

The EU Commission's regulation plans for chemicals as part of the Green Deal: Impact on the medium-sized chemical industry

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Introduction

As part of the Green Deal, the EU has set itself the task of driving forward the circular economy, including in the area of chemicals, and reducing net emissions to zero by 2050. These are legitimate and supportable goals. However, the manner and scope of the planned regulatory projects will have a dramatic impact on the **diversity of chemicals** and thus on international **competitiveness** and **employment** in one of Europe's last leading industries at the global level. The first effects can already be observed. While production plants have already been closed in Europe, new investments are no longer being made in Europe but in Asia and the USA. We therefore urge the political decision-makers to seek dialog with the industry and **modify or, if necessary, even stop the projects**.

Initial situation

The European Commission (COM) published its "Chemicals Strategy for Sustainability" (CSS) in October 2020. With numerous measures to protect health and the environment, it is part of the European "Green Deal" and will have far-reaching consequences for the chemical industry, especially small and medium-sized enterprises (SMEs).

Instead of sufficiently discussing the sense, efficiency and appropriateness of the measures, the "Transition Pathway for the Chemical Industry" published by the COM on

January 27, 2023, lays down all the planned measures and adds timetables. It is therefore no longer a question of "how" or "why", but only of "when".

Through national and international association work (IVK/VCI/FEICA/CEFIC/DUCC), the chemical industry is trying to be heard in Brussels so that the interests of the industry and its survival are taken into account as far as possible and necessary. This has already been made clear in various official statements and publications.

This paper provides important arguments for this debate, especially with regard to the impact on the medium-sized chemical industry as well as processors of chemical products, with concrete examples for the Coroplast Group.

Overview of the regulatory projects

The European Commission's numerous regulatory requirements are primarily subordinated to the goal of zero net greenhouse gas emissions by 2050, which is to be achieved through several strategies. Central for the Coroplast Group as for SMEs in general are

- the transition to a circular economy with the Circular Economy Action Plan (CEAP), and
- "Zero Pollution Europe" with the "Chemicals Strategy for Sustainability" (CSS).

The CSS itself is a declaration of intent by the COM with an action plan comprising 56 measures. Within this, amendments and tightening of the following two regulations are planned in particular:

- REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals) and
- CLP (Regulation on Classification, Labelling and Packaging of Substances and Mixtures)

In addition, there are new concepts such as Essential Use, Generic Risk Approach and Safe and Sustainable by Design and the Mixture Assessment Factor, which are difficult to implement in practice for SMEs. Finally, the Ecodesign Directive should be mentioned as a further regulatory project, in the form of which there are repeated attempts to condemn adhesives and adhesive tapes in a sweeping and unjustified manner as an obstacle to the Circular Economy, which in turn would threaten the existence of the Coroplast Group.

Impending consequences for industry, the environment and employment

With its EU Chemicals Strategy CSS, the EU aims to protect health and the environment while at the same time establishing the chemical industry as a "world leader" in sustainable products. These are legitimate goals that we support.

However, from the point of view of entrepreneurs, the Commission is currently disregarding key aspects: Medium-sized companies in particular could be deprived of large parts of their portfolios. To avert this, the strategy must be subjected to a **reality check** before regulatory implementation, because since the criteria for the classification and registration of raw materials are to be tightened significantly, many raw materials and ultimately products manufactured with them may have to be **dropped completely**.

The Commission's approach therefore threatens the existence of many companies such as Coroplast Group.



Another critical aspect is that the Commission is introducing a **paradigm shift in** chemicals regulation with the projects mentioned here: Proven basic principles that have been tested for decades, such as scientific risk assessment, are being called into question and potentially replaced by an undifferentiated, blanket hazard-based and thus strongly ideological approach.

According to an initial economic impact assessment (CEFIC study), this means in concrete terms that **almost half of** European chemical production would be affected only by the introduction of new hazard classes and restrictions on use. Depending on the scenario, **sales** would collapse **by 47 to 70 billion euros per year by 2040**.

