

EuPIA, the European Printing Ink Association, working under the umbrella of CEPE, represents and protects the common interest of the European printing ink business and promotes the image of the industry to the public. EuPIA provides a forum for discussion and decision-making regarding issues of specific interest to the printing ink industry. EuPIA members also participate in CEPE working groups dealing with issues of general interest to the wider CEPE membership.

Market statistics 2017

EuPIA publishes market statistics on an annual basis. The data can be accessed via the EuPIA website at eupia.org, section Publications - Statistics.

The following statistics show a summary of printing ink sales from EuPIA's more detailed Quarterly Market Sales Statistics. The findings are based on the consolidated results of data supplied by 28 EuPIA member companies who have all submitted data on a standard basis to our independent trustee who compiles the data for EuPIA. The results show sales volume in tonnes and value in €m for the latest year, 2017.

It is estimated that the sample group accounts for about 90% of total industry sales in Europe.

Key sectors shown

Publication Inks comprise web offset inks (coldset and heatset), sheet-fed offset inks, publication gravure inks and related overprint varnishes. Examples of publications are newspapers, magazines, books and commercial prints such as brochures and flyers.

Packaging Inks comprise flexographic inks, specialty gravure inks, energy curing inks and related varnishes. Examples of packaging are flexible film packaging, rigid plastics, folding cartons and corrugated boxes (*see figures below*).

