

CEPE Annual Report 2021



CEPE

The voice of paint, printing ink
and artists' colours in Europe

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Join our CEPE Regulatory Quarterly Update Meetings!

To enable members to be up to date on all the latest developments, CEPE has set up "Regulatory Quarterly Update Meetings". These meetings take place 4 times a year. They are designed to provide members with the latest political and regulatory developments at EU level, as well as the priorities of CEPE. They are open to all CEPE members.

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Masthead

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Layout by
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Printed by
 Gutenberg Beuys Feindruckerei
 GmbH
 Germany © by CEPE

National Associations



AIVR – The Romanian
Paint Industry Association
www.aivr.ro

Irish Decorative Surface
Coatings Association
www.ibec.ie



ASEFAPI – Asociacion Española de
Fabricantes de Pinturas y Tintas de Imprimir
www.asefapi.es

IPV – Industrie des Vernis et Peintures
www.ipv-coatings.be



APT – Associação Portuguesa de Tintas
www.aptintas.pt

MAFEOSZ - Hungarian Paint Producers' Association
www.mafeosz.hu



Assovernici
www.assovernici.it

M&L - Maling & Lakkindustriens Forbund
www.norskindustri.no



AVISA
www.avisa.federchimica.it

PZPFiK - Polish Paint &
Adhesives Association
www.pzpfik.pl



BCF – British Coatings Federation
www.coatings.org.uk

SVEFF – Sverige Färgfabrikanters Förening
www.sveff.se



DFL - Danmarks Farve- og Limindustri
[www.danskindustri.dk/
medlemsforeninger/dfl](http://www.danskindustri.dk/medlemsforeninger/dfl)

VdL – Verband der deutschen
Lack- und Druckfarbenindustrie
www.wirsindfarbe.de



FCIO – Fachverband der
Chemischen Industrie Österreichs
www.fcio.at

VSLF – Verband der Schweizerischen
Lack- und Farbenindustrie
www.vslf.ch



PIPEC- Fédération des Industries des Peintures, Encres,
Couleurs, Colles et adhésifs, Préparation du Bois
www.pipec.org

VTY – Väriteollisuusyhdistys r.y
www.variteollisuus.fi



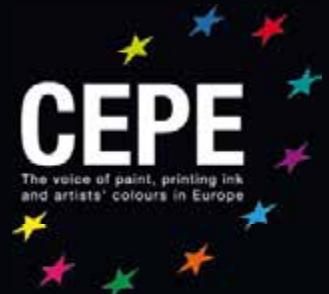
Hellenic Coatings Association
www.hellenicpaints.gr

VVVF – Vereniging van Verf
en Drukinktfabrikanten
www.vvvf.nl



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Christel Davidson
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Roald Johannsen
Chairman
CEPE

Dear reader,

Looking back, 2021 was another challenging year for the Paints, Coatings, Printing Inks and Artists' Colors sectors. Covid-19 remained centre stage as additional waves, lockdowns and restrictions continued, and the arrival of vaccines brought relief and marked a turning point in the management of the pandemic. In parallel, as the EU economy began to show encouraging signs of recovery, our sector faced further obstacles as unprecedented global supply chain disruptions, raw material shortages and overall cost inflation took hold.

On the political front, the European Commission is committed to delivering on the objectives set out in the EU Green Deal, with the Chemicals Strategy for Sustainability (CSS) at the forefront for CEPE members. The CSS sets out a new long-term vision for the EU's chemical policy. This will profoundly transform the approach and methodology for selecting, managing, and using chemicals, requiring manufacturers to provide more quantitative data to ensure alignment with the sustainability ambitions of the EU Green Deal and CSS. CEPE has set up a research fund to generate and provide such data to support our sector and members to meet this requirement.

The EU Green Deal ranks high on the CEPE agenda

The various EU Green Deal initiatives will undoubtedly transform the chemical industry as we know it and have repercussions on all downstream sectors, including ours. With sustainability as market driver, substances will be under increased scrutiny resulting in a reduced availability of current formulation ingredients. To address these challenges, CEPE has established an EU Green Deal Task Force and a dedicated subgroup focusing specifically on the CSS. Other pillars of the EU Green Deal, such as the Circular Economy also rank high on the CEPE agenda.

As the pace of legislative developments accelerates, CEPE has set up quarterly regulatory update meetings to provide members with the latest information on all key issues of relevance. We encourage you to join these meetings.

The CEPE team is, as always, fully committed to the role as the voice for our industry and ensuring we continue to position and enhance our sector in the most optimal way for the future. We know and will continue to show our sector and products as an enabler to the ambitions of the EU Green Deal, the CSS, and Circular Economy. Thank you in advance for your ongoing and active involvement and support as we navigate these regulatory and sustainability challenges and opportunities.

Stay healthy!

C. Davidson
Christel Davidson

Roald Johannsen
Roald Johannsen

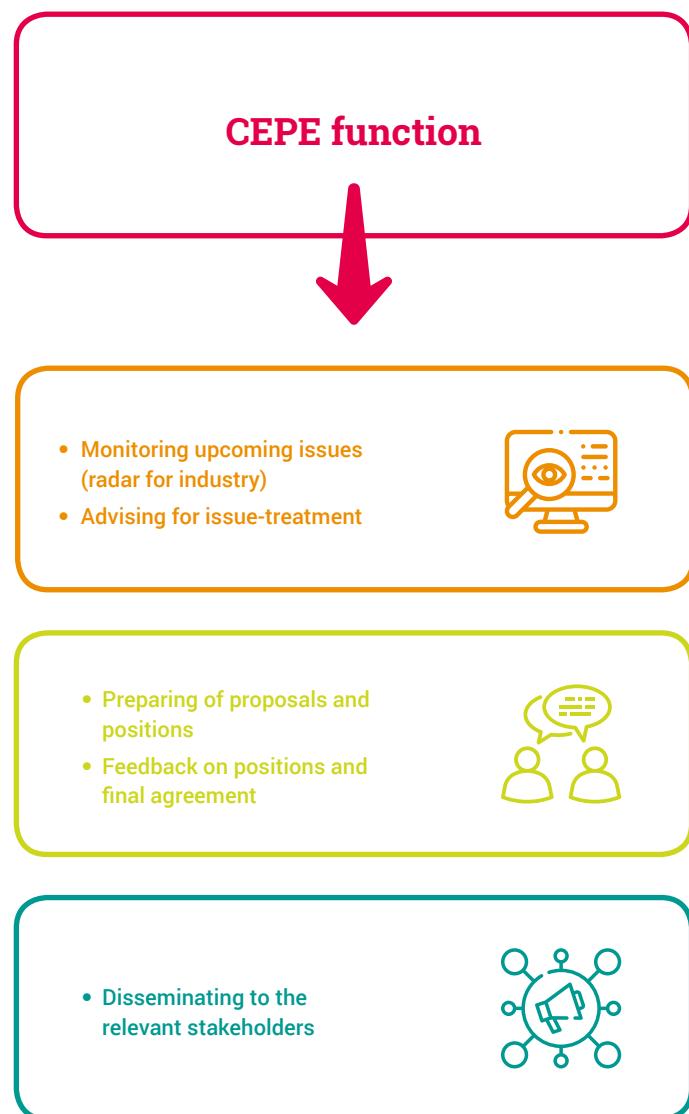
What is CEPE?

The European Council of the Paint, Printing Ink, and Artists' Colours Industry in a nutshell.

CEPE, the European Council of the Paint, Printing Ink, and Artists' Colours Industry represents the interests of Paint, Printing Ink, and Artists' Colours manufacturers in Europe. We provide our members with a platform for information exchange and cooperation on all coatings related matters. Together, we work to improve the framework conditions in Europe and pro-

mote the image of the sector. As the voice of the sector in Europe, CEPE engages and collaborates with the European institutions and relevant stakeholders on all major issues and priorities facing the paint, printing ink and artists' colour industries. We support policy making based on science that leads to a more competitive, healthier, and sustainable future. 

Activities of CEPE



Press release

Brussels, 11 May 2021

The coatings industry under pressure due to developments in the market of raw materials

The European paint, printing inks and artists' colours industry is under pressure due to rising raw materials prices. A complex mix of demand, cap to transportation resources of key raw materials is enhancing uncertainty. Despite the enormous impact for the industry, the coatings industry is

"After a year marked by the COVID-19 pandemic, our industry faces serious challenges again in 2021 due to the rise in raw material prices," said André Vieira de Castro, Chairman of the European Paints, Printing Inks and Artists' Colours Industry (CEPE). "The increase in raw material prices is due to a shortage of raw materials available due to bad weather conditions and the suppliers of raw materials to invoke force majeure. In addition, transportation costs have increased in oil prices. André Vieira de Castro pursued a strategy to increase prices account for more than half of the cost of raw materials. Key components like epoxy resins have risen by 60 percent in Europe. The price of acetone and n-butyl acetate alone rose by 123% and

The current situation stems from Europe and Asia and especially the situation in China which is fueling demand for essential raw materials. Next demanded petrochemical raw materials include inter alia polyester acids, acrylic resin, UV resins, polyurethane resins, and solvents. In particular, global pigment raw material costs (including titanium dioxide, red and yellow pigments) have increased. Key drivers for the increases include high demand in emerging countries, generic supply and

CEPE's 70th anniversary Webinar

CEPE comments on the public consultation or Inception Impact Assessment on the revision of the proposed development.

Indeed, CEPE member companies formulate chemical mixtures and downstream industry that uses the widest variety of chemicals (an estimated 10,000 REACH registered substances – which include monomers of resins). These ensure all the required functions of the end-use applications. Indeed, coatings are applied to a variety of substrates such as walls, paper, plaster, wood, plastic, stone, concrete, for a variety of functions supporting societal needs (e.g. for health, hygiene, safety, sustainability goals (e.g. by increasing service life of the treated objects).

Although the products may contain substances that are subject to a moral and legal obligation to place on the market, the industry has a responsibility to ensure that labels are clear and informative, and that they do not mislead consumers.

EuPIA Interview

Heiner Klokkers (HuberGroup)
Chairman of EuPIA

The corona pandemic affects many industries. How did the printing ink manufacturers experience the last six months?

I think none of us has ever experienced such a situation before. It is still a challenging time for most of us.

We have experienced a real digitalisation boom in the last six months last year. This will also be the case more and more in the future. It includes the trend away from print media to online media. While social media, for example, has become an increasingly important part of our daily life, print media has decreased in relevance for many consumers.

In addition, the entire industry has faced special challenges in terms of the global supply chain, for example, a shortage of raw materials led to rising prices in the short and mid-term. Due to the lockdown in many countries, freight traffic is severely restricted in some cases. This, in turn, leads to a bottleneck in freight space. But despite these adversities, there are no significant failures in the supply chain in the industry.

Are there segments that benefit from the situation?

Commercial Printing has definitely suffered as a result of the pandemic. The printing ink industry records a decline in Sheetfed and Web Offset (Heatset/Coldset) and publication gravure. In these segments I do not expect a rebound. Another segment which is strongly affected by the pandemic is luxury packaging and cosmetics since people have been staying at home most of the time.

When will the industry be able to catch-up to the volumes of 2019?

I think the industry will not be able to catch-up to the missing volumes of 2020. Commercial Printing is already experiencing a steady decrease over decades and Covid-19 pandemic has accelerated this decline. We will see a further constant decline. This scenario was underlined by the news in 2020 that the production of the biggest print product worldwide – the IKEA catalogue – was stopped. The only segment which might have a chance of a catch-up to the volumes of 2019 level is the

CEPE response to the EC Inception Impact Assessment on the simplification and digitalisation of labels on chemicals

September 2021

The opportunity to provide some initial thoughts on the Inception Impact Assessment

denominator amongst all chemical products sold in the EU is that they have a label. The purpose of the label is to inform the person purchasing and using the product about its hazard and safety information and to provide instructions for its use. Labels also serve as an important source of information from the supplier. The ability of labels to facilitate logistics and allow companies to keep their stock keeping minimum, is an added value for suppliers.

Colour requirements stemming from the CLP Regulation, products such as paints, gilding and Toy Safety Directive.

part of a product and should not be discarded. However, adapting the content of much information which results from legal requirements, instructions on product and marketing.

area of labels is often narrow, in particular on small packaging such as paint cans, or printing inks and cartridges for printers.

have a high information density that may be easily overlooked. For example, the chart ...

which is long (easily more than two years) and that labels may need to be revised to meet environmental impacts.

ng for products without always the same options like affixing a new label or reworking the product in the lithographic cans or tubes, are not

8 March Women's day Interviews

On the occasion of International Women's Day, we have interviewed two of our senior women representatives namely Paula Salastie and Jaitske Peenstra.

Europe Day 2021

Established the same year as the European Coal and Steel Community, CEPE's history is intertwined with the development of Europe. We are happy to celebrate Europe Day 2021.

Shining from economic to more societal challenges such as environmental issues, Europe has further created the world's biggest programme of environmental legislation. To tackle climate change, the EU ratified the Paris Agreement in 2015 and underscored its ambition by introducing the intention to set into law the objective of a climate-neutral EU by 2050 with the latest EU Green Deal strategy.

Today, in the field of sustainability, we have exciting discussions on the European Green Deal that seek to achieve the transition to a more sustainable economy.

CEPE Article

While the pandemic continues, raw materials are running short in the coatings industry.

After a year marked by the COVID-19 pandemic, our industry faces serious challenges again in 2021 due to the rise in raw material prices. In simple terms, we face a supply and demand imbalance with strong implications for our sector. There is no sign of relief, not least because additional problems make the situation even more complicated.

André Vieira de Castro
CEPE Chairman

As paints and coatings are mixtures of different ingredients, our industry is comparatively heavily dependent on a large number of raw materials. The current shortage and price hikes underline concern over ingredients. The price for epoxy resins has risen by 60 percent in Europe since January 2020, we use them as binders which hold the pigments (colours) in place together. We also experience shortages for the colour pigments (white (tin dioxide) and red and yellow (iron oxides)) because some coatings require solvents. Some coatings increased through the roof. Since last year, the prices for acetone (123%), n-butyl acetate (101%), IPA (41%) and n-butanol (5%) have increased. We also face shortages for polyester resin which helps to elevate performance requirements.

André Vieira de Castro
CEPE Chairman

automotive or aerospace sector. To remain optimistic, I should probably refrain from naming other relevant petrochemical raw materials for which we encounter shortages: Polypropylene, polyols, acrylic acids, acrylic resin, UV resins, polyurethane resins.

And all of this before our product even leaves the factory.

Limited transportation resources

To ensure safe transportation of our products these must be adequately packaged. With plastic encounter additional cost drivers. On the import side, the situation is even worse. The industry obtains many raw materials, by container, from Asia. However, the container