As a manufacturer of technical adhesive tapes with its own adhesive production facility and as a producer of extruded cables and plastic-molded cable harnesses, the Coroplast Group will be a company strongly affected by the EU chemicals regulation REACH and will thus be significantly impaired in its core business if, as is planned, the criteria for the production and use of chemicals are drastically tightened.



Particularly critical concepts and projects

The **CSS** alone contains **56 legislative measures** in numerous regulations, including REACH. The registration obligation under REACH is to be extended to polymers, among

other things. In addition, the necessity of a use is to be included and evaluated (essential use) and a generic risk assessment is to be carried out (GRA).

Changes to the **CLP Regulation** include far-reaching new data requirements, restrictions on use and comprehensive regulation of groups of substances with certain properties, as well as the inclusion of new hazard classes in the CLP Regulation.

The concepts that are particularly worth highlighting, which are **difficult for SMEs to implement in practice**, and other problematic areas of regulation are:

- **Essential Use:** In order to be allowed to use certain chemicals, the necessity of these uses for health and the "functioning of society" as well as the lack of alternatives must first be proven and evaluated, which is hardly possible due to the vague, non-specific criteria.
- **Generic Risk Approach (GRA):** An accelerated process to ban certain chemicals based on hazard potential, which currently applies only to mutagenic, carcinogenic and reproductive toxicants for end-user applications. An unbiased risk assessment will then no longer take place for many other hazard characteristics under GRA and will be extended to commercial users.
- **Safe and Sustainable by Design:** A fundamental requirement for future product development. Here, product safety is assumed to be an integral part of sustainability even in the basic development of new products, a departure from the risk-based approach to a much more hazard-based assessment that does not take actual use into account.
- **Ecodesign Directive:** The Ecodesign Directive requires adhesive tapes and adhesives to support the reparability and recyclability of bonded products after use. In addition to energy efficiency, the aspect of resource efficiency is becoming more and more important. A criticism of adhesives (including adhesive tapes) that is as **generic as it is unjustified, namely that** they are not recyclable and hinder repair, has so far been refuted by association work.

However, the accusation against products that are essential for the Coroplast Group remains.

- **Mixture Assessment Factor:** REACH already assesses the risks of substances and mixtures over their entire life cycle. In the future, the possibility of unintended adverse effects due to the combination of substances (cocktail) is to be included in the risk assessment of a substance by means of an arbitrarily selected generic factor (Mixture Assessment Factor / MAF) that cannot be derived scientifically. For this purpose, the previous RCR value (RCR = Risk Characterization Ratio), which



must always be <1 for safe use, will be multiplied by a MAF. Moreover, this MAF is not tailored to the "cocktail risk" of a specific chemical but is scientifically completely absurd for all chemicals the same.

It is very likely that numerous adhesive raw materials in a formulation mixed with other ingredients would **no longer pass this assessment** (RCR>1) if such a supposedly pragmatic blanket MAF were introduced, and their use would be **prohibited**. A new, refined calculation of the RCR is time-consuming and expensive, will not lead to the goal in many cases and will not lead to more safety. A negative result in this case makes a reformulation necessary and, if necessary substances are **omitted**, can lead to a loss of **products**. The MAF factor is currently set at 5 (!), which means that the individual components of the mixture may have a maximum RCR of 0.2. Even the German Federal Office for Risk Assessment (BfR) considers the introduction of a MAF to be unnecessary and considers the derivation and justification of the MAF to be completely unscientific.

- **Extension of the EU chemicals regulation REACH:** The extension of REACH also to **polymers** would not only oblige the *manufacturers* of the starting chemicals (monomers) to register the products, but now additionally also the manufacturers of polymers made from these monomers, such as adhesive tape manufacturers. Since these polymers are often produced in a wide range of variations to customer specifications, this would entail **high administrative costs** and result in **market shakeouts** for certain polymers and their applications.