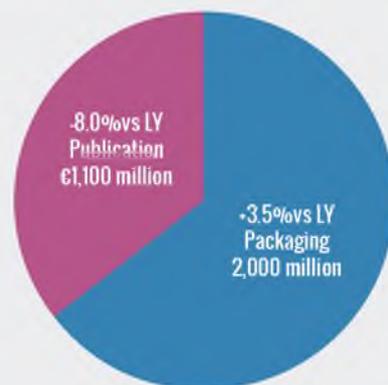


SALES VOLUME FOR 2017 IN 1,000 TONS



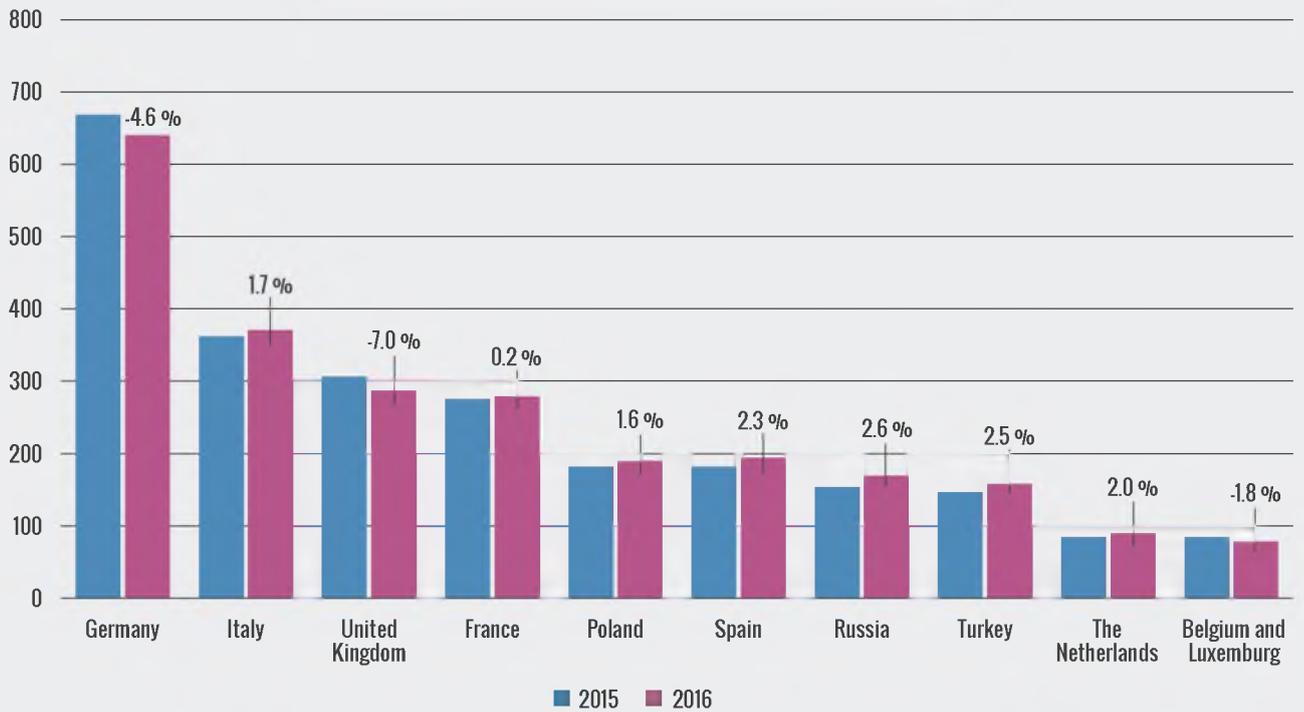
■ Publication ■ Packaging

SALES VALUE FOR 2017 IN EUR MILLION

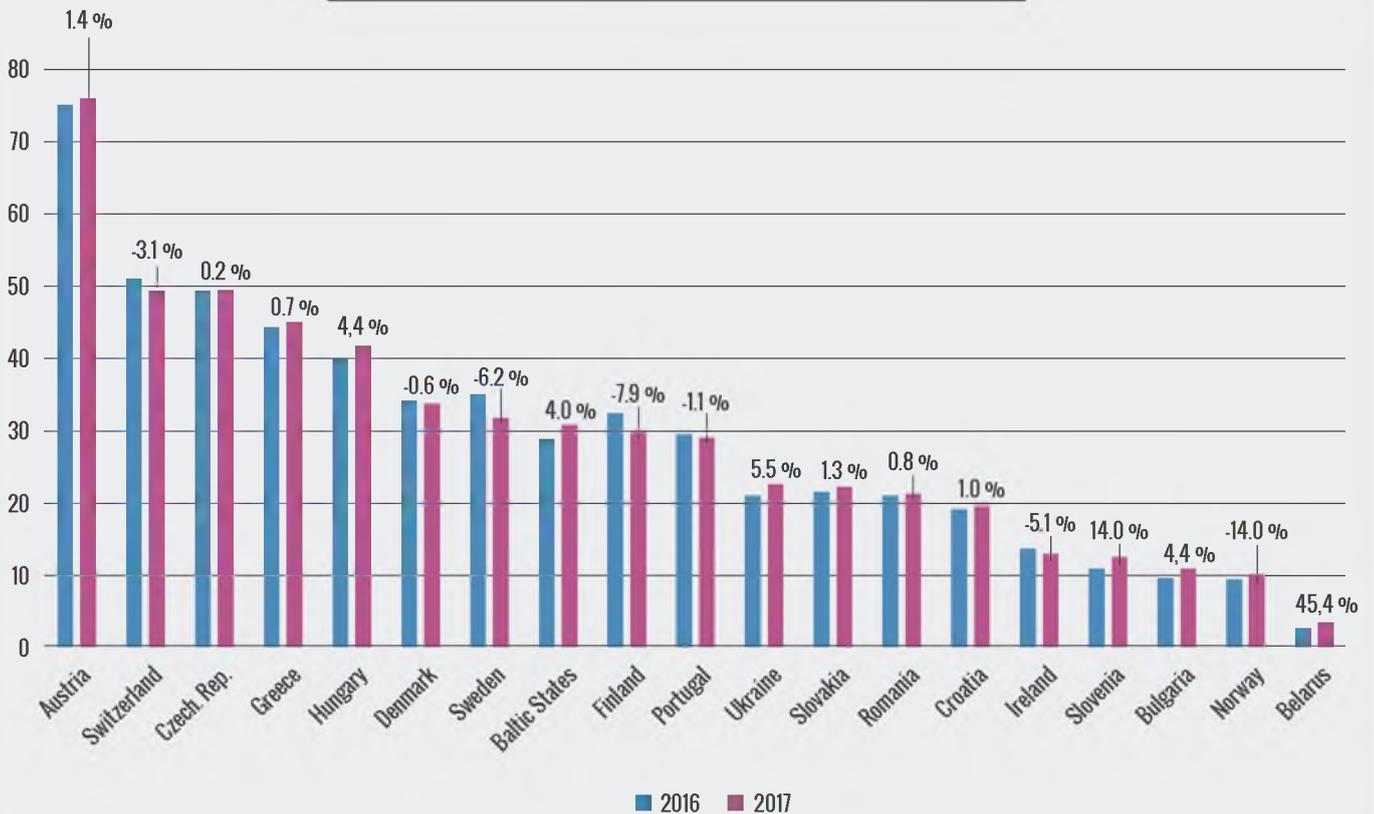


■ Publication ■ Packaging

SALES VALUE BY COUNTRY 2016 TO 2017 IN EUR MILLION



SALES VALUE BY COUNTRY 2016 TO 2017 IN EUR MILLION



15TH EUPIA ANNUAL CONFERENCE

Event summary from Herbert Forker, EuPIA Past-Chairman

The European printing ink industry met April 26 to 27, 2018 in Hamburg, Germany, to discuss the most critical issues of the sector and the latest trends in both industry and politics. Special emphasis was devoted to the digital transformation currently underway in business and the impact it has had on the printing ink industry. Participants were also pleased to learn the downward trend in sales has slowed compared to the previous year.

To set the stage, Herbert Forker kicked off the conference with a political overview. It has been a turbulent year in terms of elections, countries moving away from democratic principles and with Brexit planning to move the UK away from the EU. Nevertheless, the European industry is in a state of dynamic development and, in particular, flexible packaging is experiencing steady market growth. Although the current raw material market is volatile with rising costs, the volumes continue to remain robust.

Executive Manager EuPIA, Dr. Martin Kanert, informed the audience on matters that have kept our association busy in 2017. These were external developments such as the EU's Circular Economy, printing ink for cosmetics and food contact materials, operational safety and risk assessments, as well as hazardous mixtures and substances. The Photoinitiator "369" situation was discussed in the context of the EuPIA Exclusion Policy. In addition, EuPIA has worked on a lean, new logo which was presented in Hamburg. As a special service, EuPIA introduced a dedicated "conference app" to allow participants to stay connected throughout the conference and experience the theme of the event-digitalization.

Whereas we already use new digital tools to communicate, the question going forward is: How do we prepare our businesses for the digital transformation that increasingly disrupts industry? Our distinguished panel of guest speakers discussed upcoming trends, innovative solutions and possible new ways forward.

Matthias Giebel, Berndt+Partner, presented the global EuPIA survey on digitalization 2018. The survey identified packaging converters are still in



› Herbert Forker, former EuPIA Chairman