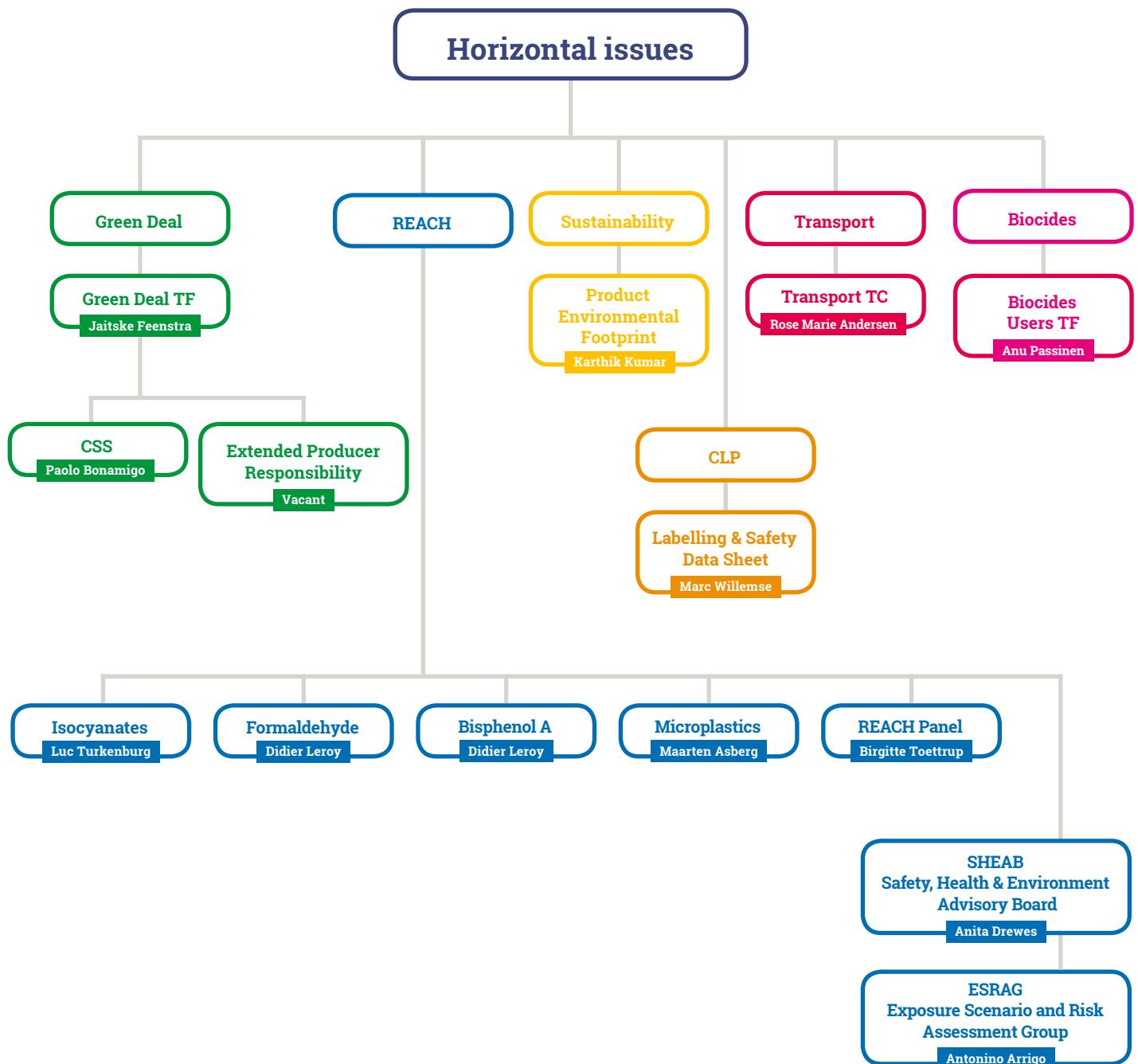
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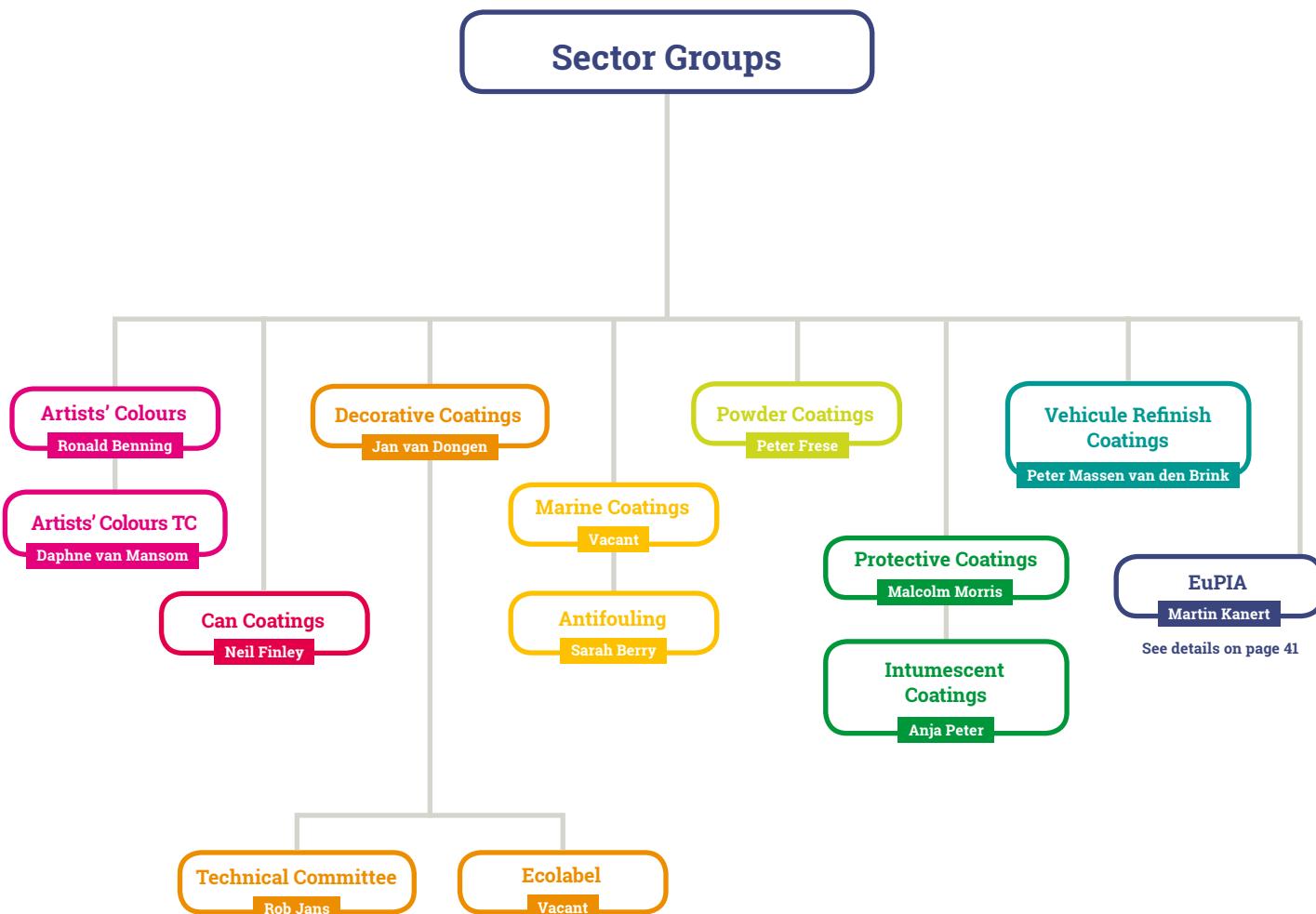
CEPE Horizontal issues

Situation as of December 2021



CEPE Sector Groups

Situation as of December 2021



CEPE is member of:



The EU Green Deal

Source: ikostudio - stock.adobe.com



The President of the European Commission, Ursula von der Leyen, presented on 11 December 2019 the European Green Deal, a plan to make Europe the first climate-neutral continent by 2050. The Green Deal is a new growth strategy to make the EU's economy sustainable and create sustainable industry and transport, without leaving anyone behind. The EU Green Deal is a step towards a more holistic and integrated approach to address climate and environment-related challenges. It also attempts to mainstream environmental policy by bringing together, and improving, several existing policies, initiatives, and funding programmes dedicated to addressing sustainability and climate change.

The diagramme (on the right) highlights the different dimensions of the EU Green Deal. Most relevant to the coatings industry are the dimensions for the "environment", "circular economy" and "food systems" which each contain many different initiatives. The EU Green Deal further recalibrates the EU approach to energy, mobility, climate, biodiversity, and finances.

The implementation of the EU Green Deal strategy has been in full swing in 2021. Addressing the different dimensions of the EU Green Deal (e.g. environment, industry, climate, finance), many sub-strategies were presented throughout 2020 (Chemicals Strategy for Sustainability, Circular Economy Action Plan). Most of these sub-strategies

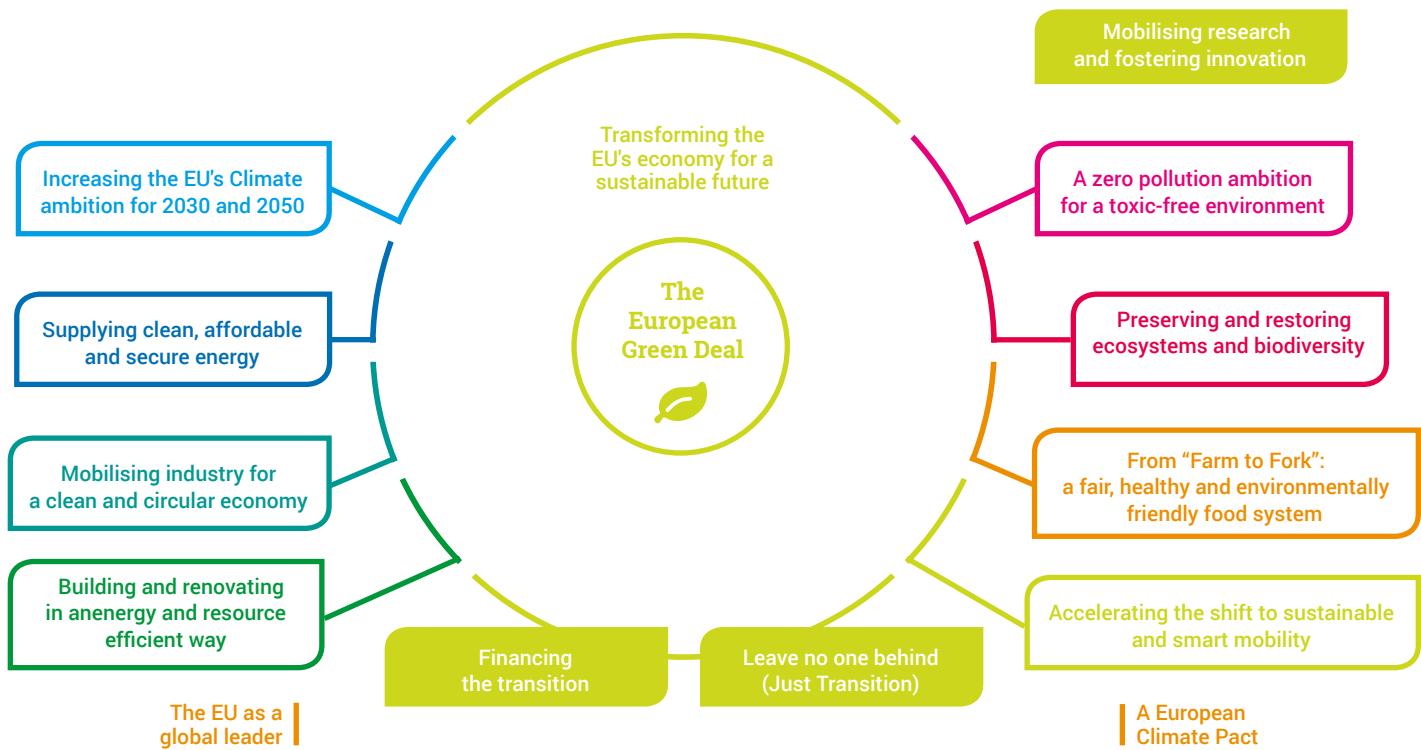
again have a bouquet of different initiatives which were put to public consultation in 2021 to prepare implementation. CEPE has engaged in several consultations and monitors many more issues. Members are kept up to date on the latest developments via the CEPE Green Deal Task Force and the CEPE Regulatory Quarterly Update meetings.

Circular Economy Action Plan (CEAP)

As part of the EU Green Deal, the Circular Economy concerns greening industry processes and is therefore of importance to the coatings industry. The CEAP was published in March 2020 and proposes the initiative to create a Sustainable Product Framework and suggests dedicated actions for key value chains and for the handling of waste.

In 2021, the European Commission (EC) advanced on the CEAP and launched the Global Alliance on Circular Economy and Resource Efficiency (GACERE), adopted rules on persistent organic pollutants in waste, and proposed new rules on waste shipments. However, the below legislative proposals of interest, and to which CEPE provided contributions during public consultations, were all delayed to 2022.

The upcoming "Green Claims proposal" will require companies to substantiate claims they make about the environmental footprint of their products/services by using standard methods for quantifying them.



Source: European Commission

The latter refers to the Product Environmental Footprint (PEF) and it remains unclear which level of obligation this will mean. CEPE welcomes a PEF as a voluntary instrument and suggests a careful alignment with other initiatives (such as Ecolables). CEPE advocates that a "truly circular economy must use a holistic approach and look at the entire life cycle of a product". For further information on PEF, see separate article on Decorative Coatings on page 28.

Similar in the intention is the proposal for "consumers in the green transition" which shall ensure that consumers obtain reliable and useful information on products (e.g. on their lifespan and repair options) to make informed decisions. Since the space on products for consumer information is limited, CEPE will carefully monitor which information will be requested.

The CEAP seeks to establish a new 'Sustainable Products Initiative' (SPI) framework. The initiative will, among other measures, broaden to other product types the Ecodesign Directive with the aim to make products placed on the EU market more sustainable (e.g. durable, reusable, repairable, recyclable and energy-efficient). The initiative will also address the presence of harmful chemicals in products such as: electronics & ICT equipment, textiles, furniture, steel, cement & chemicals. It remains unclear if and to which degree paints, printing inks and artists' colours will be affected.

After contributing to the roadmap consultation in 2020, CEPE responded in 2021 to the questionnaire of the public consultation and drafted an additional position paper. It is clear for CEPE that for some product categories the greatest sustainability benefits are related to the use phase. Hence a too narrow focus on recyclability or circularity might result in trading-off significant sustainability benefits for a relatively small benefit. CEPE highlighted in the SPI questionnaire the need to focus on product purposes and not to alter requirements that would jeopardise product performance.

« The EU Green Deal is a step towards a more holistic and integrated approach to address climate and environment-related challenges. »

Part of the SPI framework will be the Digital Product Passport (DPP). The passport will contain information about the composition of goods on the European market to help boost their chances of being reused and recycled. While the DPP has its merits, CEPE argues that only the most essential information should be provided to protect confidential business information and again to avoid administrative burden from constant updates.

The EC is further reviewing the requirements on packaging and packaging waste in the EU. Early 2021, CEPE commented on the public consultation reiterating that “the achieved packaging functionalities of which many contribute to resource efficiency and sustainability, must be cautiously considered and properly safeguarded when drafting this legislative initiative”. The initiative is currently expected to be presented in summer 2022.

Zero pollution for a toxic-free environment

- Chemical Strategy for Sustainability
 - Safe and Sustainable by Design

The Chemical Strategy for Sustainability (CSS) is undoubtedly the strategy that will impact CEPE members most. See separate article on CSS on page 11. One initiative not covered in the article is the initiative for Safe and Sustainable by Design (SSbD). Under this initiative, the EC will develop criteria future chemicals have to fulfill with before

being marketed. A working definition notes that the initiative shall focus on providing a function (or service), while avoiding volumes and chemical properties that may be harmful to human health or the environment (in particular (eco-)toxic, persistent, bio-accumulative or mobile).

While the burden of the initiative can be expected not to be with downstream users of chemicals, but chemical manufacturers, the initiative will likely extend the design and testing phase and may reduce substance availability.

CEPE commented on the initiative during the public consultation in 2021 and highlighted that there are natural limitations to the goals: “it is impossible to project all aspects of sustainability onto the chemical properties of the raw materials. It needs to be stressed that safety and sustainability are no intrinsic substance properties. Hence, it is important to analyse the entire life cycle, including the use phase of the products for which the chemicals are used”.

CEPE will continue to engage during upcoming EC workshops before the EC will present the SSbD criteria in 2022.

CEPE is currently engaged with CEFIC alongside other associations to explore possible pathways to monitor and evaluate the SSbD framework. Additionally, there is a 2nd Stakeholder Workshop expected in March 2022: this workshop will present the draft methodology to define the SSbD criteria for chemicals and materials. Stakeholders are given a time window until April 2022 to make comments on the proposed methodology.

- Zero pollution action plan

In May 2021, the EC adopted the zero pollution action plan which seeks to combat pollution to air, water and soil. The action plan sets out a vision for 2050 with targets for 2030 (i.a reduce by 50% plastic litter at sea and by 30% microplastics released into the environment). Among the actions, there are several issues that CEPE monitors and is ready to engage in if necessary: e.g. the revision of the industrial emissions directive (2021/2022), improving indoor air quality (2023), and the fitness check of the Environmental Liability Directive (2023), including proposals for the polluter pays principle (2024).

In relation to the action plan, the EC also published in November 2021 a soil strategy with a vision for 2050 and actions by 2030. One expected change from this strategy is that, in future, soil quality will be considered in the EU risk assessments of chemicals.

Financing the EU Green Deal

Achieving a green future requires substantial investments. The EC has pledged to mobilise at least €1 trillion in sustainable investments over the next decade. In addition, the EC seeks to mobilise public and private investments. To direct funds to green investments, the EC has introduced in 2020 the EU Taxonomy Regulation which seeks to classify green investments. The Taxonomy Regulation concerns the finance market but may be harmful to the coatings industry. It may cause possible reputational damage (if products were not considered green) and possibly hamper capital inflow from finance products.





Source: stokkete - stock.adobe.com

The Chemical Strategy for Sustainability

The issue

On October 14, 2020, the European Commission (EC) published its Chemical Strategy for Sustainability (CSS). This is an unprecedented revolution for the chemical industry as it shifts the regulatory approach from a **risk based approach to a more hazard based approach**.

The CSS stems from the overarching Green Deal approach and follows a decade of push for a non-toxic environment. In line with the objectives of the EU Green Deal, a sustainable chemical future will be a future without chemicals of highest concern.

Of all the initiatives of the EU Green Deal, the CSS is the one that will have the greatest impact on the chemical industry and deserves special attention.

The EU regulatory and political environment

REACH is considered the most comprehensive chemical regulation in the world and there is general acceptance that chemicals play essential

roles in our society. However, it has been acknowledged that REACH fails at eliminating the most harmful chemicals sufficiently rapidly and that it is too burdensome. The European Parliament (EP) and the Council have given a mandate to the EC to change this, with the Environment Directorate of the EC (DG ENV) in the lead. This is a political reality that we cannot change. On the contrary, we have to accept that we will have to phase out, to some extent, the most harmful chemicals from our products. Innovation will be key. In cases when substitution will not be possible in the short to medium term, derogations will be required.

What does it mean in practical terms?

Highest concern? In addition to known undesired hazard that already lead to regulatory action under REACH (CMR cat 1, PBT and vPvB) the EC intends to hit hard many other hazards. It will start adding new classes under CLP for endocrine disruptors (EDs) and for both categories: cat 1 and cat 2 (suspected), PBT, vPvB, PMT, vPvM without first going through the United Nations Globally Harmonised System (UNGHS) and it will then test through the UN the possibility to add immunotoxicants, neurotoxicants, hazardous to terrestrial organisms. In addition, the EC also intends to tackle the respiratory sensitizers and we are seeing an increasing trend to also address skin sensitizers.

It is expected that after revising the CLP the EC will revise REACH. A proposal is expected late 2022. One of the main threat is to use a **Generic Risk Management Approach (GRA)**, which is in fact a hazard approach, which is not a new concept as it already exists in REACH for a long time (see Annex XVII, entries 28-30): a simple ban for consumers for CMR cat

« It has been acknowledged that REACH fails at eliminating the most harmful chemicals sufficiently. »

1 for substances and mixtures above a generic threshold. The EC now wants to have a wider mandate and to apply this GRA for many more hazard classes, for both consumers and professionals, and for articles also. It remains to be seen if generic thresholds will remain or if the simple presence of one molecule will be deemed unacceptable.

The approach is therefore to ban in a first instance and to then consider possibilities for derogations. However, derogations might only be possible for essential uses. The essential use concept (EUC) was first put on the table at the end of 2020 and triggered a lot of reactions, including from CEPE. Some NGOs would like an interpretation whereby anything related to cosmetics, decoration, leisure or toys are by default non-essential for the society. Concretely, this would imply that no derogation for a substance would then be possible, should this interpretation be applied in such a simplistic way. The EUC is a difficult issue and, if implemented, raises the point that someone should be held accountable to judge what is essential and what is not. Who would judge if a given pigment used in Artists' Colours would be classified 'the wrong way' and automatically banned? Who would judge whether preventing human creativity would be acceptable or not?

« Some NGOs would like an interpretation whereby anything related to cosmetics, decoration, leisure or toys are by default non-essential for the society. »

The CSS also wants to address uncertainties linked to possible unintentional exposure to chemicals. It is true that under the current REACH rules safety assessments are done on an individual substance basis. It is hard to predict if and how people or the environment could be exposed to different chemicals having the same mode of action at the same time. CEPE is of the opinion that the current rules already contain sufficient safety margins to cover reasonable worst-case exposures. However, these safety margins are not deemed sufficient anymore by some Member States who want to add a **MAF (Mixture Assessment Factor)**. If a MAF of 10 would be applied in addition to existing safety factors, it would mean that the unintentional exposure to combined chemicals could pose a risk 10 times higher than it is today, which is unreasonable for most chemicals. In order to address the uncertainties, CEPE calls on decision-makers to focus on what matters most, i.e. on those chemicals that are most likely present in our environment for possible co-exposures. A blanket MAF applied to all chemicals and all uses of chemicals would be very detrimental and a too simplistic way to cover a complex situation.

