Entries focus on sustainability and the desire for recyclable and renewable packaging is constantly growing. The "Save the Planet" category highlights areas where cartonboard has replaced non-sustainable material.

FEICA (Association of the European Adhesive & Sealant Industry) established a dedicated Task Force to discuss challenges and possible solutions for the recycling of packaging containing adhesive applications, thereby pooling and increasing expert knowledge in the industry. Furthermore, FEICA's expert group on the sustainability and recycling of paper and packaging applications is monitoring and discussing developments in the compatibility of adhesive applications on paper applications. It has also given input to the harmonised test method for paper and board recyclability assessment.

FINAT (Worldwide Association for self-adhesive labels and related products) is a founding member of the European branch of the global project CELAB: Toward a Circular Economy for Labels, officially launched in October 2020. By establishing a representative value chain organisation, CELAB-Europe will work to identify and collectively scale recycling and reuse solutions for self-adhesive label liner and matrix materials. The initiative aims to develop a sustainable and circular business model for over 75% of the used liner and matrix materials in Europe by 2025. Deliverables are being pursued within four workstreams: data mining, recycling solutions, logistics and legal framework. Participation in the project is open to all partners from across the broad recycling and logistics industry value chain, as well as brand owners and retailers.

One of ACE's 10 adopted commitments is to adopt a Design for Recycling Guideline in autumn 2021 and update it on a yearly basis to ensure it reflects technological developments. ACE members will apply the Guideline as soon as it is available.

[2] The full document can be found here.
The side letter to stakeholders can be found here.

RESEARCH AND DEVELOPMENT

Companies from the Pulp and Paper Industry (PPI), along with partners from academia, public authorities, waste generators and end users, have created a consortium of 20 partners from 5 countries. PAPERCHAIN project introduces an industrial symbiosis model focused on the use of different waste streams generated by the European PPI, as valuable feedstock for three resource-deficient industrial sectors: construction, mining and the chemical industry.

PAPERCHAIN tackles the valorisation of almost all PPI waste streams. The project focuses on those waste streams whose current fate is mainly landfilling and will demonstrate their valorisation in three different ways: with no modifications, minimal processing, and under any treatment. The project's objectives are to:

- Design the baseline for circular economy models surrounding the PPI and the selected sectors.
- Implement the valorisation process at industrial scale.
- Demonstrate the circular models at real scale in four European countries.
- Validate the sustainability of the circular economy models.
- Carry out the certification processes, training and guidelines for recycled solutions.
- Develop a market strategy, exploitation routes and ensure replication.

Cepi and EuRIC were involved in the European-funded Horizon 2020 research and innovation programme COLLECTORS. The project consisted of nine partners in four European countries. Its aim was to identify and highlight existing good practices of waste collection and sorting in three waste streams: paper and packaging, waste electrical and electronic equipment (WEEE), and construction and demolition waste (CDW). The project ran in three phases; during phase 1 an inventory of waste collection practices took place, during phase 2 the assessment of 12 case studies, and phase 3 focused on implementation and produced the following guidance documents for decision makers:

- Implementation guidelines.
- Policy recommendations on aligning the different policy levels involved.
- Three customised factsheets on waste collection systems.

INGEDE funded and monitored several research projects and investigations within the scope of the EPRC. These included examining the quality of paper for recycling and inspection, as well as the ecodesign of print products. INGEDE widened its activities on the recyclability of fibre-based packaging and co-sponsored research work in that area.

INGEDE looked into its members' deinking processes by preparing a project on the efficiency of ink flotation as well as monitoring a publicly-funded project on ink removal from process water.

In Germany, a publicly-funded project aims to investigate the deinkability of UV prints. The German EuPIA member, VdL, and INGEDE are members of the advisory board for this project. VdL members provide the ink samples to produce the UV prints to be investigated. EuPIA is actively engaged in defining accurate criteria for the assessment of the deinkability of all types of prints produced by the various existing printing techniques.

ACE members innovate their packaging design, taking into account circularity and design for environment across the value chain. The beverage carton industry has been instrumental in the development of recycling solutions for multi-layered materials. In addition to some initiatives by private companies, e.g. in Italy, the Netherlands or Czech Republic, the manufacturers of beverage cartons have invested in the recycling of plastic/aluminium. A private company initiative in Germany will recycle approximately 20,000 tonnes of wet paper rejects from paper mills into new materials. By the end of 2021, nearly one third of the PolyAl (polymer and aluminium) collected from used beverage cartons will be recycled. A significant increase in capacity is planned for the near future. EuRIC has also explored new ways to recycle beverage cartons.