the starting stages of digitalization. While time and strategy are no longer issues, the lack of in-house expertise is the greatest problem facing us today. Risks aside, 40 percent of the 155 respondents understand digitalization as a big opportunity.

Jan De Roeck from ESKO challenged us to examine: How "digital" are our product go-to-market processes? To reduce project time and stay competitive in the digital age, full workflow automation and e-connectivity in workflows is of critical importance.

The latest developments from the new world were shared by Tracy Huang, Shanghai Flamesun, via livestream video from Shanghai. As the largest e-commerce market in the world, China is setting trends for global retailing with one third of the Chinese GDP already digitalized and more expected. Digitalization has opened a new era of consumption which in China is based on trust in digital payments, innovative social commerce models and a mobile-first consumer behaviour. As a result, digital printing will likely have a profound impact on our industry.

As the Wipak Group gears up for this new era of consumption, Stefan Gutheil reported that digitalization for converters translates into "Interactive Packaging – Smart Shopping" where QR codes on products create a link from advertisement directly to home delivery.

Digitalization is equally important for Bayer Consumer Health. Guido Schmitz explained that digitalization facilitates the information exchange with consumers which feeds into their approach of a holistic product design. In the future, packaging will likely contain digitally-adapted product information and advertisement.

We hope the EuPIA 2018 annual conference provided attendees with valuable insight into where the world and our business is moving. 📍

NEXT EUPIA CONFERENCE

The next Annual Conference will
be held on

11th / 12th April 2019

in London (UK).



NEW EUPIA CHAIRMAN



Heiner Klokkers (Hubergroup)

took over the EuPIA Chair from Herbert Forker (Siegwerk) for the coming two years. Doug Aldred (Flint Group) is EuPIA's new Vice-Chairman.



Source: Sergey Ryzhov - stock.adobe.com

LAUNCH OF A NEW CONTEMPORARY LOGO

When EuPIA was founded in 2003 in order to create a distinct identity of the European Printing Ink Industry, the acronym EuPIA was not self-explaining, and so it was necessary to explain the acronym as part of the logo. Since then EuPIA became a strong brand, and is today well known to all stakeholders. Therefore, the logo has been simplified for better readability through removal of the explanatory addendum. Also, the shadow of Europe in the background of the logo was not always reproducible – so it is now deleted.