The EC is also developing **Key Performance Indicators (KPIs)** to measure the success of the transition to a less hazardous environment. Once again, we need to be innovative to develop criteria that do not simply measure the tonnage reduction of hazardous chemicals, but criteria that



Source: Tamara - stock.adobe.com

encompass other Green Deal objectives such as sustainability. Replacing a technology by another one that has only half its lifetime is against the sustainable principles of reducing CO₂ emissions, use of raw materials or waste generation.

What can we do and how?

The EC has now identified over 85 CSS actions. It has recruited staff to face the ever-increasing number of activities, and has outsourced many actions to private consulting firms. The timelines are very ambitious, giving industry limited time to react.

Concretely, the difficult concepts such as GRA, EUC or MAF will be implemented. The role of CEPE and its members is to '**control damage**', analyse and communicate the impact on our industry to decision-makers to prevent simplistic approaches to these concepts. To be successful, we need to offer innovative and reasonable solutions that deviate from former positions such as 'if it is safe for use then leave it alone'.

What have we achieved?

As stated above the EC has hired external contractors to address the many ongoing actions. For each of the actions, inception impact assessments followed by impact assessments, public consultations, targeted

consultations and workshops are organised. Discussions also take place at CARACAL level and in sub-Caracal groups, and also within many industry associations. Calls are organised, documents and position papers are circulating. Given the limited resources available it is impossible to follow all the developments in detail and we have to prioritise and focus on the most important impactors, among which those identified above.

CEPE has created a **dedicated CSS group** under the CEPE Green Deal TF. This group also ensures that the CEPE Board, the National Association Directors and the CEPE SHEAB group have the possibility to comment. It started to meet once per month early 2021, but this rate has increased to every second week to try to keep up with the pace of actions. At the end of 2021 a subgroup of the CSS group was also set up to be even more reactive and to support the CEPE staff liaising with the EC.

At the end of 2021 a document on GRA was adopted and submitted to a dedicated functional mailbox that the EC has opened to receive comments and suggestions from stakeholders. CEPE is calling for **the EC to not rush into a blanket GRA** and to, in a first instance, gather information on uses, exposures and alternatives, before deciding which regulatory route to choose (under REACH and/or under other legislation). Only an informed decision making process can prevent unexpected consequences. If there is support for the proposal of CEPE, the next step will be to discuss how to address the **analysis of alternatives**. The CEPE CSS group has developed a decision tree for this, which postpones to the last stage a possible essential use concept.

The ongoing discussions and developments highlight that **industry as a whole will have to provide more information than it currently does**, including the supply chains.

What are the remaining steps?

Short term. Get involved!

The window of opportunity to influence the EC is now to mid-2022. As of the summer, the EC will start drafting an amended REACH which is expected to be submitted to the EP and Council by the end of 2022.

Long term. Data!

With the expected entry into force of the amended CLP and REACH around 2023-2024, the subsequent three decades will be marked by increasing pressure on many substances: many of which are critical and used in our industry. Therefore, our industry needs to:

- Be prepared to innovate by substituting the most harmful chemicals, where possible and
- If more time is needed solid quantitative data will be necessary to support derogations.

Therefore, as a sector our priority should be to focus on obtaining quantitative data, as qualitative data is deemed insufficient by decision-makers

The CSS group and other CEPE groups are also discussing the need for 'big data' for the industry. This information will be essential to allow CEPE to advocate and to defend our industry and thereby obtain derogations. To be successful though, companies need to be able to deliver the relevant information and to ensure confidentiality. The information will be managed by external parties. The CSS group is now in the phase of identifying what type of information will be needed, for what priority substances and may differentiate such data by the type of question that can be expected in the future.



Question

Please give us data on possible release to the environment of the substance X from your facility



Qualitative data

We believe that no release can be expected because we work under an environmental permit



Quantitative data

We have performed some analysis on key samples from various activities in our plant to quantify the precise amount of the substance X in waste water released to the municipal waste water treatment plant

REACH

The most ambitious piece of European legislation was implemented 15 years ago. Despite its already long existence there are still many ongoing activities.

Source: Jérôme Rommée - stock.adobe.com



The issue

REACH stands for: Registration, Evaluation, Authorisation of Chemical substances. Although the title does not incorporate it, REACH can also restrict the placing on the market and use of chemical substances (the restriction process).

All these activities can have an impact on our industry and are monitored. Since the publication of REACH 15 years ago, the focus has been on guidance, compliance and enforcement, not on new legislative developments. Although Europe stands as an example for the world with this legislation, the pressure on chemicals is still mounting inside our borders in particular with the publication of the Chemical Strategy for Sustainability (CSS) (see separate article on the CSS on page 11). In addition, a proposal for a revision of the REACH regulation is expected by the end of 2022 with significant impacts on our industry.

The EU political environment

REACH is now well established and all relevant chemical substances have been registered by suppliers (we are mainly downstream users).

The European Chemicals Agency (ECHA) database is estimated to contain some 25,000 substances. Currently, Europe has the biggest database on the safety of chemicals in the world. Nevertheless, chemicals remain in the spotlight, in particular in the framework of the EU Green Deal and the CSS (see the separate article on the EU Green Deal on page 8).

The evaluations of some of the submitted dossiers started in 2012 and will continue for decades considering the current pace of maximum 50 substances per year. This is deemed to be too slow and there is increasing pressure to find solutions, such as grouping similar chemicals to avoid 'unfortunate substitution'. The quality of the dossiers is also questioned. CEPE monitors the outcome of the evaluation process for several substances of interest to our industry. Over the years, it has become apparent that more data is requested to registrants in order to complete their dossiers and to address the concerns of the authorities of Member States. The outcome of the substance evaluations is often that there is a need for additional regulatory measures such as harmo-

nised classification, restriction, substance of very high concern (SVHC) identification or other measures such as OEL setting. This information is provided to CEPE members during our quarterly regulatory updates.

Under the restriction route, the European Commission (EC) has now adopted broad approaches to target multiple chemicals at once, as in the case

Compliance in the supply chain remains a hot topic with a lot of activities. Indeed, proper flow of information is needed from the REACH registrants to the end users. The information is complex to pass on the chain and tools are still under development.

What can we do and how?

CEPE carefully monitors the various activities under REACH and these are discussed in a dedicated group named REACH Panel, among others.

CEPE created dedicated internal Task Forces to deal with important dossiers such as the microplastics, the BPA, the formaldehyde or the diisocyanate restriction. CEPE is also involved in providing input during public consultations and is following up with interest the development of polymers requiring registration.

« Currently, Europe has the biggest data-base on the safety of chemicals in the world. »

The second review of REACH in 2017 concluded that REACH was meeting its objectives and was generally effective, but that there were opportunities to improve and simplify its implementation. The review yielded a series of 16 actions: CEPE, as such or as part of Downstream Users of Chemicals Coordination Group (DUCC) is involved. This involvement allows us to contribute to the effective implementation of REACH and facilitates compliance for our companies.

What have we achieved?

For the specific dossiers on microplastics, see separate article on microplastics on page 20.

With regard to compliance, activities have primarily taken place in the framework of Action 3: **improvement of the workability and quality of safety data sheets**. This project aims to identify the information needs of different supply chain actors and how to generate and transmit that information. Proposals for solutions gathered in 2019 have been worked out, tested and evaluated in 2020 and 2021. CEPE and DUCC are key participants. This action is closely linked to the activities of the Exchange Network on Exposure Scenarios (ENES) (see below), and it is important to maximise use of those tools and avoid yet more different solutions from being invented. ECHA has been closely involved in these activities but decided last year to put this on hold due to the many other activities that keep them busy and are of higher political priority.

ENES is a collaborative network of sector organisations, Member States and ECHA that develops tools and good practices to improve the communication of REACH information in the supply chain. DUCC was a co-founder of ENES and the CSR/ES Roadmap 2013-2018, the outcomes of which are now being taken further in the ENES Work



of the restriction on the placing on the market of textile, leather and fur articles containing skin sensitising substances, the formaldehyde and formaldehyde releasers in articles or the microplastics (see separate article on microplastics on page 20). The restriction on diisocyanate is also broad and encompasses dozens of these substances.

With regard to the Authorisation activities, there are now 209 substances on the candidate list for authorisation, some of which were subject to many discussions. Indeed, the status of SVHC (a first step before the candidate list) is purely based on hazard, not on use and risk, and has a 'black-listing effect'. Increasingly this is used to remove substances from the market as the authorisation process is burdensome and slow for both industry and authorities. This is an unfortunate development as it shows the increase of hazard based decisions compared to risk based decisions.

Polymers have been exempted from registration as their monomers are all registered. However, the EC now wants to have a series of polymers also registered, the so-called 'polymers requiring registration'.

Programme, comprising 23 actions in 6 focus areas - CEPE/DUCC are involved in some 80% of these. More information can be found here: www.echa.europa.eu.

As chair of DUCC, CEPE was a lead organiser of the ENES 12 event that took place in Brussels on 21 November 2019. The goal of this event (about 150 delegates) was to promote, demonstrate and improve un-

« REACH is one of the most ambitious piece of European legislation ever implemented and despite its already long existence there are still many ongoing activities. »

Source: adrian_jj1825 - stock.adobe.com



derstanding of the numerous tools already available. To elaborate on just a few:

- Use map packages were developed by downstream user sector organisations to provide standardised information to registrants on the uses of substances (in mixtures). Besides an overall map, these packages include exposure assessment determinants for consumers (SCEDs), workers (SWEDs) and the environment (SPERCs). In 2018/2019 CEPE produced updated SPERC factsheets and generated CHESAR files for its use map package to facilitate import into ECHA's CSA tool for registrants. CEPE is still involved with ECHA to check the quality of the implementation of these within the ECHA assessment tool CHESAR.
- Exposure Scenarios (ES) for communication: DUCC has been a key player in developing solutions to make ES easier to read and navigate, such as the Table of Contents and Structured Short Titles. DUCC is also a co-founding partner in the ESCoM standard for electronic transmission of ES information and is still working on the harmonisation of the standard phrases used by its member sectors in their use map packages in order to improve the quality of the ESCoM Phrase Library.
- SUMIs: Safe Use of Mixtures Information documents are a means for formulators to provide consolidated information on exposure scenarios and conditions of safe use to the users of their mixtures. This is a 'bottom-up' methodology developed by DUCC, based on typical standard conditions for workers as defined in the SWEDs, which aims to make compliance with REACH obligations easier for a majority of formulators and/or products.

CEPE's SUMI package, developed in the Exposure Scenario Coordination Group (ESCG), was originally launched in 2017 and its roll-out to the membership has been supported by a series of training workshops with the national associations.

CEPE's package underwent in the past years an update and improvement, including high-quality pictograms commissioned by DUCC, inclusion of environmental information (for professional uses) and revisions to the guidance. Additional differentiated SWEDs/SUMIs were developed for some technologies such as UV products and a guideline was developed in conjunction with ESRAG (see separate article on page 24) to help members refine assessments and SUMIs for specific mixtures or uses where required.

In January 2021, the CEPE use maps, including the CEPE SWEDs, SPERCs and SCEDs were published on the ECHA website and the documents in CHESAR 3.6 format were made available on the website to be used by the substance registrants.

What are the remaining steps?

REACH is one of the most ambitious piece of European legislation ever implemented and despite its already long existence there are still many ongoing activities. With increasing pressure on synthetic chemicals, CEPE will have to carefully follow future developments and get involved to ensure support to our industry where and when needed. Discussions and a proposal for a revision of the REACH Regulation is expected for 2022 which will heavily impact our industry (see separate article on the EU Green Deal on page 8).

In 2022, CEPE also intends to publish an update of the CEPE Use Maps including the newly developed SWED for UV curing inks.

Transport

More than 50% of all transported paints, coatings and inks are classified as dangerous goods. As there are various international transport regulations, a close monitoring is necessary to avoid further burdens.

CEPE's Technical Committee Transport (TCT) monitors proposals to the various international transport regulations to ensure that there are no controls that would cause problems for CEPE members. The Committee also makes its own proposals to improve the situation for members. This includes working with the various international bodies to avoid undue costs, delays or administrative burdens. The regulations comprise the overarching UN Model Regulations on the Transport of Dangerous Goods (MRTDG), the International Maritime Dangerous Goods (IMDG) Code for sea, the International Civil Aviation Organisation (ICAO) Technical Instructions for air and, in Europe and beyond, the International Carriage of Dangerous Goods (ADR), the International Carriage of Dangerous Goods by Rail (RID) and ADN for road, rail and inland waterways respectively. Over half of all paints and inks transported are classified as dangerous goods and so fall within the scope of these rules. CEPE work is carried out in conjunction with the World Coatings Council (WCC), particularly the American Coatings Association, to ensure changes are globally acceptable.

In the 2020 annual report, we reported on our success of having been able, after years of negotiation, to get a Proper Shipping Name for environmentally hazardous goods (e.g. "PAINT").

This year we have been facing a new problem stemming from the reclassification of some important dry-film preservatives used in outdoor paint under the 15th ATP to CLP, namely ZPT, OIT and DCOIT. This ATP enters into force on 1 March 2022. The presence of those biocides lead to a transport classification of EN3082 from 0.025%

and this triggers the need to have approved packaging, which are not yet available. We therefore needed transitional measures to continue using the available packaging up to 30L in size.

The CEPE proposal to allow for a transitional measure in ARD/RID for the use of UN approved packagings for paints and inks becoming classified as environmentally hazardous substance, n.o.s., UN 3082 as a consequence of the 15th ATP to CLP was adopted in the autumn joint meeting. Until June 2025, water-borne paints and high flash-point products that contain 0.025 % or more of the preservatives DCOIT, OIT and ZnPT are still allowed to be packed in non UN approved packaging up to 30 litres. The transitional period for paints, printing inks and related materials which will now be assigned to UN3082, following the 15th ATP to CLP, ensures that the industry can continue to transport these materials whilst the necessary changes are made to the formulation or packaging without prejudicing safety or the work of emergency responders.

Because this transitional period will be taken into account only in the ADR 2023, it is important that Member States also sign the multilateral agreement to still cover the bridge between 1 March 2022 and the ADR 2023. National Associations have been asked to contact their respective ministries.

The CEPE TCT also worked, together with the European Writing Instruments Manufacturers Association (EWIMA), on a common information note on the transport of writing instruments.



Substances advocacy

An overview of the events that led to the classification of titanium dioxide, what steps have been taken and the latest developments.

Titanium Dioxide (TiO₂)

The issue

This issue of TiO₂ is now closed. However, it is useful to remember the story around this topic as well as the latest developments that took place in 2021.

In 2016 the French authorities proposed a classification for carcinogen by inhalation category 1 (the worst), for all forms of TiO₂, hence bypassing the full evaluation of the REACH dossier. The consequence of this category 1 classification would have been huge for our industry as this pigment is used in most paint and printing inks as it is the best white like scattering and UV protecting opaque pigment. There is no equivalent substitute. In addition to the perception problem, a category 1 triggers several regulatory consequences such as, a ban of consumer goods and a classification as SVHC (substance of very high concern) under REACH, which is the first step towards a phase-out in Europe.

TiO₂ has multiple applications. Our industry is the number one user in terms of quantity, but TiO₂ also finds applications in plastics, paper, rubber, ceramic, toys, toothpaste, cosmetics (also in sun cream to protect against skin cancer), food additives, etc.

The EU regulatory and political environment

This dossier was a CLP dossier (Classification, Labelling and Packaging of substances and mixtures Regulation (EC) N° 1272/2008). The classification of a substance is based solely on its hazard. There is no room for arguments linked to exposure, risk in use or socio-economic impact.

A CLP dossier is evaluated by the European Chemicals Agency RAC Committee (Committee for Risk Assessment). This Committee is chaired by ECHA and composed of toxicological experts of Member States. These experts are not experts for all toxicological issues so when a certain endpoint is discussed not all speak up. A public consultation always takes place before the discussions in the RAC but never after. Concretely, this implies that a substance can enter RAC with a certain proposal and come out with a totally different outcome, which is no longer open to public consultation. The process is quite unpredictable and experience shows that most substances come out with a worse classification.

What did we do and how?

For three years, TiO₂ was the number one dossier for CEPE: exemplified by three internal task forces with about 100 meetings/calls preparing e-mails, documents, presentations, letters, input to public consultations and participation in official meetings. Also, we led a coalition of downstream users in close collaboration with the association of TiO₂ manufacturers (TDMA).

In September 2017 RAC decided against a Category 1 classification. Instead TiO₂ would be classified as a carcinogen category 2 by inhalation only (no issue for dermal and oral exposures). However, this still triggers the classification of mixtures containing 1% (w/w) and more, which is always the case for TiO₂ used in our products. It goes without saying that the impact on public perception of the sentence 'Suspected of Causing Cancer' would have been disastrous.

The positive outcome was made possible, by engaging early in the process with the European Commission (EC) and by explaining to them the nature of the problem and the impact in case no solution would be found. This led to the decision of the EC to reduce the impact by derogating liquids. Despite all our subsequent efforts, the position of the EC did not change further. Member States can of course challenge the EC position but only a couple were clearly standing against the classification. All the others asked the EC to try to reduce the undesired impact, while still supporting the fact that CLP was the best regulatory route to address the concern.



Source: Bangkok Click Studio - stock.adobe.com

What was the concern? This is the first time that an inert dust was proposed for classification as carcinogenic. Indeed, TiO_2 is an inert solid with poor solubility and which has no intrinsic toxicity. It is chemically neutral when present in the body. The effect observed in rats is linked to the overload of lungs. At unrealistic concentration levels of dust particles, the lung natural clearance mechanism cannot remove such quantities. If that occurs during the lifetime of a rat, the presence of the solid particles causes inflammation and chronic inflammation triggering the development of lung tumors. Can this realistically occur with humans? In the presence of dust mist one would protect oneself by moving away, which the rats could not do in the laboratory.

Too much dust in lungs is not good for humans, hence the reason why all Member States have adopted maximum concentration limits at the workplace (OEL). This protects workers from chronic exposure. We strongly believe that a chronic exposure to high levels of dust is unlikely for other categories of the population. Therefore, we are of the opinion that this concern should have been solved through the legislation on safety at work only and not by CLP. Our view was supported by several Member States, while others took a conservative approach.