EDUCATION AND INFORMATION

INGEDE invited various stakeholders to onsite visits in recycling paper mills and laboratories to demonstrate the paper recycling process at industrial scale and the related test methods. Improvement of deinkability was the key item for continued contacts with OEMs (Original Equipment Manufacturers). INGEDE hosted its annual symposium at the mill of INGEDE member Leipa and presented recycling of fibre-based products at the Specialty Papers Europe conference.

ACE members support awareness campaigns and the exchange of best practices for recycling technologies. This is done via the national beverage cartons associations present in 7 EU Member States, the United Kingdom and Switzerland, ACE representatives in Iberia, Nordics, South East Europe and Italy, and companies. In some cases, national associations support collection schemes.

EuRIC informed institutional stakeholders such as the European Commission of the need to complete the single market for recycling, particularly with many European countries having increased collection, and the fact that Spain and Germany are net importers of recovered fibres.

EuPIA provided information to interested stakeholders relating to the suitability of paper and board made from recycled fibres for food packaging. This information is available on the EuPIA website.

CITPA member (Pro Carton) is running several educational initiatives. As schools across Europe are closed due to COVID-19, the EduCarton – Home Schooling Initiative was launched with educational resources to assist parents and carers to teach children about the environment and recycling.

Another educational programme initiated by a CITPA member is Teaching TICCIT at Home, based on the TICCIT (Trees into Cartons, Cartons into Trees) schools' workshops, which won the 2019 European Paper Recycling Award (EPRC) for Information and Education. The "At Home" programme enables parents to teach their children about packaging, the environment and recycling and explains how they can plant a sapling, in a carton, in their own garden. Aimed at children aged between 7 and 11, one of its goals is to raise awareness on paper recycling. The programme was developed in 8 European languages. The TICCIT quiz about recycling and paper had attracted almost 300,000 views on social media with 5,250 people from 13 countries across Europe entering a competition to win subscriptions to Disney+. The Carton Campaigners videos with their five animated superheroes made from cartonboard, showcase Pro Carton's "5Rs of Responsibility" – Reduce, Reuse, Recycle, Renew and Replace. Each of the characters are named after one of these 5Rs. On Global Recycling Day, Ricki Recycle launched a campaign to promote recycling of paper-based packaging materials. This was followed up by videos related to World Environment Day and Earth Overshoot Day. The series was watched by over one million people across Europe. The Carton Campaigners have their own dedicated YouTube playlists in English, French, Italian and Spanish.

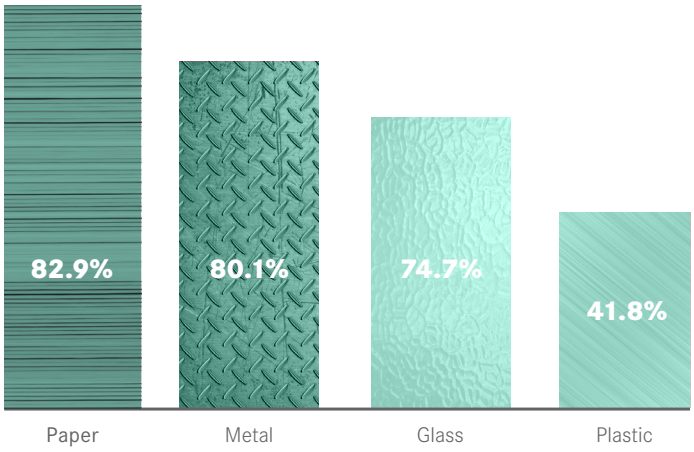
ACE members, via the national beverage cartons associations present in seven member states, the United Kingdom and Switzerland, support awareness campaigns and exchange of best practices on recycling technologies. In some cases, national associations support collection schemes.

EuRIC together with its members continuously educates to improve the collection of paper. EuRIC members educate their industrial and retail customers.

Paper and board is the most recycled packaging material in Europe

2018 PACKAGING RECYCLING RATES

Source: EUROSTAT



4EVERGREEN: THE NEW FORUM FOR THE FIBRE-BASED PACKAGING VALUE CHAIN 4

4evergreen is an ambitious cross-value chain alliance initiated by Cepi in November 2019, and now counting almost 70 members across the fibre-based packaging value chain, from paper and board producers to packaging converters, brand-owners and research institutes, technology and material suppliers, waste sorters and collectors. Its aim is to look at recyclability and design for recycling, with a view to further boost the contribution of fibre-based packaging in a circular and sustainable economy that minimises climate and environmental impact. It will deliver a holistic approach to optimise the sustainability and circularity of the fibre-based packaging's life cycle.

