

A Grip on hazardous substances, EU perspective

Highlights of the Rli online debate, June 8th, 2020

On June 8th, 2020, the online debate session 'A grip on hazardous substances, EU perspective' took place, organized by the Dutch Council for the Environment and Infrastructure (Rli).

Following their advisory report for the Dutch government, concerning national and EU policy on hazardous substances, the Council set out to share their insights and recommendations and to contribute to the debate on hazardous substances policy in the EU. The meeting was attended online by 281 participants representing experts, stakeholders, NGOs and government organizations.

[Link to the debate programme](#)

[Link to the complete video of the online debate](#)

Do the right thing: focus on the cumulative effect of substances

The session kicked off with an interview with Co Verdaas, member of the Council and chair of the advisory committee, followed by a short video where Dutch national stakeholders reflected on the recommendations of the council.

"If we focus only on individual substances, then, overall, we won't be doing the right thing"

Co Verdaas argued that chemical, and not seldom hazardous, substances are ubiquitous in daily life and in the environment. His main concerns are the dispersion of substances within the



environment, the adverse effects of cumulative exposure and the move towards a safe circular economy by 2050. If we want a better control of the risk involved for humane and environmental health, we need a more comprehensive approach. For the Netherlands, as an open economy and as a country lying downstream of some major European rivers, an adequate policy requires international coordination.

Urgency for an increased grip on hazardous substances: reflections

The first discussion round involved the observations of the Council and the resulting urgency for reinforcing chemical substances policy. **Werner Brack**, Professor at Aachen University, presented his findings from research on monitoring of mixtures substances and their effects in the aquatic environment. His conclusion is that the toxic effect on ecological systems is determined by the

exposure to the mixture of substances, rather than the individual components. The results even show that the ecological status of European water bodies is influenced to a substantial degree by the occurrence of non-regulated and non-monitored substances. This is a strong case for effect-based-monitoring and evaluation of ecological systems rather than the conventional substance based monitoring, as is now the general policy. He is confident that adequate tools are available and that existing knowledge gaps are quickly being filled.

Xenia Trier, Project Manager at European Environmental Agency, referred to the EEA's State of the Environment report and outlook for 2020. Effects of substances are determined by the exposure to the separate substances, the simultaneous exposures, as well as by historic exposures: there is no pristine environment. While there is certain knowledge about the hazard of specific chemicals, risk assessment is hampered by lack of information about this combined exposure to the vast number of chemicals around. Therefore, we need to think about other risk assessment tools, making better use of modelling, and getting better information available. We also need to think about more effective methods for enforcement, making use of standardization and grouping of substances and coherent legislation for cumulative effects. Furthermore, **Xenia Trier** drew attention to the need to clean up the legacy of substances in material cycles, soil and water. As for new substances, they need to be safer, we need to understand why they are essential to society, and we need to be clear about liability. The move towards Safe and Sustainable by Design depends on several preconditions, among them an enabling (policy, education) environment and minimal criteria for sustainability as well as safety.

Following these two presentations, invited guests in a virtual 'Blue Room' reflected on the presentations and the advisory report.



Christina Rudén, Professor at Stockholm University, shared the analysis of the Council and the speakers that the cumulative effect of (unintentional) mixtures needs to be accounted for. She pleads for a pragmatic approach to risk-assessment, by using an allocation factor for the mixture effect. On the subject of chemicals on the market, she stated that there are no absolutely safe or non-safe chemicals, but that we

need to continuously reduce the risk of substances, by developing safer chemicals or finding non chemical solutions. In regulation, the precautionary principle is well established but substitution with safer alternatives needs more effort.

"It is urgent that we add the aspect of cumulative exposure to the current system of legislation"

Steven van de Broeck, Director REACH & chemicals policy at Cefic, stated that industry is eager to move forward on combined exposure, but we need to consider different options for regulatory frameworks and be cautious of too simplistic solutions. Effect based monitoring and non-target screening need to be further explored. On Safe by Design, he stressed the importance of an holistic view: sustainability solutions in for instance the energy transition may depend on the application hazardous substances. **André van der Zande**, member of the Council, stated that liability for mixture effects is a complex issue and that research is required to develop robust methods to gather proof. On Safe by Design, he considers this as a valuable concept for the future, but we need to address the current issues as well, for instance by issuing temporary permits.