What have we achieved?

We have obtained that liquid mixtures be exempted from classification and the term 'carcinogenic' not appear anywhere. The classification only applies to powder forms (when they fall under the criteria of 'aerodynamic diameter' – see below for more explanations), as explained in the classification entry in its Note 10. This certainly helps the decorative sector which sells products to consumers.

Indeed, it is very difficult to explain to the public the difference between hazard and risk. It is not because a substance is classified hazardous that there is a risk when using it. Following a survey carried out in the UK, a consumer would have thought that by opening a can of paint, he would be at risk of developing cancer, which is totally wrong. Unfortu-

nately, CLP does not allow that differentiation which would have caused misunderstandings and miscommunication.

In order to address its remaining concern when spraying paints, the EC has invented a new EUH 211 sentence: 'Warning. Hazardous droplets may be formed when sprayed'. This sentence must appear on the labels of liquid paints.

Latest situation

TiO_2 is now officially classified in the 14th Adaptation to Technical Progress (ATP) to CLP. The deadline for complying was 1 October 2021. We have worked hard to clarify when and how a powder coating falls under the scope, and helped manufacturers to fine tune their classification guidance. We have also clarified how TiO_2 should be mentioned in Safety Data Sheets given its peculiar status. It should be noted that the waste remains an unclarified issue as the EC did not find a way to close it before adopting the classification. A derogation for the EU Ecolabel has been granted (together with the organic coating TMP). At the time of writing, a derogation is still under evaluation for the Toy industry.

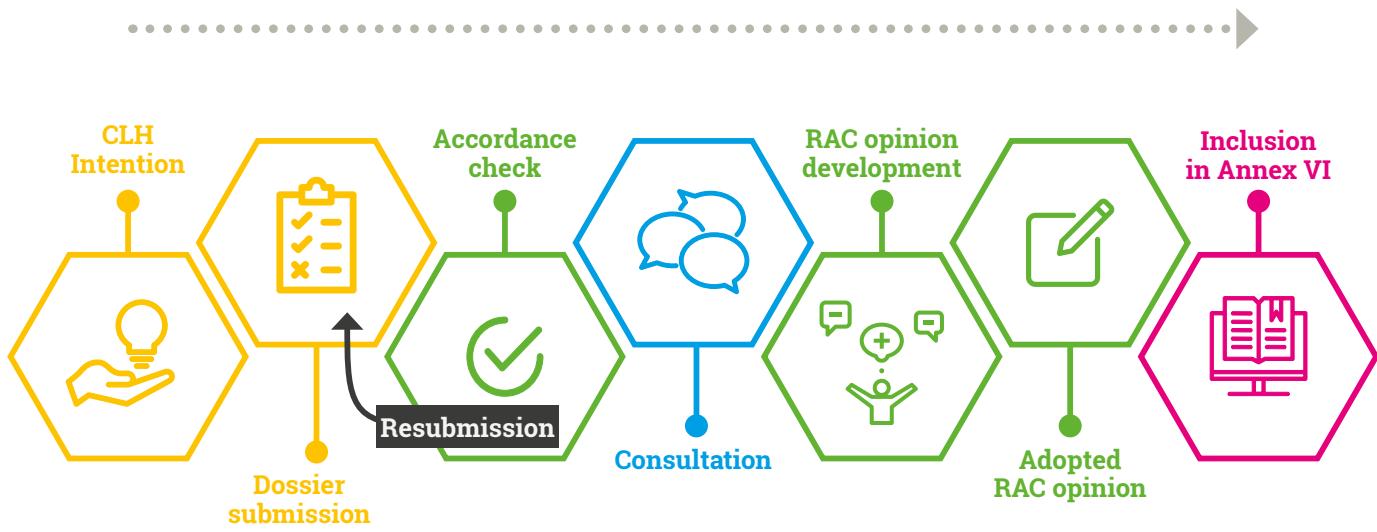
For powder coatings efforts focused on understanding if these coatings would fall under the definition of 'aerodynamic diameter'. The most relevant method of the 'rotating drum' was applied to numerous representative powder coatings. According to this methodology, powder coatings do not need to be classified and only the EUH 212 sentence applies.

During 2021, manufacturers of TiO_2 decided to not classify their material, based on the same methodology. However they did recommend to apply the EUH 212 sentence.

A few court cases have been filed with the objective to annul the classification. It will not be suspended, hence re-labelling has taken place. We expect to hear from the European Court of Justice in 2022.



Steps of the CLH process



■ Dossier submitter ■ ECHA / RAC ■ Parties concerned, including Member States ■ European Commission

Microplastics

The issue

Increasingly, studies are reporting about the presence of microplastics in the marine sediment (starting with the Baltic and the North seas) resulting in an escalation of the issue to the political level and forcing the European Commission (EC) to act. Microplastics must be differentiated from the problem of 'plastic soups'. However, nowadays the presence of plastics in the sea is perceived as a sufficiently severe problem to prompt regulatory action. These microplastics come from different anthropogenic origins. The first source comes from the wear and tear of tyres: by driving a car one generates persistent microplastics that ultimately end up in the marine sediments of our neighbouring seas. The second source, is the washing of textiles which is due to the insufficient number of systems in place to collect these residues as well as insufficient sediment basins and sewage treatment plants.

The EC requested European Chemicals Agency (ECHA) to propose a restriction on the placing on the market of 'primary microplastics' which impacts our sector as it covers waterborne paints based on polymer dispersions. Indeed, the definition of microplastics is 'everything that is not liquid or gas is solid'. In this framework, ECHA considers water based dispersions to be included while emulsions are considered liquid in liquid and thus are excluded.

The EU regulatory and political environment

PRIMARY MICROPLASTICS

This is a REACH dossier, despite doubts having been raised as to whether non-hazardous inert polymers can be tackled by this Regulation. The proposal of ECHA has been to tackle this issue under the REACH restriction route. Due to the difficulty of regulating the wear and tear of articles, this restriction focuses on primary microplastics i.e. those that can intentionally or under reasonable conditions of use be released to the environment, such as the microbeads in cosmetics, the encapsulation of fertilisers or the infill material used in synthetic turf (e.g. football fields).

The proposal for the restriction is based on the precautionary principle. Indeed, to date, no harm has been demonstrated as a result of the presence of these inert particles in the environment but the concern is that they are persistent, which means that they will build up, possibly affecting future generations.

Our industry is only a minor releaser of primary microplastics. Yet, we were not able to get our sector entirely out of the scope of the restriction, resulting in some additional administrative burden of information and reporting. In general the approach of ECHA to such problems is to restrict all uses, then derogate some uses, instead of focusing only on the most relevant releases.

SECONDARY MICROPLASTICS

The EC has expressed its intention to also look into the issue of wear and tear of articles leading to environmental contamination. A first workshop was organised in September 2021 during which the EC explained that it would primarily focus on tyres, pellets and textiles



and announced its intention to propose a regulatory action at the end of 2022. However, it should be noted that paints are regularly mentioned.

What can we do and how?

PRIMARY MICROPLASTICS

CEPE is active on this issue since 2016. We immediately set up dedicated expert groups, and at a later stage an advocacy group, in order to provide data to the regulators and to try to avoid, and if not possible minimise, the impact on our sector.

The first sets of information CEPE provided to the consultants working on behalf of the EC were figures and other information concerning our industry. The only direct relevant – although minor - environmental contamination coming out of our industry is when consumers wash, under the tap, the remaining water-based paint present on the brush or roller. CEPE has issued a good practice guide to prevent this happening in the future and the VVVF, the Dutch Association for Paint and Ink Producers, produced a video to promote the correct disposal and CEPE is actively promoting it amongst the relevant stakeholders. While CEPE was in contact with the EC, National Associations were liaising with their ministries. CEPE also joined other industry associations to align views and participated in the Committee for Risk Assessment (RAC) and the Socio-Economic Analysis Committee (SEAC) discussions. To date, the following steps have been:

- November 2017 – ECHA received a request from the EC to prepare a restriction proposal
- March to May 2018 – a 'call for evidence' took place followed by a workshop



- January 2019 – a proposal for a restriction was published followed by an update in March
- March to September 2019 – a public consultation took place
- February 2020 – (draft) Background Document (outcome of public consultation)
- June 3 2020 – adoption of the 8th opinion RAC
- June 9 2020 – adoption of SEAC opinion

SECONDARY MICROPLASTICS

Considering the increasing pressure around the issue of microplastics, the CEPE microplastic group has agreed, with the support of other working groups and the CEPE Board, to be pro-active and to start generating degradation data for some outdoor coatings in the architectural and marine sectors.

What have we achieved?

Regarding primary microplastics, products like coatings that are film forming have been derogated from the restriction of placing on the market.

What are the remaining steps?

As regards primary microplastics, the proposal of the EC has been delayed to 2022. For CEPE the main remaining issue is linked to the burden of the reporting obligation which currently stands as follows:

- For industrial customers, members would have to inform on the presence of microplastics, the amount and the generic type present in their products. These customers would then have to report every year on the amount and type used and the estimated discharge to the environment;

« Nowadays the presence of plastics in the sea is perceived as a sufficiently severe problem to prompt regulatory action. »

- For professional and consumers, members would have also annually to report the same directly.

The aim of the decision-makers is to understand if these contaminations will require further regulatory actions in the long run. We are of the opinion that it makes no sense: our figures will show minimal release anyway and the same estimated figure for release will be sent every year as it will be based on the same release factor. If the business for water-based products increases, the figures will increase accordingly and despite being minor, these figures could send a negative signal to the outside world i.e. that our industry increased the environmental contamination of microplastics. Our objective is to get a simplified reporting for the generic description of polymer types.

As far as secondary microplastics are concerned, we are working on identifying a scientific research protocol that will allow us to understand the degradation dynamic and routes of coatings exposed to weathering.

Biocide

Biocides is a very important dossier for CEPE. Biocide preservatives are absolutely essential to preserve both water based in the can (the in-can preservatives) and outdoor coatings after application (the dry-film preservatives).

The issue

With the implementation of the EU Regulation N° 528/2012 on biocidal products (BPR), we are increasingly concerned about the future availability of effective preservatives. Biocides are products defined as additives for paints used in small amounts: our industry does not manufacture them but uses them.

The EU regulatory and political environment

Biocides are means of controlling 'pests' or 'bugs' i.e. micro-organisms and macro-organisms everywhere other than on plants (pesticides are designed for plants and are regulated separately). Biocides therefore encompass products like household insecticides, rodenticides, anti-fouling paints, human hygiene disinfectants, swimming pool disinfectants, metal working fluids or preservatives.

Before 1998 biocides were very poorly regulated in Europe, only some of the products were regulated in a few Member States. The preservatives were almost non-regulated (except wood preservatives). The Biocide Product Directive was adopted that year, replaced by the BPR in 2012 (because the former did not work properly). By May 2000 the industry was requested to identify all the existing active substances and their uses (called Product Types) present on the market (around 1000), and by 2003 the industry was asked to submit information to support the most important substances (around 350). From 2004 to 2008, the industry was asked to submit full data packages for these substances. The in-can preservative dossiers were submitted in 2007 and the dry-film preservative dossiers in 2008. The review of existing substances then started. Member States were allocated substances to review. Most of the in-can and dry-film preservatives still have to be reviewed. Concretely, files have been on the table of the competent national ministries for 15 years with no progress.

The review was first supposed to end in 2010, then in 2014, and with the BPR an extension to 2025 was granted by the European Parliament (EP). Despite this extensive time frame, after 17 years of review and 3 years left before the deadline, only 42% of the entire review programme has been finalised as shown on the next page (EC document 'Progress of the review Programme of active substances' from the 94th Competent Authorities meeting of December 2021).

At the current pace, the review programme will fail. Why? Because of the very heavy and costly requirements, the extremely complex ever changing guidelines and the conservatism based on the precautionary principle,

« The BPR has been in unbalanced regulatory hands for over 20 years. »

the addition of new criteria such as endocrine disruption, the need to get through harmonised classification, the lack of resources and/or competence in national ministries, the necessary renewal of actives and products, the need to discuss issues with mutual recognition etc.

The official aim, as described in the text, is to improve the functioning of the internal market while ensuring a high level of safety for human health and the environment. The less official objective is to eliminate or reduce as much as possible the use of biocides.

The BPR lies in unbalanced regulatory hands and this has been the case for over 20 years. It has been more than challenging to find support be it in the Directorate General Grow of the European Commission (EC) or in national ministries of economy. We are operating in a highly political environment.



Source: sebastianreuter - stock.adobe.com

The Council of the European Union was made aware of this situation pointing to insufficient resources at Member State level.

What can we do and how?

CEPE has been deeply engaged for many years with the biocide regulators (at EU and national levels) to explain the essential need of preservatives and the possible upcoming crisis due to the unavailability of efficient products. We have developed advocacy documents used by our national associations as well as during official Biocide Competent Authority meetings in Brussels. We have continuously been in contact with other downstream users' associations, mainly the detergent industry, as well as with the biocide suppliers, to jointly address our common problem.

What have we achieved?

We have achieved a significant momentum since the end of 2019. It has taken us several years to have decision-makers accept that there is, indeed, an issue and that it needs to be solved. This has now been officially recognised by the EC and the Member States.

What are the remaining steps?

CEPE is maintaining pressure on the relevant stakeholders to find a solution. Following the recognition of the essential need of preservatives, in February 2020 at the Biocide CA level, representatives were still hesitant to develop a solution. One of the key family of preservative substances (the isothiazolinones) is made of skin sensitising substances. In 2016 the use of one of them for in-can preservation (CMIT/MIT) was approved but with a disturbing restriction for use in consumer products. It stated that it cannot be used in consumer products (like paint) above a concentration limit of 15ppm for skin sensitisation – thereby forbidding the sale of a treated article classified as skin sensitiser. This sets a precedent that would impact the other substances, which are not efficient under the newly adopted classification limit (a default 15ppm despite their different potency), hence resulting in a potential ban for this essential chemistry in consumer paints.

There was agreement that we should first have a scientific discussion at the European Chemicals Agency (ECHA) level which took place from March to June 2020. Toxicologists from the paint and the detergent industries were involved. Again, the outcome was disappointing. In a nutshell, the proposal for a quantitative risk assessment as addition to qualitative risk assessment, despite being based on ECHA guidelines, seems to be too difficult for scientists of Member States to tackle and a "too hot potato" given its impact on REACH, therefore ECHA proposed to send it back to the policy makers, i.e. the Biocide CA meeting. CEPE wrote to ECHA and to the EC stating the importance for this discussion to take place. Also, it should be postponed to the product authorisation stage – rather than the active substance stage – in order to properly take into account the reality of the formulations, applications and uses, which all affect risk characterisation.

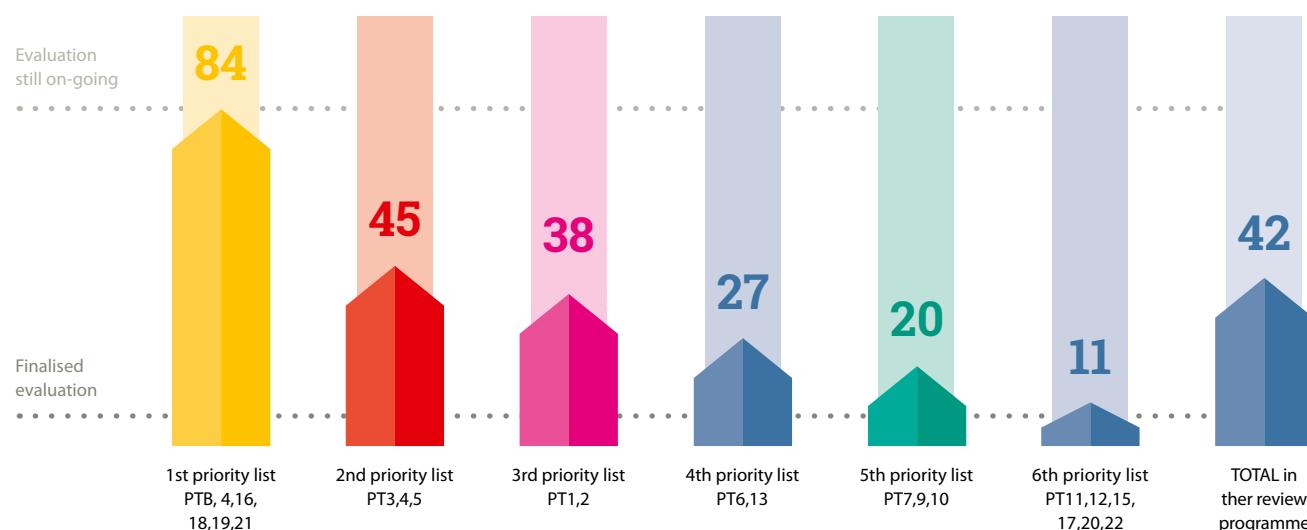
In 2021, CEPE contracted an independent law firm to conduct a legal analysis on the possibility of the EC to restrict the use of active substances in treated articles (like paint) at active substance level, which we shared with the relevant decision-makers at the end of the year. Moreover, CEPE reached out to an independent contractor to carry out a socio-economic impact assessment on the consequences of a reduced accessibility to biocide active substances as preservatives. The impact assessment looks at PT6 (in-can preservatives) and PT7 (film preservatives). Work began at the end of 2021 and the results will be available in Q1 2022, for further use with the Biocide Competent Authorities. We also know that the EC is in discussion with ECHA to give ECHA a mandate to give 'another chance to Science' (a thorough risk assessment is supposed to be made), in which case we will be further engaged in discussions with ECHA in 2022.

CEPE, together with the help of national associations and a network of other industry associations, will continue to engage with authorities in the coming months and years. In addition, CEPE is also producing a series of documents aimed at raising awareness amongst decision-makers and stakeholders on the importance of biocides.



Overall progress on the review programme of existing active substances per priority list

(in percentage)



Exposure Scenario and Risk Assessment Group (ESRAG)

The Issue

Under REACH the manufacturers and importers of chemical substances have the duty to register their substances and provide safe use information in their Safety Data Sheets (SDS). When carrying out a risk assessment they provide the outcome as a Chemical Safety Report in their extended SDS (eSDS). However, the information provided does not always fit with the needs of our industry. It is also sometimes difficult to understand how they came to a certain conclusion. In addition, some manufacturers could decide for commercial niche substances to make very basic assumptions and pass safety levels based on unrealistic conditions. It is the responsibility of downstream users like ourselves to check whether safe use can be demonstrated down the supply chain and to communicate safe use information. Due to the fact that there is very limited capacity to carry out risk assessment in our industry, ESRAG aims at helping companies comply by providing generic advice on safe use for a number of substances.