In response to popular demand, a “Member of EuPIA” logo was created which members are invited to use on their stationery, for their websites, or for sign boards on fair booths:



PRINTING INKS AND VARNISHES FOR FOOD CONTACT MATERIALS

The planned EU regulation on printed food contact materials

In 2016, Germany notified to the European Commission its draft “Printing Ink Ordinance” pursuant to Directive (EU) 2015/1535 (TRIS notification). The Packaging Ink Joint Industry Task Force (PIJITF), which represents the value chain from manufacturers of ink raw materials to food business operators, and of which EuPIA is a member, analyzed the draft ordinance and came to the conclusion that it would have a serious negative impact on the functioning of the Internal Market.

This position is shared by both the European Commission and a considerable number of Member States. As a result, the Commission announced its intention to adopt new Union legislation on printed Food Contact Materials (“pFCM measure”), already in 2018 and in line with the expiry date of the standstill period. Germany declared that it will suspend the adoption of its draft ordinance until further notice. However, the Commission has not yet presented a proposal for the regulation at the time of writing.

The Commission expressly invited the PIJITF to co-operate in the development of the pFCM measure. The PIJITF took this request of the Commission very seriously, and put forward a detailed proposal for a

harmonized approach which ensures high levels of consumer protection and which can be delivered within a relatively short time frame.

The PIJITF position on the planned EU regulation on Printed Food Contact Materials

The proposal developed by the PIJITF is intended to ensure that substances in the ink layer of a printed Food Contact Material do not transfer to the food in quantities which could endanger human health. The objective is a high degree of consumer safety whilst being pragmatic and workable for industry.

The proposal envisages that official evaluations and listings will be used where available. However, if a Food Contact Material contains a material for which there is no such evaluation, it will be necessary for industry to conduct a risk assessment in order to demonstrate compliance with the relevant requirements of the Framework Regulation (EC) No 1935/2004.

Thus the proposal has two elements:

Part 1. A Database of Officially Evaluated Substances. This consists of those substances already evaluated by official bodies, such as EFSA, and will include any SMLs, TDIs or other restrictions already established. These substances are allowed to be used in the manufacture of inks for FCMs (subject to their restrictions).

Part 2. Industry risk-assessed Substances. Substances which are not listed in Part 1 may be used provided that they have been properly risk assessed “in accordance with internationally recognised scientific principles”, in line with the Article 19 approach laid down in the Plastics Regulation. The risk assessment process should be developed by the European Commission.

There should be a duty, outlined in a Guidance Document, to communicate the results of the industry risk assessments, including any self-derived SMLs, TDIs etc., to the next actor in the supply chain.

Worst case calculation, migration modelling and migration testing into simulants and into real foods may all be used to demonstrate compliance with any restrictions. General principles for testing could be included in the text with specific details in a Guidance Document.

In order to verify compliance in an efficient way, the focus should be on processes for risk assessment. These processes used for compliance work performed along the value chain should be defined and documented so

that they can be audited, either by the Control Authorities, or, if this is not possible, by accredited third parties delegated to by Control Authorities.

EuPIA Guidance on Migration Test Methods developed by its Analytical Experts Working Group

In order to be able to provide data on migratable substances in inks for Food Contact Materials to the customer, it is often necessary to perform migration testing. However, while the current legislation provides clear guidance on how to perform migration testing for plastic materials intended to come into contact with food, this is not the case for most other (printed) FCMs. Hence, the conditions set out for plastics are also often applied to other pFCMs, which often leads to incorrect and misleading results. Consequently, EuPIA decided that specific guidance for printing inks for FCMs is needed and tasked the EuPIA Analytical Experts Working Group to develop the “EuPIA Guidance on Migration Test Methods for the Evaluation of Substances in Printing Inks and Varnishes for Food Contact Materials,” which was published on the EuPIA website in August 2017. This guidance document is to be used in conjunction with food packaging regulations and provides detailed information on how to find appropriate testing methods for the evaluation of the migration of components of packaging inks applied to the non-food contact surface of food packaging materials.