The ascent of environmental awareness has prompted companies to accelerate their demand for and development of alternative packaging materials, including fibre-based packaging, with a view to help consumers make more environmentally and climate-friendly choices. The European Directive on Single Use Plastics (2019/904) was an additional catalyst for taking action on coatings and barriers used on paper and board packaging articles.

With these concerns at heart, and as a circular economy leader, the fibre-based packaging industry created 4evergreen to further improve circularity at every stage of the packaging life cycle. 4evergreen seeks innovation in packaging performance and packaging functionality as well as improving performance in recycling systems to reach the full potential of the circular economy. Fibre-based packaging is already a strong contributor to the European circular bio-based economy: 83% of paper and board packaging is recycled. This means that, in volume, we recycle more than all other packaging materials combined. The wide participation along the entire packaging life cycle allows us to identify and advance systemic improvements.

4evergreen (4EG) has set a very ambitious recycling target, to reach 90% recycling rate for fibre-based packaging by 2030.

To reach our shared goal, the Alliance has identified four intermediary targets to be met by 2025:

1. Industry adopts 4evergreen's Recyclability Evaluation Protocol and its circularity by design guidelines for fibre-based packaging.
2. Separate collection streams are available for all fibre-based packaging types, including for those used in household, out-of-home, and on-the-go consumption.
3. All Paper for Recycling (PfR) is sorted according to the different paper and board categories specified in the EN643 standard.
4. All collected fibre-based packaging, specifically from household, out-of-home, and on-the-go consumption, is recycled.

TIMELINE OF EUROPEAN PAPER RECYCLING AWARDS' WINNERS

Every two years, the European Paper Recycling Awards distinguish European projects, initiatives or campaigns that change the way we recycle paper in Europe and support us in our ambitious paper recycling rate goals. The awards take place in the European Parliament and have been hosted by Members of the European Parliament shaping the European Circular Economy. Find out more here.

2007

Industry Caterogy winner:
UPM - Augsburg: Automated Entry Inspection of Recovered Paper

Communities Category winner:
ASPAPEL: Tu Papel Es Importante

Education Category winner:
Maison des Lyceens: Action Eco-Bloc

2009

Technology Improvement & R&D Category winner:
Sabox, Italy with the Green Project: Packaging and ecology products in corrugatedcardboard. The company decided to become green and focus on developing newgreen packaging on ecology projects, such as containers in card board forcollection recycling waste.

Information & Education Category winner:
The best use of paper at school Paper Chain Forum, Belgium. The project focusedon the use of paper at school, to objectively inform young people on theenvironmental impact of paper products, and to organise a better recovery andrecycling of the recovered paper at school.

2011

Technology Improvement & R&D category winner:
Palwaste Recycling with the 'ProjectCLEAN' and The Paper Technology Specialists (PTS) with 'New Possibilities for Process Control'. 'ProjectCLEAN' was set up with the purpose to develop a recycling solution for an omnipresent waste stream that went unrecycled: so-called "plastic-aluminium laminates". Goal of the project: To use jointly developed technology and build and operate Europe's 1st facility that can fully recycle beverage cartons.

'New Possibilities for Process Control' by The Paper Technology Specialists (PTS) is a project used for the first time an online NIR measurement system to determine several important qualitative and quantitative parameters of recovered paper in a paper mill. Online measurements allowed the observation of the real changes in composition of recovered paper as it was not possible before.

Information & Education category winner:
Smurfit Kappa with the 'Be Part of Birmingham's Paper Chain'. This project is the result of a close working partnership between Smurfit Kappa Recycling and Birmingham City Council (BCC). Since the partnership the amount of paper recovered from the waste stream for recycling has increased from 750 tonnes to around 40,000 tonnes per year.

2013

Technology Improvement & R&D category winner:
Voith Paper GmbH & Co. KG with a new technology called LowEnergyFlotation(LEF). An innovative technique that significantly reduces the energy requirementsneeded to remove printing ink from paper fibres. The newly developed injectors were at the heart of the LEF.

Information & Education category winner:
The Alcorcón municipality in Spain. Their project improves paper and boardcollection by distributing paper bins in all schools in the district. The project aims toincrease both the amount of paper collected as well as environmental awareness among children.