The EU regulatory and political environment

This activity is driven by REACH. This Regulation is in principle risk based i.e. the hazard is compared to the exposure to characterise a risk. However, over the years, we have observed a trend towards a more precautionary approach to substitute hazardous substances only based on hazard, even if there is no risk in use (see separate article on REACH on page 14 and on the EU Green Deal on page 8).

REACH already contains some hazard based elements that trigger regulatory activities. The most hazardous substances (carcinogen, muta-

gen, reprotoxicant category 1, PBT very persistent, very bioaccumulative (vPvB) substances and substances of equivalent concern) can become substances of very high concern (SVHC) and listed in the candidate list (at the time of writing the candidate list contains 209 substances) for further regulatory measures. These substances are typically avoided in our industry. However, it may happen that some are still used for some, difficult to substitute, applications such as industrial catalyst for polymers. It is important in this case to ensure that they are used safely.

Generally, the ESRAG selected substances do not fall under the above-mentioned most hazardous substances but they represent key substances that may have difficulties to pass safe use without adaptation of risk management measures.

What can we do and how?

The CEPE ESRAG group was originally established in support of the CEPE Paint Formula Stewardship initiative. Indeed, addressing hazardous substances based only on their classification was deemed to be too simple for our sector. Some substances may be adversely classified but still safe for use. Therefore, the group aims at assessing the risk of some substances of concern and identifying the risk management measures necessary to demonstrate safe use.

What have we achieved?

Since its inception, ESRAG has grown in maturity, from a situation where limited knowledge and resources were available to a motivated group aligning on processes and with growing knowledge. It is deemed

Name	Xylene (max 10% ethylbenzene)						
CAS	1330-20-7	A	Respiratory protection with 90% efficiency				
Molecular Weight	106,16	B	Respiratory protection with 95% efficiency				
Vapour pressure, Pa	821	C	Enhanced general ventilation				
Inhalative DNEL*, mg/m³	221	D	LEV and general good ventilation				
Dermal DNEL*, mg/kg bw/d	212	E	Gloves APF 5				
Concentration range	0-100%	F	Gloves APF 10				
SWED		< 1%			1 - 5%		
Scenario name		< 1h	1 - 4h	> 4h	< 1h	1 - 4h	> 4h
CEPE_SWED_PW_03a_v1, prof paint spray indoor Lev1 prep&cleaning	2,83E-02	8,48E-02	1,41E-01	5,66E-02	1,70E-01	2,83E-01	
CEPE_SWED_PW_03a_v1, prof paint spray indoor Lev1 handling&waste	2,83E-02	8,48E-02	1,41E-01	5,66E-02	1,70E-01	2,83E-01	
CEPE_SWED_PW_03a_v1, prof paint spray indoor Lev1 application	1,42E-01	4,26E-01	7,11E-01	2,84E-01	8,53E-01		A or C
CEPE_SWED_PW_03b_v1, prof paint spray indoor Lev2 prep&cleaning	2,83E-02	8,48E-02	1,41E-01	5,66E-02	1,70E-01	2,83E-01	
CEPE_SWED_PW_03b_v1, prof paint spray indoor Lev2 handling&waste	2,83E-02	8,48E-02	1,41E-01	5,66E-02	1,70E-01	2,83E-01	
CEPE_SWED_PW_03b_v1, prof paint spray indoor Lev2 application	1,60E-02	4,81E-02	8,02E-02	3,21E-02	9,62E-02	1,60E-01	

an important group for the reasons explained above i.e. that we want to continue being able to carry out risk assessments to prove safe use of substances and to be able to use them in the future. The group is now able to run a first Tier assessment for industrial and professional uses based on the CEPE SWEDs (Specific Worker Exposure Determinants – CEPE determined the most relevant exposure determinants in the industry using our products such as working duration, typical ventilation systems and other risk mitigation measures) developed in the past by another CEPE group, ESCG, and fine tune the most appropriate risk management measures. It started to also work on ConsExpo for consumer applications, as this exposure software is the most established one for that category of the population.

Here is an extract of the outcome for one substance available to our membership:

From time to time we observe that safe use cannot be demonstrated under certain conditions of use of a substance. In such cases, additional risk management measures have to be applied. In the example above, safe use can be demonstrated for the substance used under PROC 11 (professional paint spraying indoor) but for an activity above 1 hour, a respiratory protection is needed, from 5% concentration on in the mixture.

There are instances where safe use cannot be demonstrated for certain concentrations and/or durations. It is the responsibility of companies to take this into account and either:

- Refine the assessment using other models, where available;
- And/or refine the assessment using company knowledge on uses/exposures;
- Inform ECHA accordingly.

What are the remaining steps?

This group is expected to have a long-term future owing to the high number of substances and the different risk assessment methodologies available. The next immediate steps will be to continue to publish the outcome for the next substances and work on refinements of assessment using additional models. Also, due to the upcoming new classes for Endocrine Disruption (ED) under CLP, there will be additional attention on those ED substances used in consumer products. The group is also working on the possible impact of a Mixture Assessment Factor (MAF) – another safety factor – that some authorities would like to add to cover the uncertainty of unintentional combined exposure to



Source: Bojan - stock.adobe.com

chemicals. This should help the CEPE Green Deal Chemicals Strategy for Sustainability ad hoc group to advocate against the MAF (see also the article on the EU Green Deal on page 8).

To date, risk assessment for the environment has not been tackled. This will be an additional task for the group with increased priority if safe use cannot be demonstrated using our default SpERCs (Specific Environmental Exposure Release Categories). A discussion on a possible update of the SpERCs has started due to the fact that SpERCs have never been determined based on real measurements in our industry and have been inherited from the past and are potentially outdated. ☺



JOIN

CEPE "Regulatory Quarterly Update Meetings"

In this section of our annual report, we address all the priorities of CEPE. However to enable members to be up to date on all the developments, CEPE has set up "Regulatory Quarterly Update Meetings". These meetings take place 4 times a year. They are designed to provide members with the latest political and regulatory developments at EU level, as well as the priorities of CEPE. They are open to all CEPE members.

5 - 25%			> 25%		
< 1h	1 - 4h	> 4h	< 1h	1 - 4h	> 4h
1,70E-01	5,09E-01	8,48E-01	2,83E-01	8,48E-01	A or C
1,70E-01	5,09E-01	8,48E-01	2,83E-01	8,48E-01	A or C
8,53E-01	A	A	A or C	A	A
1,70E-01	5,09E-01	8,48E-01	2,83E-01	8,48E-01	A or C
1,70E-01	5,09E-01	8,48E-01	2,83E-01	8,48E-01	A or C
9,62E-02	2,89E-01	4,81E-01	1,60E-01	4,81E-01	8,02E-01

Can Coatings

Can Coatings in direct contact with food are designed to be safe and rigorously tested. They fall under the scope of the EU Framework Regulation 1935/2004 on materials and articles intended to come into contact with food.

The Issue

There is growing concern amongst the EU population about all aspects of human-made chemistry and a lack of trust that industry is doing a proper job in placing on the market safe products. This is also true for can coatings which are in direct contact with food. The European Parliament (EP) has heard the concern and has put pressure on the European Commission (EC) to act. The latter has commissioned a study to understand if the current regulatory framework is fit for purpose. The final report was made available in July 2020 and concludes that “the overall performance of the legislative framework is not completely satisfactory due to insufficient availability of resources and important gaps in implementation and enforcement”.

The EU regulatory and political environment

Coatings for rigid metal packaging is essential to preserve food in healthy conditions for long periods. The coating prevents food contact with the metal and thereby ensures the quality of nutrition. Food contact materials are regulated under the Regulation (EC) No 1935/2004 on materials and articles intended to come into contact with food. This regulation re-

quires that materials and articles in contact with food be made according to Good Manufacturing Practices so that, under normal and foreseeable conditions of use, they do not transfer their constituents to food in quantities that could endanger human health. The EC may adopt specific measures such as a list of authorised substances, which it did for plastic materials, through the European Food Safety Agency (EFSA).

However, the establishment of such lists requires significant resources which explains why they do not specifically exist for other materials such as coatings, glass, paper, ceramic, cutlery, rubber, adhesives, cork.

At the time, CEPE developed a Code of Practice to guide coating manufacturers and their customers to comply with the Regulation (EC) No 1935/2004. One of the sections of the guide identifies the substances that may be used and those that should not be used. Specific reference is made to the EU positive list for plastics but also to other acceptable lists established by various bodies.

The regulation also requires that traceability is ensured at all the stages of the production process in order to facilitate control. Procedures and documents are in place throughout the supply chain, however, due to its complexity it is difficult for the outside world to understand and trust what is in place.

The safety of materials in contact with food mostly lies with industry, which makes it open to criticism. The EP and EC are also calling for more scrutiny. For instance, EFSA who is responsible to assess pesticides was put under significant pressure and its neutrality and independence was challenged following the examination of glyphosate. Increasingly, science is subject to controversy and several dossiers are treated on the basis of a political agenda.

What can we do and how?

The CEPE Can Coatings group is made up of a limited number of companies which however represent the bulk of the market. The experts participating in this group have, for the most part, been working in this area for many years. A close working relationship is also established with Metal Packaging Europe, who represents our members' customers

« **The safety of materials in contact with food mostly lies with industry, which makes it open to criticism. »**



and CEFIC, who represents our members' suppliers and Food Drinks Europe (FDE) who represents the end users. Good communication along the supply chain is essential and has been in place since many years.

A cross sector group was also set up for industry sectors, who produce or use materials which come in contact with food (such as paper and board, kitchen appliances, glass), in order to adopt uniform principles to ensure compliance with legislation on food contact materials.

Today, risk assessment and risk management principles have been agreed. Each sector has to identify exactly how safety is ensured throughout its supply chains. Trust and transparency will be improved by the development of tools designed to help enforcement authorities. This work aims at helping the outside world have more insight in what the industry is doing and thereby reduce concern about leaving safety in the hands of the industry.

What have we achieved?

The agreement by many industry sectors of uniform principles for risk management and risk assessment is a success. Within our joint industry (the rigid metal packaging supply chain) a dedicated group (TSC-35) was established and has developed, over three years, guidance to demonstrate safety in food contact material, templates for Document of Compliance (DoC) and are discussing the concept of a database to facilitate the work of enforcement authorities (digital traceability). This work is essential to be able to demonstrate to, ultimately, the outside world that the industry is acting responsibly and thereby avoid unnecessary new legislation.

Another group (TSC-32) has been working, for the last 3 years, on a dedicated toxicological project on a specific substance (a Non Intentionally

Added Substance aka NIAS) and has progressed as planned despite the Covid situation. The €700,000 project, financed by three associations and six member companies of CEPE, is now coming to an end. A scientific publication is foreseen in 2022 showing the clean toxicological profile of that impurity. CEPE has taken the Technical and Financial Secretariat of the project.

The EC issued at the end of 2020 an Inception Impact Assessment, which we commented on together with our customers of the metal packaging industry.

During 2021, our industry was to present its views during several workshop/conferences. DG Sante of the EC has also regularly explained their current thinking – focus on what consumers can be exposed to rather than establishing positive lists of acceptable substances and their migration limits for all non-harmonized materials – and in reflecting internally on how best to amend the food contact material legislation to also take into account the Chemical Strategy for Sustainability (CSS) push for a more hazard based approach. The CSS topic is discussed in a dedicated TSC-36 group involving our supply chain.

What are the remaining steps?

As stated above the priority is to ensure a high level of safety and to prevent disproportionate legislation. There is still much to come. We will have to see how the EC is going to react following the publication of the recent study. The EC has announced in its Farm to Fork Strategy that it will present a proposal for a revision of the EU legislation on Food Contact Materials in Q4 2022. This has now been postponed to 2023. Given the current EU political environment and the increasing concerns as regards endocrine disruptors and non-intentionally added substances etc. developments are likely. CEPE will continue to support the necessary work of the Can Coatings group.



Ref. Ares(2020)7731375 - 18/12/2020

Inception impact assessment

Inception Impact Assessments aim to inform citizens and stakeholders about the Commission's plans in order to allow them to provide feedback on the intended initiative and to participate effectively in future consultation activities. Citizens and stakeholders are in particular invited to provide views on the Commission's understanding of the problem and possible solutions and to make available any relevant information that they may have, including on possible impacts of the different options.

Title of the initiative	Revision of EU rules on food contact materials (FCMs)
Lead DG (Responsible unit)	DG SANTE E2
Likely type of initiative	To be determined
Indicative planning	Q4 2022
Additional information	Evaluation of food contact materials (FCM) legislation



Decorative Coatings

By volume, the Decorative Coatings segment is the largest within the entire paints and coatings industry. It is still facing the same challenges as in the past, such as the EU Ecolabel, PEF, biocides just to name a few.

The Issue

The Decorative Coatings' current priorities are similar to those of previous years namely:

1. The EU Ecolabel and PEF

As the number of substances classified increases, the number of derogation requests in the EU Ecolabel and other national labels is also on the rise. This is because the criteria excludes several hazard categories of some essential substances, for example: biocides, which puts the future of the system at risk. In parallel, the Deco Sector Group has invested a lot of time in the design of a Product Environmental Footprint (PEF) system that eliminates such qualitative criteria as in the EU Ecolabel and takes into account the whole life cycle of the paint product and thereby offers a more holistic approach than other initiatives.

2. Biocides

Biocide in-can preservatives classified skin sensitizers may not be allowed in consumer paints in the future, hence threatening the future

possibility to sell well preserved paints to this user category. Biocide dry-film preservatives are needed for exterior coatings (and indoor in humid rooms like bathrooms) and are also under threat.

3. Sell through period for re-labelling

One of the consequences of a reclassification of a substance is the issue of sell-through period. Indeed, once a substance is officially re-classified, the normal period available for re-labelling is 18 months. Yet, 18 months is too short for slow moving products in the supply chain like paint and artists' colours products if the interpretation is that all products at any stage of the supply chain have to be re-labelled (not only the first placing on the market).

In addition, the following new priorities have arisen i.e.

4. The Chemicals Strategy for Sustainability (CSS)

The developments proposed in the Chemicals Strategy for Sustainability (CSS) (see separate article on CSS on page 11)) could result in generic bans of substances in consumer and professional products.



« We are of the opinion the PEF should not be integrated into the Ecolabel as the two systems are incompatible. »

Regulation (EC) N° 1272/2008 on CLP. The starting point is often a new adverse classification given to a substance. Indeed, CLP is central and has a direct impact on all other pieces of legislation. This hazard-based system triggers consequences that are, unfortunately, not based on the safety of use but on perception.

What can we do and how?

1. Ecolabel and PEF

CEPE works closely with the EU Eco-labelling Board (EUEB) to explain the difficulties of our sector and, when necessary, to request derogations. The EUEB is managed by the European Commission (EC) and is made up of representatives of Member States.

For many years now, CEPE has invested in a PEF system for paints. We now have a system that we may want to pro-actively promote, should the EC not pursue it. We are of the opinion the PEF should not be integrated into the Ecolabel as the two systems are incompatible. Indeed, the EU Ecolabel focuses more on the individual substances, while the PEF covers the whole life cycle of products.

2. Biocides

For the overview on biocide in-can preservatives and consumer paints, see separate article on biocides on page 22.

It should be noted that the important ongoing advocacy activities for in-can preservatives should benefit also the dry-film preservatives. The latter are in an even more difficult situation due to the fact that there are very few remaining algaecides and fungicides available to protect the applied film during many years.

CEPE participates in public consultations to support these substances. Also, CEPE has embarked, some years ago, in the study of the leaching behaviour of dry-film preservative substances in different outdoor coating categories. The objective is not to generate leaching figures to be used in risk assessment dossiers, but to identify the outdoor coatings where substances leach the most in order to identify worst case coatings and facilitate the future authorisation of the biocidal products by the suppliers, hence helping our industry to have sufficient products to offer in the long term.

3. Sell-through period for re-labelling

When a new substance classification is published in an Adaptation to Technical Progress (ATP) to CLP, industry is given, normally, 18 months to amend the label. While 18 months is sufficient for products first placed on the market, it is not the case for several products of our sector that are already in the supply chain. Therefore, CEPE needs to approach the EC while National Associations need to approach their Member States to try to agree on an interpretation as to which products need to be re-labelled

5. Voluntary initiatives of the Deco sector

The Deco groups are keen to identify pro-active initiatives in the field of sustainability.

6. Extended Producer Responsibility (EPR)

The Circular Economy Action Plan supports waste prevention and circularity. Among the proposed initiatives is the enhanced implementation of the recently adopted requirements (Directive (EU) 2018/851 on waste) for extended producer responsibility schemes (EPR). The European Commission (EC) considers EPR schemes as a suitable instrument for holding manufacturers accountable for waste from their products as it corresponds with the "polluter pays principle" (which shall be updated by Q2 2023). Therefore Member States have until 31 of December 2024 to establish EPR schemes for all packaging (Directive (EU) 2018/852), though, different EPR schemes exist for the packaging materials. It is important to identify if paint as a product can be targeted under the EPR.

The EU regulatory and political environment

The above-mentioned issues are linked to several pieces of legislation: Regulation (EC) N° 66/2010 on the EU Ecolabel, Regulation (EU) N° 528/2012 concerning the making available on the market and use of biocidal products, Regulation (EC) N° 1907/2006 concerning REACH,

and at what stage of the supply chain. CEPE is of the opinion that the definition of "placing on the market" under CLP should be aligned with the definition used in other regulations (biocide, detergent, cosmetic) where the "placing on the market" means "the first making available".

4. CSS

The Deco sector ought to be well represented in the EU CEPE Green Deal CSS ad-hoc group.

5. EPR

CEPE has established an EPR working group under the CEPE EU Green Deal Task Force to assess the current EPR situation in different Member States and the technical feasibility of EPR schemes for both paint and paint packaging.

What have we achieved?