Migration Modelling Workshop exclusively for EuPIA members

Digitalisation is a business trend, which also impacts the way the risk assessment of substances is performed. Modern techniques such as in silico toxicology and migration modelling are becoming increasingly important. When dealing with migration of substances, a tiered approach is usually recommended: at first a worst-case calculation, then migration modelling can be done and finally analytical migration testing might be needed. Whenever the worst-case calculation predicts the migration to be higher than the specific migration limit for a certain substance, migration modelling can be a valuable tool, which saves time and money. However, so far the modelling experience in the industry is limited. Therefore a EuPIA migration modelling workshop was held in November 2017 in Frankfurt. More than 20 participants exchanged their experiences and discussed problems and expectations with modelling experts. Since the experience of the EuPIA members with migration modelling is expected to grow in the next few years, a follow-up workshop will be envisaged in one or two years.

EuPIA concepts are in demand in China

The Chinese Food Safety Authority (CFSA) has announced a new regulation for printing inks for food packaging in 2018. This new regulation is planned to supersede the existing regulation GB 9685-2016, which, among other things, is insufficient with regard to the number of usable raw materials for the inks in scope of the standard.

Preparing for the new regulation, the CFSA invited EuPIA to a full day seminar in Beijing in July 2017. EuPIA Executive Manager Martin Kanert and Jörg-Peter Langhammer, Past-Chairman of the Technical Committee “Printing Inks for Food Packaging”, presented and discussed the EuPIA regulatory concepts for ink regulations. In addition, both answered a multitude of questions which were asked by the Chinese government experts from Beijing, as well as questions from other experts who had travelled from as far as Shanghai and Guangzhou, just to attend the seminar. The seminar also provided an excellent insight into the Chinese regulatory landscape in general.

Kanert and Langhammer continued their visit by meeting representatives of the Chinese Printing Ink Association (CPIA) with an aim to forge a relationship between the two organisations for future collaborations. CPIA is currently undergoing a transition to becoming a more



› At the EuPIA migration modelling workshop in Frankfurt, more than 20 participants exchanged their experiences

western-style trade association, and is particularly interested in EuPIA's working group setup.

The journey concluded in Shanghai with a visit to the Shanghai Quality Testing Institute (SQI), a large control authority tasked to test food and food packaging and a key party involved in setting up the new ink standards.

EUPIA TECHNICAL COMMITTEE

Technical issues and non-food applications of printing inks fall under the remit of the EuPIA Technical Committee (ETC) and its subsidiary working groups, Labelling & Safety Data Sheets (LSDS), Operational Safety & Risk Assessment (OSRA) and the Task Force Paper Recycling.

Product stewardship as a core commitment

EuPIA's **Exclusion Policy for Printing Inks and Related Products** continues to be an important commitment by members and a key element of promoting a responsible image for the printing ink industry in Europe. An increased number of substance re-classifications in recent months – largely arising from REACH registration dossiers for the last deadline on 31 May 2018 – is posing a challenge as many substances become subject to substitution at the same time. However the exemption possibilities incorporated in the Policy allow for more consistent management of such changes and enable the EuPIA secretariat to monitor for any specific issues which might require further discussion by ETC.

Despite the increased pressure, to date the Policy is functioning as intended and members are seen to be making best efforts to maintain compliance. ETC published updates to the Explanatory Note on the Exclusion Policy for members in November 2017 and March 2018, to clarify and enhance the advice provided.

In the past twelve months ETC has published new or updated information notes on Substances of Very High Concern, classification of some offset inks and the hazards of certain types of pigments to augment the product stewardship advice provided to members and/or customers. Some issues in this area are delegated to the EuPIA LSDS working group, which besides issues of classification and labelling has also addressed safe use information for UV-curing inks, ink-specific phrase content and protective equipment recommendations for



› Jörg-Peter Langhammer and Martin Kanert are seated by Mrs. Lei Zhu from the CFSA, responsible for drafting the new ink regulation – the banner in the background reads: Seminar for Standards of Inks for Food Contact Materials

safety data sheets and the impact of Poison Centres reporting for ink makers.