At Coroplast Tape in particular, the processing of our key raw material UV acrylate would be affected, as the business unit would have to further crosslink the starting raw material on the coating line and produce a new "plastic", which would have to be individually evaluated, described and registered, for example, depending on the formulation, coating weight and crosslinking dose. Whether this effort will still make sense from a technical or business point of view is completely open to date and represents a significant business risk.

- Another consequence of the REACH regulation is the possible ban on per- and polyfluorinated alkyl compounds (PFAS). Here, too, the paradigm shift in chemicals regulation described above takes place, replacing the scientifically based risk-based approach with a hazard-based approach and thus potentially leading to a blanket condemnation of an entire class of substances. The consequences would



be equally dramatic and have been addressed, for example, by the industry associations VDA, VDAM and ZVEI.¹

Coroplast Group could be directly affected by a PFAS ban in the production of heavy-duty cables.²



Impact

Our concerns regarding the effects of these political projects relate primarily to four points: The competitiveness of European industry through the restriction of chemical diversity, turnover and employment, the paradigm shift in regulatory policy and other negative consequences as a result of these developments.

- Competitiveness: One particular **risk is** the possibility that, as part of a **reversal of the burden of proof, the** chemical industry and now, for the first time, SMEs as processors of chemical raw materials will have to **register** their product range in extremely elaborate procedures, as has already been required of those placing monomers on the market since 2006 under REACH. This seems completely excessive and unrealistic in terms of the effort and cost-benefit ratio for SMEs. Since the criteria for the classification and registration of raw materials are apparently to be tightened considerably, many raw materials and ultimately products manufactured with them may have to be **dropped completely**.

The severe restrictions on the diversity of chemicals associated with these measures will lead to an enormous problem, particularly for downstream users of chemicals, such as the Coroplast Group, as innovations and high-performance products are not possible without a corresponding construction kit of chemicals. On the customer side, this would potentially also have an impact on the automotive industry and thus electromobility, as well as the construction industry and the skilled trades, which are important for the energy transition.



According to a study by the European chemical industry (CEFIC), this would affect approx. **43% of the current product portfolio in the chemical industry**, with an expected 12% of non-substitutable (and thus no longer available) raw materials, which could lead to a **production stop** or reduced performance of the end

¹ [Blanket PFAS ban jeopardizes climate targets - vdma.org - VDMA](#) (published 03/08/2023 accessed 17/08/2023)

² [PFAS ban: SMEs see existence of companies threatened \(vogel.de\)](#) (published on 16.08.23, retrieved on 17.08.23)

product.³ Adhesives and sealants for households and craftsmen are particularly in the focus of this limitation (in the top 3 in terms of the number of products).

- Turnover and employment: The CEFIC study assumes a **loss of up to 126,000 jobs** due to the effects of the GRA alone. Approximately 100 companies were involved in this study (17% SMEs), which together represent 2/3 of European chemical production. CEFIC's economic impact analysis runs through various scenarios of the implementation of the new regulations and concludes that the chemical industry could experience a **loss of sales of €47 to €70 billion annually** by 2040.
- Another critical aspect is that the Commission is introducing a **paradigm shift in** chemicals regulation with the projects mentioned here: Proven basic principles that have been tested for decades, such as scientific risk assessment, are being called into question. It is now only a question of whether a substance has fundamentally hazardous properties. Questions of exposure, dose and safe use play no role in the COM's deliberations. The rules for end-user products are also to be extended to the commercial sector.
- The further impact on medium-sized companies, which cannot easily take advantage of the possibility of relocating to less regulated areas, is manifold:
 - **Disadvantage of SMEs:** In addition to the high financial cost and the future potential limitation of available raw materials, SMEs will have neither the experience nor the capacity to quickly meet the requirements compared to large-scale industry.
 - **Relocation:** Increasingly, companies, researchers and skilled workers are threatening to turn their backs on Germany and move to countries that offer the urgently needed conditions for innovation and competitive business. While global corporations have long since taken these steps, mostly unnoticed by the public, owner-managed family businesses in particular have little time left.
 - **Lack of innovation for climate and environmental protection:** Soon, we in Europe will no longer be able to produce the high-performance adhesives currently on the market or even develop new innovative adhesives due to the severely restricted variety of chemicals and numerous restrictions on use,