1. Ecolabel and PEF

In 2021, we obtained two derogations: one for TiO_2 and another for TMP. Furthermore, CEPE was invited to address the EUEB to discuss the issue with the biocides. CEPE highlighted its concerns on compromising product quality arising from the Ecolabel's criteria for eliminating biocides. The EU Ecolabel replicates the REACH and CLP regulations making a duplicate gateway for those substances which have been assessed to be safe under the most stringent regulation in the world for example the EU BPR. Alternatively, the Nordic Swan has proposed to the EUEB to allow the use of more isothiazolinones as the options for biocides are reducing. This is currently under investigation.

2. Biocides in-can preservatives

As explained in the separate article on biocides, for biocide in-can preservatives we have achieved a clear momentum whereby the EC and Member States now understand the importance of these substances and the need to find a solution. The key in-can preservative BIT should also have passed most hurdles.

Building on the success of biocide in-can preservatives, CEPE has also increased the attention of authorities on our forthcoming issue. The laboratory testing of the leaching project and the report of the semi-field leaching part are now finalised. We presented the latter to the ECHA Biocide Product Committee Working Group Environment early 2021 that welcomed this initiative of CEPE. This was followed by some constructive feedback and further questions to which we responded, together with the biocide suppliers. The future of dry-film preservation remains quite uncertain due to the ongoing re-classification of the remaining substances. Further work is expected when derogations under the BPR exclusion criteria will be needed.

3. Sell-through period for re-labelling

The Deco group issued a guidance early 2020. This topic was also addressed during the public consultation on the amendment of CLP under the CSS (see separate article on page 11). Data collection on quantified costs and waste generation is still ongoing.

4. The impact of the CSS

The Chairman of the Deco Technical Committee is very active in the CEPE EU Green Deal CSS ad hoc group given the threat that the CSS poses to consumer and professional products (see separate article on page 11).

5. Voluntary initiatives of the Deco sector

A small group was set up to investigate possibilities for voluntary initiatives and to make some concrete proposals to the Deco Sector Group. Meanwhile, activities around the issues of the disposal of paint brushes and biocides have begun.

6. EPR

Initial discussions in the EPR group paved the way to identifying two key indicators when it comes to paint takeback or recycling of paints. The first is to identify the different paint streams in municipality waste that can be a key indicator in order to identify and assess the untapped potential offered by leftover paints. The second is to identify the existing Producer Responsibility Organizations (PROs) that can fulfil the EPR obligation for paint companies in the different Member States.

What are the remaining steps?

1. EU Ecolabel and PEF

CEPE will follow-up on the issue of biocides. Also, further discussions will take place in the Deco groups with regard to the future integration of the EU Ecolabel and PEF wanted by the EC.

2. Biocides in-can preservatives

Biocides in-can preservatives is a critical dossier that is in the hands of the CEPE Biocide User TF and to which Deco members actively contribute. Regarding biocide dry-film preservatives, further follow-up is planned on the outcome of the project with relevant authorities at the ECHA BPC WG Environment.

3. Sell-through period for re-labelling

The Deco group will continue to support the work under the revision of CLP to correct the interpretation of 'the first placing on the market'.

4. CSS Development

This is a critical area where the Deco group will continue to actively support the CSS group.

5. Voluntary initiatives of the Deco sector

Further activities around the issues of the disposal of paint brushes and biocides will be carried out and new initiatives will be sought.

6. EPR

The group is currently focusing on collecting the data from municipalities of different Member States to identify the leftover paints that ends up for incineration or landfilling and discusses the technical feasibility of any existing paint recycling or reuse scheme.

« CEPE highlighted its concerns on compromising product quality arising from the Ecolabel's criteria for eliminating biocides. »

Marine Coatings

Biocidal anti-fouling paints are one of the pressing issues among the prime activities for the Working Group in this sector. Some national biocide authorities are very critical with the continued use of biocides, especially in non-commercial use.

The Issue

The activities of CEPE in the field of Marine Coatings lies primarily in issues relating to biocidal anti-fouling coatings, REACH and microplastics.

Some national biocide authorities are very critical with the continued use of biocidal anti-fouling paints, especially on leisure craft. Their agenda – aligned with the general agenda on biocides (see separate article on page 22) – is to reduce the use of biocides as much as possible or to eliminate all non-essential uses of them. In the case of leisure craft the situation reached a point requiring dedicated actions.

The EU regulatory and political environment

For the general regulatory and political environment, see separate article on biocides on page 22.

Members have now applied to obtain authorisation for most of their biocidal anti-fouling paints under the EU Biocidal Product Regulation (BPR). After the approval at EU level of a biocides used in products, the formulations which contain them (the biocidal products) also have to be authorised, after they have been reviewed following an approach set out in guidance issued by ECHA. The time between the submission of the dossiers

and the feedback from the relevant national authorities can be up to three years or more. In the meantime, additional discussions with Member States are taking place with regard to the ECHA guidance for performing an environmental risk assessment for anti-fouling paints under the BPR.

CEPE is following these discussions closely in the EU committees and are intervening where possible to ensure guidance on how to evaluate biocidal anti-fouling products is driven by good science and to ensure changes in guidance are harmonised across Member States and do not result in legal uncertainty on the investment made to apply for product registration. The dossier cost and the fees required by Member States can easily amount to €500.000 for one paint.

What can we do and how?

The Anti-Fouling Working Group (AFWG) of CEPE has been active for a long time on BPR issues and has often engaged with ECHA/EC committees and Member States on developments in EU biocides legislation. It has helped decision-makers understand anti-fouling paints, refine risk assessments and has advocated on the benefits of these paints that come from keeping hulls free of fouling such as fuel savings, reductions in air pollution from ships and prevention of translocation of non-native species from one place to another where they may become invasive. The group is now deeply involved in the Coordination Group of the European Commission and Member States dealing with product authorisation.

The CEPE Biocide User TF is in charge of carrying out the general advocacy activities on biocides. Currently, it focuses on biocidal anti-fouling paints. One of its most recent actions was the development of the paper "Sustainable Use of Anti-Fouling Paints".

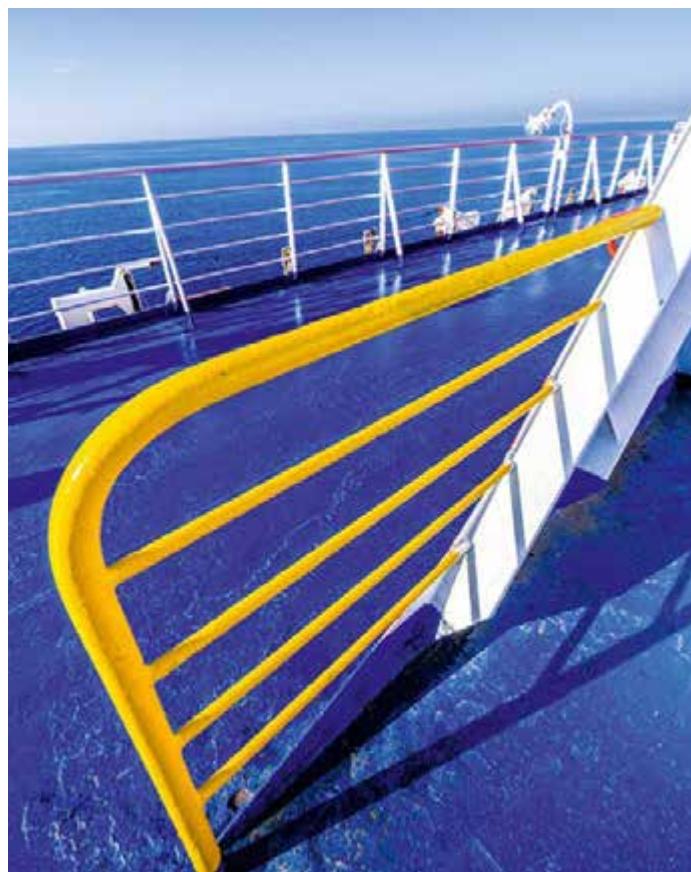
What have we achieved?

The AFWG set up a "fast response group" to address issues as they pop up in the ECHA/EC committees and to facilitate discussions within the AFWG.

There has also been an agreement to continue supporting the MAMPEC model, the Marine Antifoulant Model which predicts Environmental Concentrations of biocide in the marine environment for an additional five years. Originally developed in a joint EC/CEPE project MAMPEC is now used worldwide by regulators evaluating anti-fouling paints. MAMPEC is also being used for exposure assessment in freshwater systems and discharges of chemicals in ballast water.

What are the remaining steps?

CEPE will continue to advocate for good science to be used as ECHA guidance is developed and when Member States evaluate biocidal anti-fouling paints. We will also emphasise the importance of having the right products to keep ship/boat hulls clean of biofouling to prevent translocation of invasive aquatic species, leading to disruption of biodiversity.



Protective Coatings

Source: Евгений Фисенко - stock.adobe.com



The Issue

The issues the Protective Coatings Sector Group follows are addressed in the different sections of this annual report. This section will focus on the activities of the Intumescent Coatings Technical Committee (ICTC).

Construction Products Regulation

CEPE has long advocated for a mandatory CE marking of reactive intumescent coatings for the fire protection of structural steel. Unfortunately, little progress can be reported on this issue.

Progress has also been slow as regards the Construction Product Regulation (CPR). Indeed, since the public consultation on the evaluation and possible revision of the CPR in June 2020, there has been little progress observed, causing a delay in the issuing of the standardisation request. The delay is (partially) due to legal issues stemming from the European Court of Justice (ECJ) ruling on the James Elliott case. The ruling from the case that product standards have a legal basis has major ramifications from a product standard devel-

opment point of view. This has resulted in issues with the updating of existing harmonised EN product standards, which the European Commission (EC) is prioritising over the issuing of new standardisation requests. It is unlikely that a standardisation request will be put forward until the CPR review is completed and existing mandates are reviewed. The proposal for the revision of the CPR is expected to be integrated in the Sustainable Product Initiative which is scheduled for Q1 of 2022.

Environmental Footprint

The topic of sustainability and in particular environmental footprints is starting to gain interest in several European countries. There are discussions about CO₂ of construction products raising the question if there is a need to standardise at European level. This topic will be analysed in more detail in the future.

Publications

In order to drive improvements in clarity of product certification, CEPE members are considering setting up a CEPE certification log, which will list details of members certification. This would be promoted as an exemplar of best practice in certification.

The group has also been looking at the product standard documents. The intention is to revise the CEPE guide on the quality control of intumescent coatings, which was first produced in 2008. This document is the forerunner to EN16623 product standard, and the revised CEPE document will be used to help draft the next review of EN16623, which we hope will come out once the standardisation request has been published.

« Sustainability and in particular environmental footprints is starting to gain interest in several European countries. »

Artists' Colours

The Issue

While EuACA members have very similar interests as other CEPE members, the specificity of artists' colours products requires some special attention.

The EU regulatory and political environment

The new classification and labelling requirements for TiO₂ which entered into force in October 2021 (see article on page 18) also impacts artist colour products falling under the scope of Directive 2009/48 on the safety of toys (TSD), which prohibits, by default, the presence of Cat. 2 CMR substances, such as TiO₂. The TSD has also revised the migration limits for aluminium and formaldehyde which apply since 20 May 2021. The limits apply to toys intended for use by children under 36 months of age or toys intended to be placed in the mouth.

Standards are also an important component of the TSD. Therefore, the TC closely follows the developments of standard EN-71 (safety requirements for toys), in particular part 3 (chemical elements) and part 7 (finger paints), and participates in CEN/TC/52/WG 5 (safety of toys – chemical properties).

« The proposal with a more generic approach to chemicals could result in more bans on chemicals and the establishment of a positive list. »

What have we achieved?

Following the publication of the new classification and labelling requirements for TiO₂, CEPE is assisting Toys Industry Europe (TIE) with all the necessary technical information to support their request for a derogation for the use of TiO₂ in toys. A decision is expected by the European Commission (EC) in 2022. Meanwhile, the TC is drafting a statement for companies to use with their customers. It is hoping to have the statement co-signed by TIE.

Regarding standards, the ongoing blocking of the delivery of standardisation requests is causing further delays to the revision and updates of several standards. The standardisation organisations are leading the discussions with the EC. There are also increasing problems with test results from accredited laboratories. To illustrate the extent of the problem, the TC is collecting examples of deviations from companies with a view to drafting a statement.

Next steps

The TC will continue to work on all the issues of relevance to the sector of Artists' Colours. It will provide input to the public consultation

on the TSD, which was originally scheduled for Q4 2021 and which has been postponed. This consultation paves the way for a proposal for a revision of the directive in Q4 2022. Besides calling for the directive to be changed into a regulation, the proposal will propose a more generic approach to chemicals which could result in more bans on chemicals and the establishment of a positive list.

As in 2019, the SG will conduct a market survey to identify and monitor the current and future trends in the art industry when it comes to orientation and purchase behaviour of professional consumers, consumers, institutions and distributors.



Source: BillionPhotos.com - stock.adobe.com

EuPIA Annual Report 2021

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.



Martin Kanert
Executive Manager
EuPIA



Market Statistics 2020

EuPIA publishes market statistics on an annual basis. The data can be accessed via the EuPIA website at eupia.org, About Us - 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, 2019.

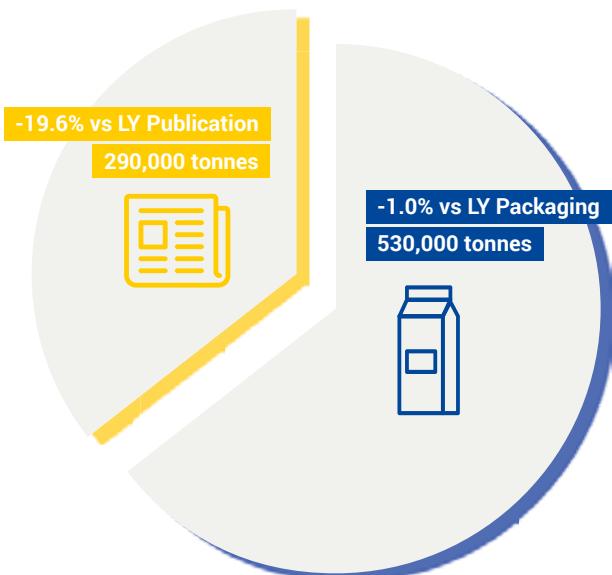
It is estimated that the sample group accounts for about 90% of total industry sales in Europe.

Key sectors shown

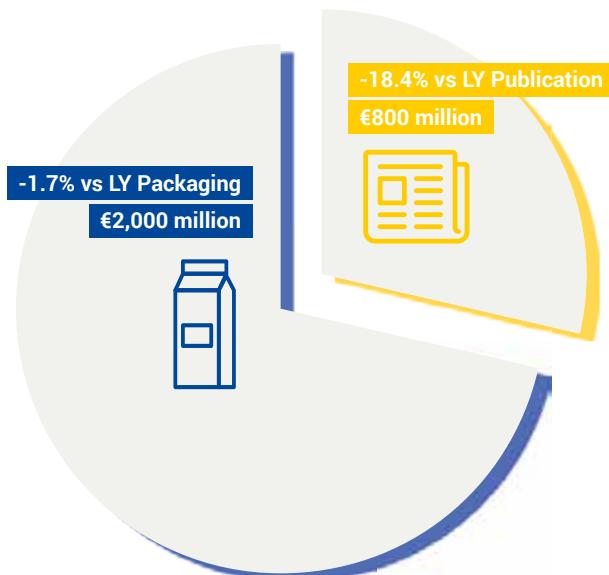
Publication Inks comprise web offset inks (coldset and heatset), sheetfed offset inks, publication gravure inks and related overprint varnishes. Examples of publications are newspapers, magazines, books and commercial prints such as brochures and flyers.

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).