Who is to take action?

In the second discussion round, the central question was who is to take action, and how can the recommendations by the council be helpful? A first presentation was given by **Anne-Sofie**

Bäckar, Director of the NGO Chemsec. She considers the EU-Recovery Package, the Green Deal and the Chemical Strategy as a great opportunity for reducing chemical hazards. She stresses the importance to consider safe chemicals as the solution for the circular economy. This means not only quantitative goals for circularity, but also consider the quality of circular products. The occurrence of hazardous substances in recycled products or uncertainty about their composition determines whether they will be accepted by the public, and thus determines the market for circular products. This implies we need the Circular Economy to be non-toxic, or it is deemed to fail. Transparency and traceability are prerequisites for clean product chains.

"It is regulation that drives innovation towards safer chemicals"

Furthermore, for industries to develop clean materials, regulation and the prospect of further regulation are essential drivers. Also we must develop equivalent regulation for raw and recycled materials.

Frontrunner industries with high public exposure recognize toxic chemicals to be a commercial risk, that drives them towards safer products. European policy and the recovery strategy can expand that mechanism towards laggards by giving a clear message that we are moving towards a non-toxic Circular Economy, and by supporting business cases for safer products through public procurement and product design requirements, among others. Action needs to come from political decision makers, NGOs and investors. Consumer must be able to rely on legislators that products are safe.

This presentation was followed by an interview with **Marco Mensink**, Director General of Cefic. He stipulated the complexity of chemical substances flows through Europe, with a global market for chemicals and products. Industry has a role in providing good information on substances within REACH, in being transparent and in cooperating in the value chain. Governments have an important role in legislation and enforcement. Also consumers play a role, in proper use of products and as a link in the recycling chain. However, their actual behavior is not easily influenced by labels or apps.

"Governments should put more effort in enforcement on imports"

Further on the suggested instruments to provide transparency, **Marco Mensink** welcomes this to be discussed on a European level. He is, however, not enthusiastic about positive lists, as there are already many different lists with different starting points. There are some good examples for specific applications, like for food contact materials. On development of the European framework, Marco Mensink stressed the importance of coherence between the various European agenda's under the Green Deal and pleads for a dialogue with stakeholders across all transition themes.



In a second 'Blue Room' discussion, invited guests reacted on the introduction by the two speakers. **Sjoerd Dijkstra**, Sustainability Marketer at DSM Coating Resins, pointed out that, in addition to substance regulation, a product regulation is required to make clean products, without hazardous substances, competitive. Examples are regulation for toys and for food. Material passports can be very helpful to support a product related chain responsibility. **Hein van Tuijl**, Managing Director of EPEA, introduced the concept of materials and substances as nutrients is a

cradle to cradle value chain. Material passports can then be considered as a tool for nutrient management in a circular economy. Far reaching transparency can already be observed in several sectors, e.g. the cosmetics sector and parts of the automotive industry. Ultimately, circular nutrient management requires radical transparency on a cross-sectoral scale. **Ralph Jorissen**, Vice-President of Tarkett, argued that full disclosure along the value chain is a tedious process, convincing suppliers to become transparent about their products or finding new suppliers that are willing to do so. It also leads to more expensive components and, hence, a less competitive proposition. Nevertheless, Tarkett aims to be extremely transparent as a company. National governments and the EU could reward frontrunners and investors by setting circularity criteria for public procurement. **Marco Mensink** underlines that, EU should lead by example. Europe will survive by being circular and innovative.

Green Deal in the EU-Recovery Package

The final discussion round addressed the perspective of the EU, and started off with an interview of **Diederik Samsom**, Head of Cabinet of the European Commissioner Timmermans. The recommendation of the Council fit very well within the Green Deal and the Circular Action Plan, that were finalized just before the Covid-19 crisis. In the Recovery Package, the EC intends to deliver on the Green Deal, although there is a lot of lobby going on asking to delay.