³ Ricardo (2021): CEFIC study - Economic Analysis of the Impacts of the Chemical Strategy for Sustainability). [economic-analysis-of-the-impacts-of-the-chemicals-strategy-for-sustainability-phase-1.pdf \(bcci2001.com\)](https://www.bcci2001.com/economic-analysis-of-the-impacts-of-the-chemicals-strategy-for-sustainability-phase-1.pdf).

which we need in order to make the climate and environmental protection goals set in the "Green Deal" achievable at all.

- Since not only the manufacture of the current high-performance adhesives within the EU is affected by the regulatory exclusion of necessary chemicals, but these adhesives may also not be imported into the EU under REACH, the next stage of the value chain is also up for grabs. The use of these high-performance adhesives is then forced to take place in non-European countries, as these adhesives can be manufactured there and used to make better products. The finished products can then be imported into the EU without any legal barriers.
- **Unmanageable liability risks for companies and entrepreneurs:** The replacement products, which - if they exist at all - would have to be developed in a short time, cannot be tested for years as is usually the case. Should quality problems or product failures occur, the question of liability therefore arises. Many companies will shy away from these unmanageable risks and, if necessary, withdraw from the market. In the context of managing director liability, the private assets of the management could even be called upon, thus severely limiting the incentive to make entrepreneurial decisions.

At the Coroplast Group, too, it is not uncommon for us to experience that chemical substitutes in the many different areas of application have different properties than expected, so that the short-termism demanded by politicians is irresponsible.



Demands

As a consequence of the problem situation outlined above, five demands emerge:

1. Taking into account the needs of small and medium-sized enterprises

The individual elements and requirements of the chemicals strategy must be designed in such a way that they are practicable for medium-sized companies in Germany and can be implemented without extensive additional resources and costs.

2. Use existing laws

In order to ensure planning security, lengthy legislative procedures with uncertain outcomes must be dispensed with. In particular, proposals must be drawn up with the aim of dispensing with a revision of the REACH and CLP regulations.

3. Receive risk assessment

The proven concept of scientific risk assessment must be retained for decisions in chemicals management. The focus must be on safe use. The primarily hazard-based approach proposed in the chemicals strategy must be designed to allow consideration of benefits, risks and safe conditions of use.

4. Ensure knowledge-based dialogue

The results of the dialogue must be taken into account in a transparent and comprehensible manner before concrete proposals are made for measures to implement the chemicals strategy.

5. Improve competitiveness

In close cooperation with the chemical industry, coherent concepts must be developed at the same time as the chemicals strategy is implemented that are suitable for improving the competitiveness of the chemical industry, in particular that of small and medium-sized enterprises, rather than worsening it.

Conclusion

The need for safe and sustainable handling of chemicals is undisputed and is actively supported in principle by the chemical industry. However, a prohibition-oriented chemicals policy that has made the substitution of chemical substances the dogma of European policy

is threatening to reach new and ever greater levels of a **planning approach** with the Green Deal and the revision of REACH.

Medium-sized companies in the chemical industry themselves have the greatest interest in becoming better and better in terms of sustainability and safety. This is demanded not least by our customers in virtually all industries. But the question is how we can best achieve these goals.

We immediately need an **economic policy for and not against the companies producing in Germany and Europe**, for the people employed in them and for environmental and climate protection.

It is time for **less ideology** and **more knowledge** in Germany and Europe.