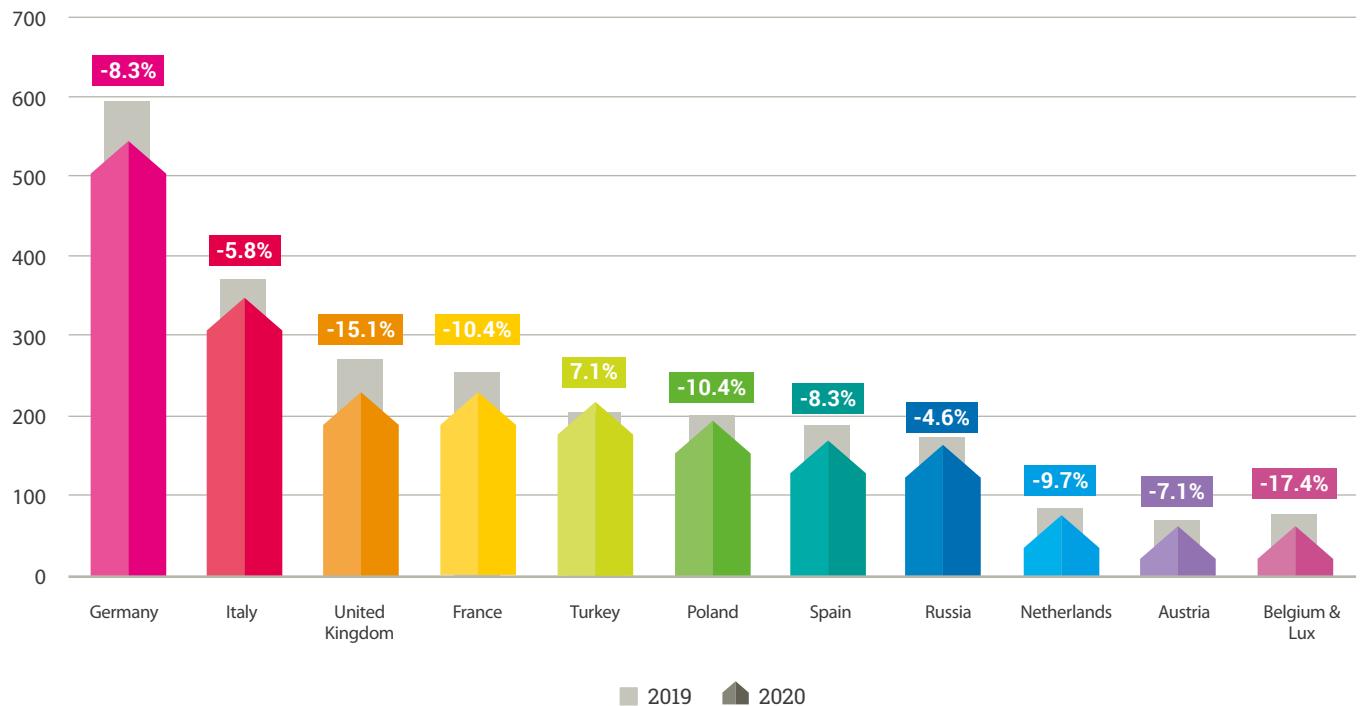
Sales volume for 2020



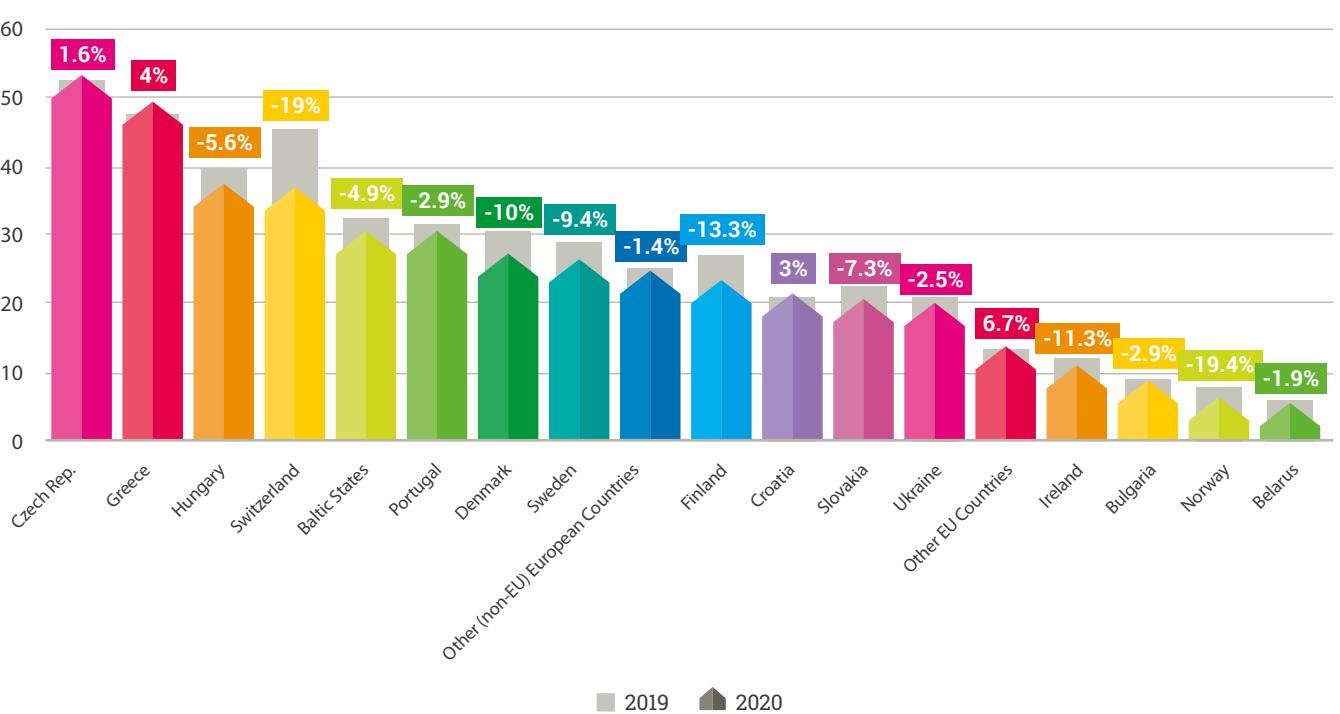
Sales value for 2020



Sales Value by country 2019 to 2020 in EUR millions



Sales Value by country 2018 to 2019 in EUR millions





Continued severe supply chain problems in 2021 and beyond

Supply chain strains are expected to continue throughout 2022. Even as some of these constraints ease and the recovery moves forward, there remains global uncertainty regarding a resurgence of the coronavirus, erratic consumer purchasing behaviours and potential trade barriers.

It is an aggregation of factors, mostly triggered by the COVID-19 crisis, which severely impact the overall raw material supply chain. Whilst EuPIA members continue to work tenaciously to minimise risks to customers, they highlight the economic pressures impacting the printing inks market below.

Global Supply Chains

The global economy is experiencing what most economists and supply chain experts say, is the most unprecedented supply chain volatility in recent memory. Demand for products continues to surpass supply and, as a result, global raw material and freight availability has been heavily impacted.

This situation, driven by a global pandemic which continues to cause manufacturing shutdowns in many countries, was exacerbated, firstly by a homebound consumer base purchasing more items than usual and outside of peak seasons and, secondly, by the revival of the economy in all regions of the world, which led to a surge in demand. Add to that a crippled supply chain, reduced production in China due to the Chinese Energy Reduction Program, and a shortage of key raw materials.

For the printing ink and coatings producer – transportation and raw material shortages are causing a multitude of challenges. Feeding into this 'perfect storm' are numerous factors related to raw materials and freight transportation.

Raw Materials

Supply and demand imbalances for many critical raw materials used in the production of printing inks – vegetable oils and their derivatives, petrochemicals, pigments and Titanium Dioxide (TiO_2) – are causing significant disruption to EuPIA member companies.

Materials in all of these categories, to a differing extent, are seeing increased demand while supply continues to be constrained. Moreover, the demand volatility has caused increased complexity in vendors' ability to forecast and plan shipments.

When looking at each material group, unique contributing drivers can be spotted:

- Pigments, including TiO_2 , have surged recently due to increased demand and factory shutdowns in China caused by the Chinese Energy Reduction Program. TiO_2 has seen increased demand for architectural paints and wind turbine production.
- The supply of organic vegetable oils has been affected by unfavourable weather conditions in the U.S. and Latin America – at a time when Chinese imports and consumption of this raw material category has increased.
- Petrochemicals – UV, polyurethane & acrylic resins and solvents – have been rising in cost since early 2020 with some of these materials having demand increases outside of normal levels.

The market has witnessed a multitude of force majeure events which have further constricted supply and exacerbated an already unstable situation. As costs continue to increase and supply continues to tighten, printing ink and coating producers are increasingly affected by immense competition for materials and resources.

Packaging, Freight & Transportation

Packaging Materials

The industry continues to face shortages in steel for drums and High-Density Polyethylene feedstocks used for pails and jugs. Increased demand in online commerce is driving a tight supply of corrugated boxes and inserts. Material allocation, production delays, feedstock, Force Majeures, and labour shortages all contribute to packaging increases. Extraordinary demand continues to outweigh supply.

Air and ocean freight capacity limits

The pandemic has been a catalyst for abnormal consumer purchase activity (both during and after shutdowns), causing unusual demand within multiple industries and straining both air and sea freight capacity. Jet fuel costs have increased along with shipping container costs (in some routes from Asia/Pacific to Europe and/or the United States, container costs have increased 8-10x the norm). Unusual ocean freight schedules have emerged and freight carriers are stranded or challenged to find ports to offload containers. Ultimately, increased demand and ill prepared logistics have caused a critical shortage of freight capacity.

Congestion at ports

Due to the coronavirus pandemic, strict health and safety measures remain in place at global ports which is affecting port capacity and throughput. The majority of ocean freight liners are missing their scheduled arrival times and ships, which do not arrive on time, experience delays as they wait for new slots to open up. This has contributed to escalating shipping costs since the autumn of 2020.

Truck driver shortages

Another contributing factor is driven by a critical shortage of truck drivers in many regions but perhaps most pronounced across Europe. Interestingly, this shortage is not new and has been a concern for at least 15 years. It is simply been heightened due to the global pandemic.

The pandemic has disrupted international trade, driving up the cost of shipping goods and adding a fresh challenge to global economic recovery.

EuPIA Annual Conference

As another consequence of the pandemic, it was not possible to conduct the EuPIA Annual Conference as a physical meeting; it was held virtually instead. However, this did not detract from the attractiveness of the conference: the number of participants was even higher than in previous years.

The EuPIA Exclusion Policy for Printing Inks and Related Products

For the last 25 years, the EuPIA Exclusion Policy for Printing Inks and Related Products, and its predecessor, the EuPIA Exclusion List has had a tremendous value for the printing ink industry, the printers/convertors, brand owners and consumers as it contributes to the safety of inks used across Europe. In short, the policy is about excluding hazardous chemical substances from the manufacture of printing inks which have a serious

adverse effect on human health. The EuPIA Exclusion Policy is THE product stewardship initiative of the ink industry in Europe and as such, is well respected across the market.

Members' commitments to the Exclusion Policy have always been voluntary. In the past, they were "collectively" confirmed by the National Associations on behalf of their printing ink members. Since the publication of the 4th edition of the Exclusion Policy in March 2021, member companies confirm their commitments individually. A list of EuPIA members that commit to the Exclusion Policy is available on the EuPIA website.

Raw materials which, by reason of re-classification, fall under the exclusion criteria, must be substituted as soon as practicable. If, however, substitution cannot be completed in the short term for technical reasons, then a temporary exemption from substitution can be granted/can be made use of. The fourth edition of the Exclusion Policy introduces clear rules under which circumstances the time limited exemptions can be applied.

An Exclusion Policy Advisory Panel (EPAP) will advise the EuPIA secretariat in case where expert judgment is deemed necessary to understand the appropriateness of a temporary exemption notification. Moreover, the EPAP can be called by a EuPIA member company if the EuPIA Technical Committee had refused an application for exemption (for group A substances).

Member companies having committed to the Exclusion Policy have established Designated Company Focal Points through which the information flow between the EuPIA secretariat and the member company will be organised.

Printing Inks and Varnishes for Food Contact Materials

Printed food contact materials (FCMs), such as food packaging, are regulated in principle at EU level, however, specific provisions are lacking.



Therefore, EuPIA has over the years developed comprehensive concepts, which have been successfully implemented and are constantly adapted and improved. They support the converters and distributors of food contact materials in their compliance work and set standards in many areas such as migration testing or risk assessment. In 2021, EuPIA issued the 5th amendment of the “EuPIA Guidance for Risk Assessment of Non-Intentionally Added Substances (NIAS) and Non-Evaluated or Non-Listed Substances (NLS) in printing inks for food contact”, which contains more details on the exclusion of genotoxic properties with QSAR tools and experimental methods. Furthermore, the 3rd revision of the EuPIA “Guidance on Migration Test Methods for the evaluation of substances in printing inks and varnishes for food contact materials” was published, which features a completely revised and updated section on analytical identification and quantification. The EuPIA Analytical Experts Working Group is also conducting a research project to define improved testing methods for the evaluation of the migration of components of packaging inks, by comparing accelerated migration testing with real food migration. The study was delayed due to the Covid situation but is expected to be finalised beginning of 2022.

Notwithstanding all these efforts to further enhance the safety of printed food contact materials through industry initiatives, EuPIA together with the entire food packaging chain in Europe has long been advocating a harmonised European regulation for printed food contact materials. During the notification of the German “Printing Ink Ordinance”, the European Commission (EC) had announced in 2016 that indeed it intended to develop and adopt such a piece of legislation. However, while working on it, the EC identified potential fundamental deficiencies in the existing legal framework, which should first be examined in the context of a broad-based evaluation.

EU Commission started evaluating the legal framework

As the framework legislation is over 40 years old (originally Directive 76/893/EEC, now Regulation 1935/2004), has never been systematically evaluated and does not take “new” developments such as REACH into account, a thorough evaluation makes sense. The EC’s processes foresee a so-called inception impact assessment, including a public consultation on the policy options, followed by the actual impact assessment, in which the policy options are assessed in detail. Afterwards the results will be published and the new legislation will be drafted. In December 2020, the public consultation on the inception impact assessment started roughly half a year later than originally announced. The EC identifies eight “fundamental issues” with the current legal framework, which need to be addressed. It is proposed to shift the focus onto the final article and to prioritise the assessment and management of substances via a tiered approach. EuPIA carefully evaluated the policy options and provided detailed feedback. The feedback was also coordinated with the whole food packaging chain and an aligned position of the Packaging Ink Joint Industry Task Force (PIJITF) was issued.

The proposal of the EC contains some chances for the ink industry, but also several risks: the EC acknowledges that a regulatory approach purely based on positive lists is not a practicable way forward and consequently sees the possibility of industry self-assessments as one part of its tiered approach. Although the details are yet undefined, with these ideas the EC seems to recognise the work done by EuPIA and the whole food packaging chain, who have long advocated to adequately reflect



Source: New Africa - stock.adobe.com

the current practice of industry self-assessments in the legal framework. On the other hand, some of the more hazard-based approaches envisaged in the EU’s Chemical Strategy for Sustainability are also reflected in this proposal, which marks a paradigm shift in the EU’s regulatory approach for food contact materials, away from the current purely risk-based approach.

The EC sees two basic options to move forward: either to work with the current regulatory framework (with Regulation (EC) No 1935/2004 as a cornerstone) or to develop a new regulatory framework, replacing the current Regulation. EuPIA as well as the PIJITF see the framework as being in principle fit for purpose and hence the priority should be the timely development of further specific measure(s) for non-plastic materials, especially printed FCM. In these specific measures industry risk-assessment for non-listed substances should be incorporated, in line with the PIJITF proposal.

The original timetable of the EC as set out in the Farm-to-Fork Strategy of the Green Deal foresaw that the final legislation should be presented end of 2022, however, currently it seems as it will be rather mid-2023.

Germany published the so-called Printing Ink Ordinance

In 2016, when the EC had announced to work on a harmonised measure on printed food contact materials, it seemed as if the plans for the German Ink Ordinance had become obsolete. However, due to the changed timeline on the European level, the German Federal Ministry of Food and Agriculture (BMEL) presented a new draft of the 21st ordinance amending the German Consumer Goods Ordinance, the so-called “Printing Ink Ordinance” (GIO) in 2020, arguing that the EC has failed to keep its promise to provide a European legislative measure. The wording of the draft was largely identical to the draft notified in 2016 and the positive list was still incomplete, and hence not workable in practice. Also, the general objections against a national measure, which ignores the reality



of the complex flows of goods in the internal market. However, despite severe criticism of the German national association, VdL, and the entire German packaging value chain, the draft passed the Federal Chamber (Bundesrat) in November 2021 and was published in the Official Journal in December, thus bringing the legislative process, which started in 2010, to an end.

However, in the final version some small, but nevertheless, important changes in the wording of the legal text were incorporated. Furthermore, the incompleteness of the positive list was acknowledged by the legislator and a corresponding transition period of four years has been set. This period must now be used by the raw material suppliers to complete the list. Therefore, there is currently also no basis for requesting confirmations of compliance with the requirements of the Printing Ink Ordinance. Furthermore, a "regulatory sandbox" was announced by the BMEL, in which concepts of cost and data sharing – which are missing in the legal test – shall be discussed.

EuPIA and the entire food packaging chain strongly believe that only a European regulation can satisfy the functioning of the European internal market and ensure a uniform level of consumer protection. This view is also shared by the German Federal Chamber. Although it adopted the GIO, the Chamber calls on the Federal Government in an accompanying resolution to support the EC in its review of the EU legal framework "and to strongly advocate the development of a uniform European regulation". In their explanatory statement, the Federal States conclude that the "established concepts of the European printing ink industry EuPIA ensure the safety of printed packaging" and thus confirm the successful EuPIA concepts for safe food packaging. In principle, the German Federal Government also recognises the priority of a European regulation. Thus, an extension of the transitional period is envisaged should the EC present a corresponding specific measure on printed food contact materials within this period. EuPIA together with

its partners advocates the adoption of a European measure within the transitional period, which will be one of the major tasks on EuPIA's political agenda in the next years.

Although the GIO entered into force, it needs to be emphasised that printing inks for food contact materials, which are manufactured or distributed in accordance with the guidelines of EuPIA, comply with all relevant European legislation on food contact materials. This also applies for Germany until the transitional period has expired and is applicable regardless of whether the ink components are listed in the still incomplete positive list of the German regulation or not.

Switzerland updated its positive list and announced further changes in the future

Section 12 of the Swiss Consumer Goods Ordinance sets out provisions specific to food contact material inks. Substances which only may be used in the manufacture of printing inks in scope of the Ordinance are listed in the positive list in Annex 10. The so-called part A lists evaluated substances, while part B contains substances, which have not been fully evaluated, but which may be used under certain conditions and if they do not migrate with a detection limit of 10 ppb. More details can be found in the Q&A document on the EuPIA website, which was completely revised in 2021 in collaboration with the Swiss Coatings Federation VSLF.

In December 2020, an updated version of Annex 10 entered into force, where all monomers with certain hazard categories (CMR) were deleted from part B. It must be noted that although the monomers feature these hazard properties, the corresponding polymers, which are used in the formulation of the printing inks are obviously not falling under these hazard categories and are safe to use. After discussions with the VSLF, the Swiss authorities agreed to accept a 2-year transition period for four of these monomers with a high relevance for the ink industry.

Furthermore, the Swiss authorities announced that they are planning to completely remove Part B in the future. It is currently planned that non-listed substances may be used, as long as they do not possess CMR-properties and do not migrate with a detection limit of 10 ppb. Currently, it is assumed that all inks that are currently compliant would also be compliant after the revision, however, the details are not yet known.

Printing Inks and Circular Economy

The 'Circular Economy' has in recent years become a hot topic and is also one of the corner stones of the Green Deal - the programmatic centerpiece of the von der Leyen Commission. The Circular Economy Action Plan foresees many legislative measures, which aim to set the guiding principles to achieve circularity. The details of the implementation of the legislation are not yet clear, however the principles of circularity themselves are well understood and industry has already implemented many working concepts, which are continuously improved.

In the area of packaging, cross-sector platforms such as CEFLEX or 4evergreen are working on improving the circularity of flexible and fibre-based packaging by bringing together the entire value chain and to collaborate on topics such as "design for circularity" guidelines.

The ink industry will clearly play its role in the transformation process and propose and support solutions to the many challenges ahead.

However, it is vital that circularity is seen holistically to achieve a true “design for sustainability”, by looking at the whole life cycle of the products and taking all different possible material loops into account. Obviously, recycling is one very important cornerstone to achieve circularity. However, due to the inherent complexity of this topic, all involved actors must collaborate and do their part to improve the recycling rate. This involves the design stage, but also the recycling processes as well as collecting and sorting.

EuPIA has established two task forces, the Paper Recycling Task Force and the Plastics Recycling Task Force which monitor and assess the impact of the transformation to a Circular Economy on the ink industry, as well as the legislative initiatives such as the revision of the packaging and packaging waste directive, the sustainable product policy framework or the single-use plastic directive.