2015

Technology Improvement & R&D category winner:
Aalto University – Textile fibers from paper and cardboard via the Ioncell-Fprocess. Taking advantage of the Ioncell-F technology, the joint efforts of AaltoUniversity and the Technical Research Centre of Finland (VTT) developed aprocess to turn Paper for Recycling and cardboard into cellulosic textile fibers.

Information & Education category winner:
The Literatura za Makulature project. Szkoła Podstawowa nr 11 is a primary schoolof almost 400 pupils in the municipality of Tychy located in the Silesian province ofPoland. The aim of the project was to show children the importance of recyclingand to increase the number of pupils involved in paper recycling.

2017

Technology Improvement & R&D category winner:
Favini, a leading global producer of packaging for the luxury and fashion industries, topped the Innovative Technologies and R&D category for its Remake project, a ground-breaking process of using recycled leather to produce paper.

Information & Education category winner:
Aspapel, the Spanish pulp & paper association headed up the Information and Education category with its ' Blue Birdies ' project targeted towards raising awareness on the separate collection of paper across municipalities in Spain.

2019

Technology Improvement & R&D category winner:
Repulping Technology GmbH & Co. KG for its new technology that makes theextraction of pulp fibres for recycling from products mixing papers and othermaterial a lot easier and more energy efficient. The new invention, the cavitationpulper, a machine exploiting the physical principle of cavitation, allows for analmost 100% recovery of the fibres from these products with an energy efficiencyabout 50% better than other technologies.

Information & Education category winner:
Pro Carton for the educational work on paper recycling and its circular economy.Pro Carton set up a European-wide educational program aimed at childrenprimarily aged between 8 and 11 years old, called TICCIT (Trees Into Cartons,Cartons Into Trees).

DATA QUALITY: 2020 DATA

5

The data used to calculate recycling rates is collected by Cepi and comes from a questionnaire sent to its national member associations in 18 countries (Austria, Belgium, Czech Republic, Finland, France, Germany, Hungary, Italy, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and the United Kingdom). Cepi's national associations supply the data, collected from their members' mills and companies, as well as official sources where appropriate.

The data in this report include paper for recycling utilisation and trade plus paper and board production, trade and consumption for non-Cepi members of the EU-27 (Bulgaria, Croatia, Cyprus, Denmark, Estonia, Greece, Ireland, Latvia, Lithuania, Luxembourg and Malta), and Switzerland. The data are obtained from AFRY Management Consulting.

After submission to Cepi, the data may be adjusted by the source, in particular the trade data obtained from customs authorities. Cepi takes the adjustments into account, with the figures being considered as final and published in the subsequent report (e.g. 2020 figures in this report).

Following this rigorous process, the 2019 recycling rate was revised and updated at 72.5%.