Part of the Circular Action Plan is the Sustainable Product Policy, aimed at extending product regulation with sustainability criteria, including circularity, reparability and hazardous substances. A working plan for this policy will be developed during the coming months. Also, the Chemical Strategy is due in September, which aims at reducing the production of hazardous substances by the chemical industry. How to deal with innovation cost and market development is part of the deliberations. Public procurement might be a catalyst. REACH as a tool is aimed at registration of hazardous substances, rather than replacing them with safer alternatives.

"After ten years of experience with REACH, we should move into the next phase: to not only register and license hazardous chemicals, but also to replace them with better ones"

On the subject of enforcement of EU-regulation in a global market, **Diederik Samsom** stated that EU presents itself as a more vigilant player. A level playing field not necessarily has to come from lowering our own standards. The Carbon Border Adjustment Mechanism and the Farm2Fork Strategy are examples where the ambition is to raise the standards on imported goods to the EU-level. This is quite an ambition and may lead to political retaliation, but the basic attitude of the Commission to make it work.



The Green Deal was presented as a growth strategy, providing a new narrative for sustainability. In the Covid-19 context, this growth strategy fits very well. Europe, as an ageing continent with an ageing industry, could use a new impulse and the Green Deal may provide such an impulse. The Recovery Package is full of investments leaping forward towards a new industrial future, e.g. hydrogen, renewable energy, and also circularity.

Asked about the gap between risk assessment capacity and innovation in chemistry, **Diederik Samsom** stated that cutting budgets of research institutes in the past was a wrong reflex. We need to restore our European knowledge institutes, like the Joint Research Centre.

In a final 'Blue Room' session, **Sjoerd Dijkstra** appreciated the view of raising the bar for a level the playing field and stated that the precautionary principle is key. He stated that in order to overcome confidentiality issues with transparency, legislation is required to force information sharing and for the development of new tools to share hazard info while respecting intellectual property. **Marco Mensink** confirmed that Cefic supports the ambitions of the Green Deal. The Recovery Package presents a lot of funds and opportunities to make a change. Meanwhile, we need proper enforcement and well equipped customs to be competitive against imported products. We need a thorough discussion on what industry we want to keep in Europe. Asked about global competitiveness, **Diederik Samsom** pointed out that there is a delicate balance. Raising the bar on imports is mirrored by supporting export in some way. This will not be by subsidies, but it can be by stimulating innovation, leading to better and competitive products in the future. Enforcement on a European level is something that needs more attention and support from member states. **Xenia Trier** recognized the opportunity the Recovery Package offers to deliver on climate goals, circularity and a more sustainable industry. She stressed that we also need innovation to develop safe products and eliminate the need for hazardous substances that are now considered essential.

Diederik Samsom added as a final statement that the report and the comments during the discussion are very useful in the light of the Green Deal and the Chemical Strategy. About the Recovery Package he stressed the point that it is still a proposal of the EC, that needs to be adopted by the member states. He called on the participants to promote the cause of the Package by their respective governments.

Factors that get things moving

In a closing address, **Jan Jaap de Graeff**, Chair of the Dutch Council for the Environment and Infrastructure, thanked all the participants and invited guests for their contributions. He concluded that the analysis and the recommendations of the Council have mainly been sustained and supported, with some hesitation regarding the lists of safe chemicals; obstacles for reducing risks from hazardous substances stem from the enormous amount of substances around, and from insufficient knowledge about the effect of cumulative exposure; the importance of transparency and of track and trace systems was underlined by many; although the public has a role in the direction we move, its influence should not be overestimated; the European Green Deal and the Recovery Package are considered as major factors in this field, where the combination of growth and green development seems the right direction.

Jan Jaap de Graeff observed that all agree on the urgency as well as on the direction to proceed. However, how to get there is very complex. His experience from dealing with the Rhine-pollution in the nineteen seventies learned him that, although solutions may not have been in sight for a long time, continuous dialogue and coordinated effort eventually led to a very positive result.

We should not underestimated the importance of the triangle of publicity, awareness and attention as a factor in itself to get things moving.

[Read more about the report and the event](#)

Pictures are stills from the live-stream

[Contact](#)

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