

Report from Final HAZBREF Stakeholder Webinar 4th of June 2020

1. Introduction

The one-day online conference aimed at presenting the results of the HAZBREF project, which is now in the final stage of its 3 year duration (for the final agenda see HAZBREF [webpage](#)).

There were 150 participants from 20 EU Member States, representing EU Commission (DG ENV), EIPPCB, ECHA, Ministries for Environment, Environmental Protection Agencies and local authorities, industry organisations, operators and environmental managers as well as environmental NGOs.

The event was originally planned to be held as a two-day conference in Dessau, Germany hosted by the project partner German Environment Agency (UBA). Because of the COVID-19 outbreak the event was carried out as webinar. When the final event was planned before the outbreak the expectation was that HAZBREF outputs would have been more final than was the case in beginning of June. Despite some delays due to the virus outbreak major findings were ready for presentation and the event provided an opportunity to get feedback from the broad range of participants representing different stakeholders. The aim is now to use the input from stakeholders to further develop the HAZBREF products before publishing the results in the autumn.

The first part of the event focused on presenting the results from HAZBREF activities concerning the following topics:

- Approaches to identify relevant substances for BREF reviews
- Proposal for a more systematic method to address hazardous substances in the BREF-process,
- Recommendations for the management of chemicals in HAZBREF case sectors:
 - Textile industry (TXT)
 - Surface Treatment of Metals and Plastics (STM)
 - Chemical industry (LVIC concerning fertilisers and POL concerning Polymers production)
- Promoting non-toxic material cycles in the BREF process

The afternoon session focused on the Implications of the Zero Pollution Ambition of the European Green Deal for the Industrial Emission Directive (IED) and how the BREF process can contribute to the goals of the European Green Deal. The session included presentations from HAZBREF stakeholders on how the chemical management aspects have been tackled in recent BREFs, how the collaboration between EIPPCB and ECHA has developed, and how the HAZBREF results can further contribute to the improvement of addressing hazardous substances in BREFs.

All presentations from the webinar are available in [HAZBREF webpage](#).

The discussion during the event was very active with numerous questions and comments presented by stakeholders via chat and statements which made the HAZBREF event successful. The HAZBREF project has done its best to address the questions and comments presented during the webinar in the last chapter of this report.

2. Main issues discussed during the first session

The programme started with a welcome speech and introduction to the topics of the day by Michael Suhr from UBA.

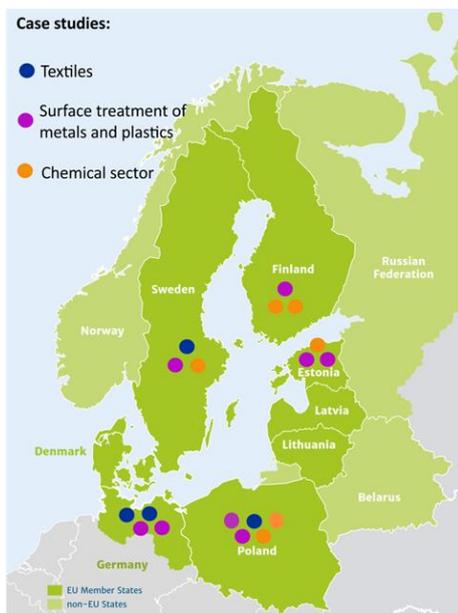
The Project Manager Kaj Forsius from the Finnish Environment institute (SYKE) presented the project and its main objectives. HAZBREF aims to increase the knowledge on the use of industrial hazardous chemicals and their reduction measures. Moreover, the project aims at enhanced institutional capacity by better and systematic exchange and utilization of existing information between different regulatory frameworks in the preparation of EU BREFs. Thus, the target groups of the HAZBREF outputs are both on the policy level (EU Commission, HELCOM, ministries) and the operational level (industrial installations and environmental and chemical authorities in Member States).

The results from HAZBREF Work Package 2 “Selection of relevant target substances in BREF industrial sectors” were presented by the WP2 Leader Nannett Aust from the German Environment Agency (UBA) under **Topic 1 “Approaches to identify relevant substances for BREF reviews”**. The WP2 team has designated four approaches to derive lists of relevant target substances potentially used in the case sectors based on available data: A) The “substance-based approach” analysed data from REACH registrations, B) The “hazard-based approach” used existing lists of regulated substances as information base C) The “use-based approach” looked at available data at industrial sectors (inventories) and D) data from “Case studies on installations” were used as a reality check. As a result, the HAZBREF WP 2 team derived a definition on substances of concern that need to be reflected in BREFs.

Nannett Aust pointed out that the IED-regime already addresses the use and potential releases of chemicals to a certain extent. Still, many of the potentially hazardous substances (substances of concern) are not addressed in a systematic and comprehensive manner. One of the guiding questions for the presentation was “What can REACH contribute to the identification of relevant target substances for IED?”. She also emphasized that the ECHA Chem database is a treasure chest for data on substance properties, fate and behaviour of substances in the environment and on requirements for the safe use of substances, BUT a key issue here is to facilitate access to the substance data in ECHA’s registration database by operators, chemical suppliers, Technical Working Groups and other stakeholders. HAZBREF WP2 gives recommendations for different stakeholders to better utilisation of existing data. One finding is that an integrated use of REACH and IED is necessary to reduce releases of substances of concern to the environment. The vision derived from the project (use the same definitions and trigger values in REACH and IED, harmonize wording of “hazardous”, reflect all environmental compartments in IED and REACH and reflect releases during entire life-cycle) created intensive discussion.

After that, the event moved on to **Topic 2: “Recommendations for the management of chemicals in industry”**.