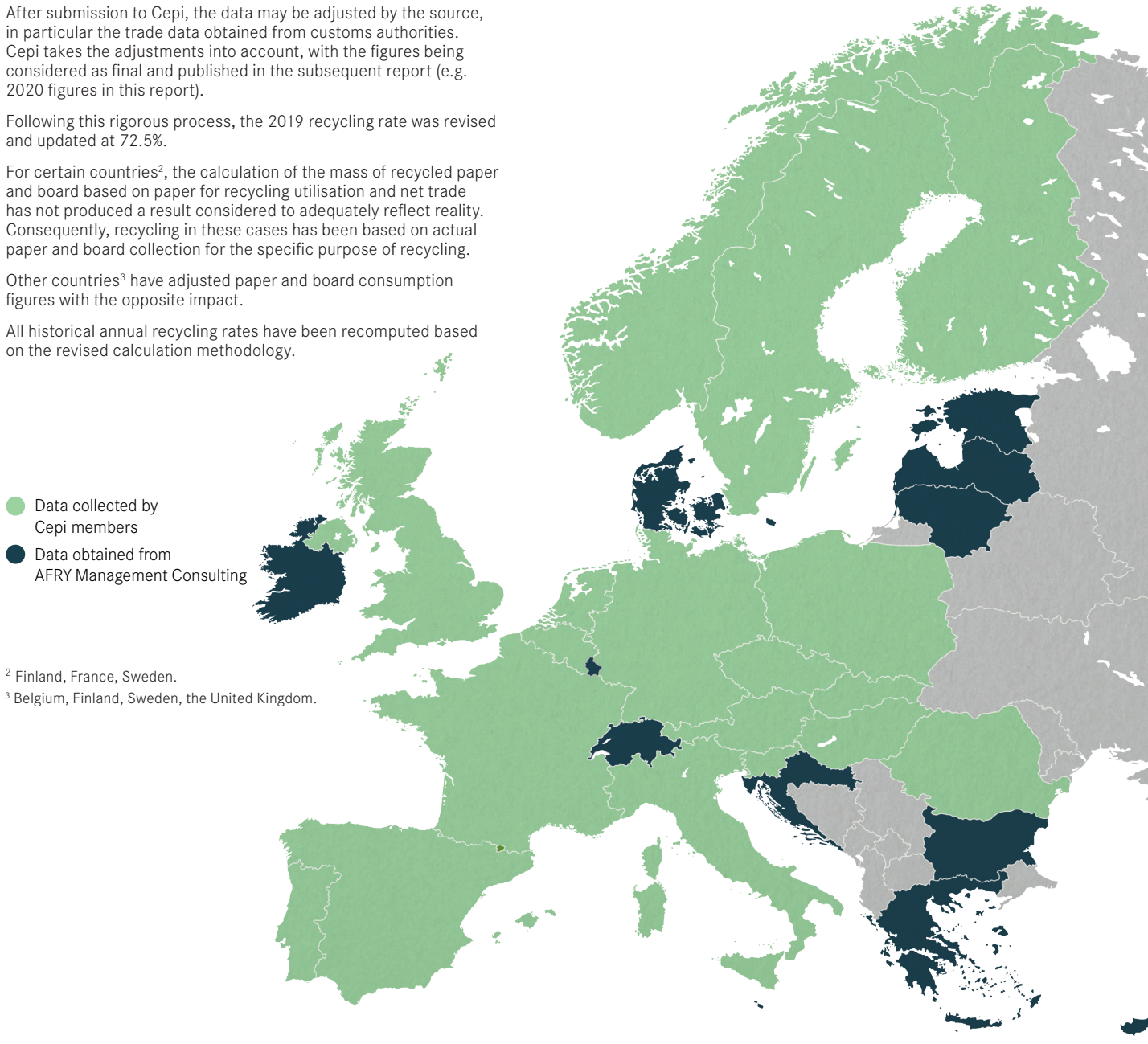
For certain countries[2], the calculation of the mass of recycled paper and board based on paper for recycling utilisation and net trade has not produced a result considered to adequately reflect reality. Consequently, recycling in these cases has been based on actual paper and board collection for the specific purpose of recycling.

Other countries[3] have adjusted paper and board consumption figures with the opposite impact.

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

Cepi has commissioned an external verification of the recycling rate calculation since 2000 (see Assurance Reports 2011 – 2015 by **EY**, 2006 - 2010 by **PricewaterhouseCoopers** and 2000 - 2005 by **Pöyry** in the respective Annual Reports).

For the ongoing five-year period, Cepi has decided to work with Deloitte to further improve data quality. As an annual exercise, data quality will be assessed using a method recently adopted by the European Commission for organisation and product environmental footprints. Specifically, this will cover geographical representativeness, time-related representativeness, completeness and the uncertainty parameter. Cepi will publish the assessment results on its website.



[2] Finland, France, Sweden.

[3] Belgium, Finland, Sweden, the United Kingdom.

The European Paper Recycling Council (EPRC) was set up as an industry self-initiative in November 2000 to monitor progress towards meeting the paper recycling targets set out in the 2000 European Declaration on Paper Recycling. Since then, the commitments in the Declaration are renewed every five years.

The EPRC committed itself to meeting both a voluntary recycling rate target of 74% in the EU-27 plus the United Kingdom, Switzerland and Norway by 2020 as well as qualitative targets in areas such as waste prevention, ecodesign, and research and development.

Signatories

www.cepi.org

www.citpa-europe.org

www.emfa.eu

www.euric-aisbl.eu

www.europeantissue.com

www.fepe.org

www.ingede.org

www.intergraf.eu

www.beveragecarton.eu

Supporters

www.afera.com

www.eupia.org

www.finat.com

www.radtech-europe.com

www.feica.eu

www.irla.info

Printed on recycled paper carrying the EU Ecolabel.

This is a durable and recyclable paper product.
When you no longer need it, please recycle it.

European Paper Recycling Council (EPRC)
c/o Cepi aisbl
Avenue Louise 250
Box 80
B-1050 Brussels
Tel: +32 2 627 49 23
eprc@cepi.org
www.paperforrecycling.eu