Since 2014 EuPIA has been part of an industry task force developing a guideline for safety assessment of cosmetic packaging (given that many such packagings are printed, so inks are important intermediate materials). A large-scale trial on the final draft guideline, involving the full membership of Cosmetics Europe, was launched at the end of October 2017 for a period of some ten months. At the time of writing, feedback is pending on the results of this trial prior to formulating final recommendations for refinement of the guideline, which will be adopted by the Board of Cosmetics Europe in autumn 2018 and presented to the European Commission and Member States Committee. Linked to this initiative, ETC maintains a EuPIA recommendation to members on the use of FCM printing inks for cosmetic packaging (where specific product development is not carried out), with a related list of ‘disclosable substances’ permitted in FCM applications but of relevance for cosmetics.

Toys are an important non-food application for printing inks, and ETC monitors developments in the Toy Safety Directive 2009/48/EC accordingly. A recent reduction in limit concentrations for chromium (VI) (Commission Directive (EU) 2018/725, to apply from November 2019) will further complicate compliance monitoring due to issues with analytical tests, and an anticipated reduction in limit values for aluminium will be a challenge in light of the intrinsic Al content of some pigments used in printing inks. The impact and any necessary actions will be assessed in ETC.

ETC also monitors and provides input on biocides and other ‘substances of interest’ (see separate articles in this report) as far as these relate to uses in printing inks, and EuPIA representatives participate in the relevant CEPE task forces. In November 2017 ETC published a second revision of its guidance note on “Labelling of Treated Articles”, as per Article 58(3) of the Biocidal Products Regulation, incorporating best practice on combining CLP and BPR labelling elements.

Sustainability and printing inks

In 2017 ETC published internal and public communication leaflets on the environmental footprint of printing inks, based on a Life Cycle Analysis of a ‘generic reference ink’ proportionally representing the total inks market. ETC will consider a new analysis and revision of these

documents following the next update of the CEPE Ecofootprint tool and related database.

ETC also continues its cooperation with the graphic industry association Intergraf to address the environmental impacts of printing, including the inks used. For more on this theme see ‘Printing Inks and Circular Economy’ below.

Safer workplaces for ink manufacturers and their customers

The OSRA working group continues its mission to support member companies and customers in operating at the highest possible level of plant and occupational safety. In the past year OSRA has produced new guidance documents on three-roll mills and on storage racking, and continued its programme of regular review and update of existing guidelines. It has also continued to publish its popular Safety Alerts and Safety Flashes on a varied range of topics, and given expert input from the occupational health and safety viewpoint to the CEPE efforts on key substances of interest.

For the first time OSRA has been collecting safety performance indicators (accident rates) directly from EuPIA members, in tandem with the employee numbers survey organised by the Statistics WG. The first set of data covers the years 2016 and 2017, with the plan to repeat the exercise each year, and OSRA is analysing how best to present and use these figures to inform and enrich its activities for the benefit of members.

Printing Inks and Circular Economy

The Circular Economy Package is one of the most ambitious projects of the current Commission. According to the Commission’s first Vice-president Frans Timmermans, “the circular economy is about reducing waste and protecting the environment, but it is also about a profound transformation of the way our entire economy works.” The aim of the CE package is to stimulate the transition from a linear to a circular economy. This transformation will also affect the printing ink industry. The EuPIA Taskforce Paper Recycling is monitoring the developments and assessing its impact on the printing ink sector and the paper recycling chain. Within the Circular Economy Package two important legislative measures were passed this year, which amend the waste framework directive and the directive on packaging and packaging waste. The changes involve new recycling goals for different materials and requirements for hazardous substances. The directives are now to be implemented in national law.

Recently the European Commission published its new Plastics Strategy, which among other things sets high recycling goals for plastics packaging, puts regulatory pressure on single-use items made of plastics and demands the reduction of substances of concern. Furthermore a tax on plastic packaging is in discussion. A dedicated EuPIA Task Force will be created to monitor and contribute to the development of concepts for the recycling of plastic packaging.

The European Paper Recycling Council (EPRC), formerly European Recovered Paper Council (ERPC), is an industry self-initiative, which monitors the progress towards meeting the paper recycling targets. EuPIA is a supporter of the EPRC and is actively involved in many of its activities. The latest monitoring report states that the recycling rate in Europe increased to 72.5% in 2016.

In 2017 the criteria for the German Blue Angel Ecolabel for “Environmentally Friendly Printed Matters” (DE-UZ 195) have been revised. The EuPIA Task Force Paper Recycling has contributed to the revision process by providing its expertise during the expert hearing. 📍