Task Force Paper Recycling

The Task Force Paper Recycling covers all aspects regarding the circularity of graphic paper and fiber-based packaging. Originally the activities focused on graphic paper, but topics around paper-based packaging are becoming increasingly important. The task force organizes the exchange with all relevant stakeholders, for instance via the European Paper Recycling Council (EPRC), formerly European Recovered Paper Council (ERPC), which is an industry initiative that 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. In 2020, the recycling rate for paper was 73.9 %, which demonstrates that paper is already a very well-functioning circular economy. The task force also monitors the work of the 4evergreen alliance, where EuPIA is a member of the Industry Association Advisory Board.

In 2021, the Task Force was also involved in activities related to the recent revision of the different Ecolabels, namely the Blue Angel, the EU Ecolabel, the Nordic Swan and the Austrian Ecolabel.

As in previous years, the use of mineral oils in publication inks was an issue on the agenda of several member states. France and Spain are both working on regulations limiting or banning the use of mineral oils in the design stage. These developments are followed by the task force in close collaboration with the Spanish (ASEFAPI) and French Association (AFEI).

Task Force Plastics Recycling

In the light of the EU Circular Economy Action Plan (CEAP), there are stringent measures that focus on improving the overall quality of plastic recycling and curbing wastage. The Task Force covers all the aspects of inks regarding the circularity of plastic-based packaging. One important focus of this group includes monitoring activities around CEFLEX (A Circular Economy for Flexible Packaging) that bring a wide range of industry stakeholders to represent the full flexible packaging value chain. Initiatives related to ink behavior in mechanical recycling and smart testing methodology for ink recyclability are being overseen where EuPIA members represent under the sub-group 9 of CEFLEX. Similarly, the Task Force concentrates on the activities around the program RecyClass, which focuses on the recyclability of plastic packaging and products through the development of recycling methodology and testing methods. The Task Force constantly monitors the scope of inks in

the definitions and interpretation of different national and EU legislation and policies related to plastics. In 2021 the TF published a Q&A on Printing inks and Plastics Recycling, which is available on the EuPIA webpage. Furthermore, a EuPIA Guidance Document on the Single Use Plastics Directive was published.

Environmental Footprint of Printing Inks (EFPI)

Discussions around measuring the environmental performance of many kinds of products have gained momentum in recent years, particularly, after the advent of the EC's initiative for a single market for green products and the EF methods. In the past, EuPIA published the virtual ink reference that represents printing inks for all print processes actually in use. This could be used by different stakeholders further downstream as ink input into their like cycle assessment (LCA) for printed matter.

As LCA is a dynamic tool, it requires constant updates so that the methods, data availability and technology representativeness remain valid also if time and progress will change situation and values. In line with this, EuPIA commissioned a working group called EFPI, that actively investigates LCA requirements for printing inks so that the customer base and stakeholders can take account of the impacts arising from inks within their LCA calculation.

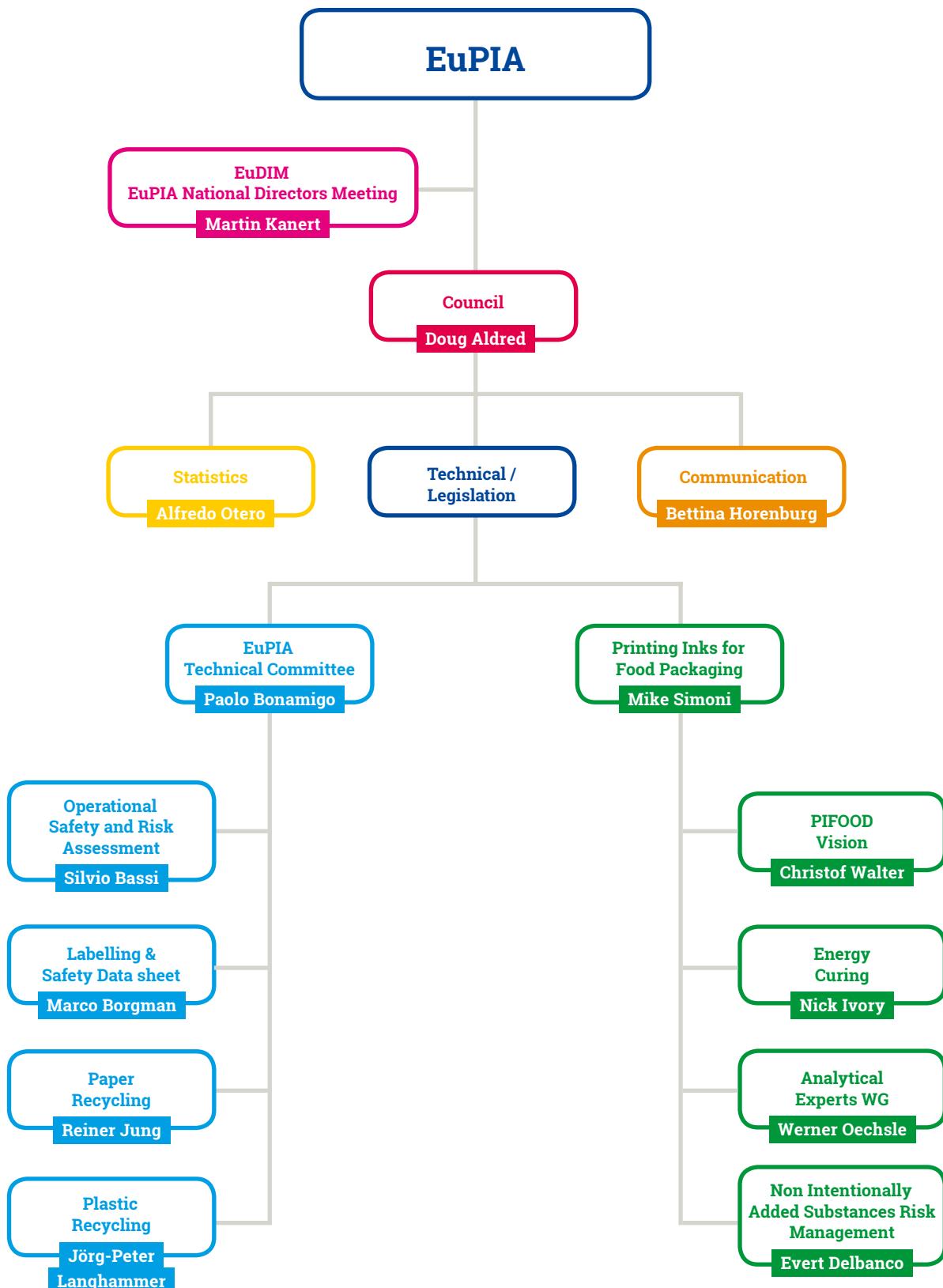
To this end, the WG is involved in activities such as identifying and updating the list of commonly used raw materials in the ink industry and developing Life Cycle Inventory (LCI) for the same, evaluation of different printing technologies under the scope of the LCA framework, monitoring PEF-related activities and their relevance for the printing ink industry, and preparing guidance documents in order to aid the ink industry and its customers to carry out updated and scientifically sound LCA studies.

Source: S-Design1689 - stock.adobe.com



EuPIA – Printing inks groups

Situation as of December 2021



CEPE Sustainability Tools

CEPE started working on sustainability issues in 2010 and published a Sustainability Charter in September 2012. The charter described the policy the coatings and printing industry would follow in the coming years, encouraging CEPE members to look at the full life cycle of their products while keeping in mind the three pillars of sustainability: People, Planet and Profit.

Over the years, CEPE has developed several tools to help members in their quest for more information on the impacts of their products on the environment (see *diagramme below*).

CEPE LCI project

In order to carry out a Life Cycle Analysis (LCA), expertise is required. It also has a cost. One of the major costs is the database to use information behind each life cycle stage of the paint product. In 2011, CEPE embarked on the CEPE LCI (Life Cycle Inventory) project to provide members from all CEPE sectors with a harmonised (LCI) database for the industry's most important raw materials and three manufacturing processes. These data are offered in three formats: SimaPro, GaBi and Excel.

The CEPE LCI database requires an LCA expert with their own (generic) LCA software or tools in order to do the analysis of a product. For the companies that do not have an expert, CEPE created the Ecofootprint tool specifically focused on LCA calculations for coatings. This tool is a user friendly LCA calculator that a user can use by inserting the bill of materials of his formulation and a few details of its manufacturing. It is available via: <http://ecofootprint.ecomatters.nl>. The end result is a report on the environmental impacts of a product over its full life cycle from cradle to gate (from the extraction of raw materials to the gate of the factory).

For the coating groups of protective and powder, the tool enables the users to have a full life cycle analysis by using the assumptions from the already published LCA studies 'from cradle-to-grave' (what happens after the gate of the factory).

To date, some 50 CEPE member companies have used the CEPE LCI data and over 250 individual users have used the Ecofootprint tool. An update to the current version of the CEPE LCI database can be foreseen by Q4 2022 and members using the current version of the database will be informed accordingly and invited to recalculate their results.

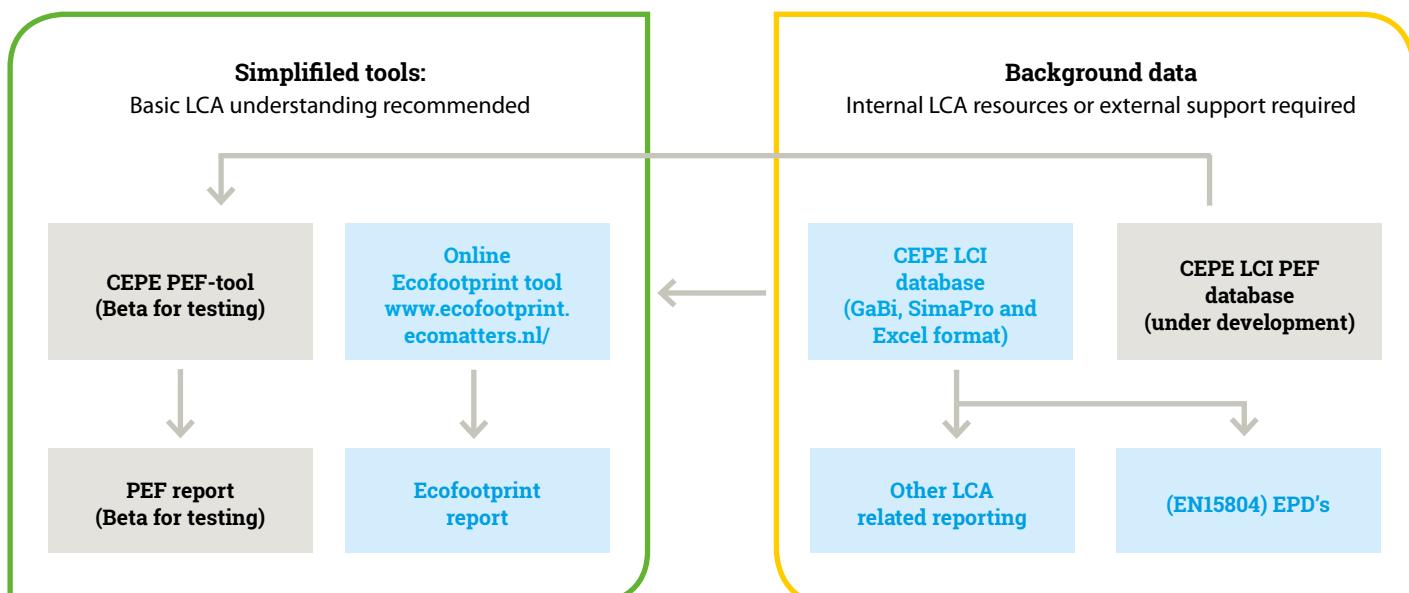
Product Environmental Footprint (PEF)

PEF is part of the Single Market for Green Products Initiative launched by the European Commission (EC). Its goal is to make it easier for companies to put green products on the European market and for consumers to identify them. The PEF methodology is an LCA (Life Cycle Assessment) method designed to be a standardised way of measuring the environmental performance of a product

CEPE joined the pilot phase for the PEF project for the decorative paints sector during 2013. This work was finalised in 2018. Since, CEPE has moved forward to enable its members to start using the PEF method as developed during the pilot. This was done during 2019 by developing a PEF (excel) tool and a rollout to many of the national associations to create awareness and provide information.

The beta test version of the PEF tool is done and can be used, but the PEF methodology and EF datasets are being refined, so the results are not finalised. This is expected in early 2022. The new release would include a couple of elements that were missing such as the inclusion of

What does CEPE offer you?





Source: Robert Kneschke - stock.adobe.com

the toxicity impact categories, updated raw material datasets and the creation of performance classes.

The CEPE PEF tool allows the user to follow a three-step data insertion process that leads to results for a single product. An overview of the steps is given below (see diagramme below):

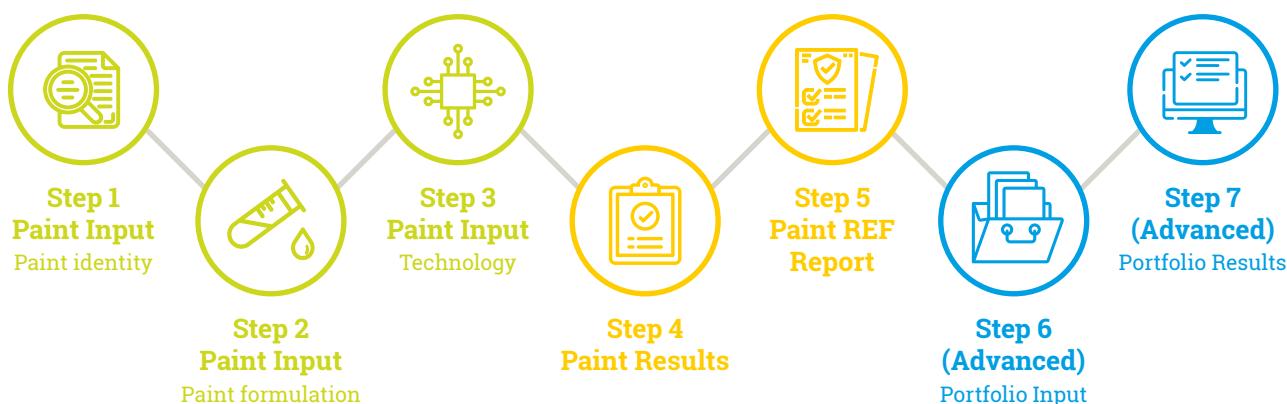
Once the paint producer inserts primary data for his product; like

- Bill of materials,
- VOC content,
- Results from PEF durability tests and
- Site specific data for the manufacturing of this product,

the tool produces the results in terms of PEF score and its 16 impact categories. The user can also set a portfolio analysis for up to 50 different products. This enables him/her to compare the different products in terms of PEF score and CO₂ emissions.

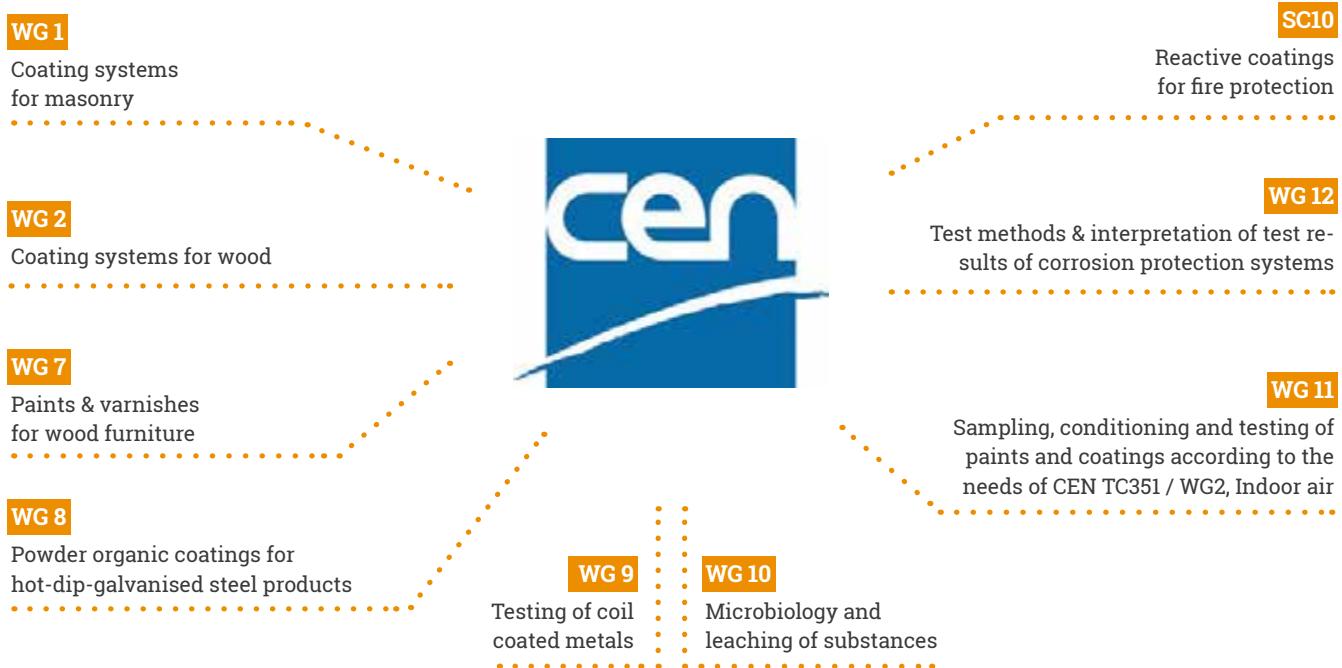
It is also required under the Recommendation on the use of Environmental Footprint methods for the PEF users to get their PEF studies 3rd party certified. As a part of the ongoing PEF project, the CEPE PEF TS completed the pilot verification study to streamline the PEF study verification process, whilst identifying the methodological and technical gaps.

Three-step data insertion process



Active standardisation bodies for paints

CEN TC 139 : Paints & Varnishes



ISO TC 35 : Paints & Varnishes



CEPE Board members



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PPG Industries
CEPE Chairman



Martin Beck
BASF Coatings



Toon Bossuyt
Boss paints



Andreas Karl Bubenhofer
Bubenhofer AG



Loïc Derrien
Cromology



Klaus-Georg Gast
Axalta Coatings



Till Iversen
Imparat Farbwerk



Heiner Klokkers
Hubergroup



Michel Kranz
BICCS



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