Leader of Work Package 4 Janusz Krupanek from the Institute for Ecology of Industrial Areas (IETU) presented the general outlines of the HAZBREF Sectoral Guidance reports. Sandra Leuthold (UBA) and Timo Jouttijärvi (SYKE) continued in the topic by providing examples on BAT proposals on chemical management in the HAZBREF case sectors and findings on good practices in permitting.



Picture 1: HAZBREF case studies in partner countries

The WP 4 provides a reality check to WP2 results by identifying and characterizing the hazardous substances actually used in the case installations. WP4 provides input to WP3 activities by interviewing operators about implementation of legislation and administrative practices of authorities. Review of chemical management practices, identification of best practices and opportunities for improvement at these installations complemented with sector wide reviews is a basis for deriving information on potential BAT candidates on chemicals management.

Under **Topic 3: “Proposal for a more systematic method to address hazardous substances in the BREF-process”**, Michael Suhr (UBA) presented the goal and first results of activity 3.2 to elaborate a practical method for including the information on

hazardous substances in the BREFs/BAT conclusions more systematically and at the right time. He also pointed out that there have been positive developments in the recent BREF reviews, and the addressing of hazardous substances is going in the right direction. However, the current system for the identification of Key Environmental Issues (KEI) is better suited for addressing mass and sum parameters, such as dust, NO_x etc, and it does not catch properly the hazardous substances or chemicals relevant in the sectors. Therefore, more focus and expertise, especially in the frontloading phase is needed for identification of relevant hazardous substances in the given BREF sectors.

Under **Topic 4: “Promoting non-toxic material cycles in the BREF process”**, Helena Dahlbo (SYKE) and Topi Turunen (SYKE) presented the work on Circular Economy issues in the context of BREFs revision process carried out in the HAZBREF project. The final report on promoting non-toxic material cycles consists of an analysis of the applicable regulatory framework, HAZBREF case sector examination and conclusions and recommendations. HAZBREF has identified three approaches to address circular economy and non-toxic material cycles in BREFs: 1) production waste approach, 2) secondary raw material approach, and 3) product end-of-life approach. These approaches were discussed throughout the study.

Incorporating circular economy into the traditional installation gate-to-gate approach of the IED and BREFs requires better implementation of value chain aspects and better connection of upstream and downstream processes. The study revealed that basic elements for promoting non-toxic material cycles already exist within the legal framework of the IED and BREFs. Still, there is room for improvement in the way these elements are used, and appropriate measures are identified in the report. The report will be soon finalised and available at the HAZBREF webpage.

Karl Kupits from the Estonian Environmental research Center (EKUK) gave a short summary on the discussions of the morning session. He concluded that it is positive that the discussion focused more on HOW to integrate the findings of the HAZBREF project than on IF the information of hazardous substances needs to be integrated in BREFs.

3. Presentations and items discussed in the afternoon session

The afternoon session started with a presentation by Ian Hodgson from DG ENV, on the **“Implications of the Zero-Pollution Ambition of the European Green Deal for the Industrial Emission Directive (IED) and how the BREF process can contribute to the goals of the European Green Deal”**. Ian Hodgson presented the European Green Deal (EGD), which is one of the six Commission priorities for 2019–2024 and provides a roadmap for making the EU's economy sustainable.

EGD aims to turn climate and environmental challenges into opportunities across all policy areas and making the transition just and inclusive for all. The EGD announces that there will be a zero-pollution ambition in a communication to be published early in 2021. Also, the IED will be reviewed as part of the EGD. Some types of activities that may be envisaged are the strengthening existing legislation and their implementation, targeted additional actions, creation of monitoring and outlook tools and to promotion of supporting and cross-cutting initiatives. The IED review will include e.g.

- consideration of inclusion of additional sectors,
- implementation issues,
- the BREF process itself,
- contribution to the circular economy,
- interaction with decarbonisation of industry and coherence with other EU legislation.

The conclusions of the Impact Assessment are expected to be announced in mid 2021.

Monique Pillet from ECHA, presented **“REACH – IED, Improvement of chemical management”**.

Monique Pillet emphasized that the site operators can contribute to identification of priority chemicals, e.g. by appropriately designed inventory of chemicals and stepwise prioritization methodology at site level as means to improve risk management. She also pointed out that the current SDS do not always include all necessary hazard and physical-chemical information on ingredient substances as well as meaningful safe use advice regarding environment, but that work is ongoing to improve the situation (REACH Review Action 3). In her presentation Monique Pillet also described ECHA's work on identification of hazardous substances in the sectors as input to the recent BREF processes. The collaboration with the EIPPCB is still a new, but fruitful learning process.

Benoit Zerger from the EIPPCB presented experiences on the inclusion of hazardous substances in recent BREF review processes with the title **“Hazardous substances in BREFs - case of the Textiles BREF”**. In current BREFs there are BATs on pollution abatement measures in almost every BREF, and where appropriate in combination with BAT-AELs. Some organic compound emissions to air are addressed in some BREFs, such as formaldehyde in BREF for Large Volume Organic Chemicals (LVOC) and Wood-based Panels (WBP). Metal emissions to air and water are addressed in several BREFs. BAT on monitoring concerning hazardous substances are also included in many BREFs, often using sum

parameters. The cooperation between EIPPCB and ECHA started in 2017 with the TXT BREF for textile industry as a pilot project for the cooperation. After that ECHA has been involved the processes for the review of the FMP, SF and CER BREFs. HAZBREF provided 5 proposals of BAT candidates of which significant parts have been included to the first draft of the TXT BREF published in the end of 2019.

After presentations by representatives from the EU commission the event continued with statements from invited Stakeholders under the heading **“How can chemical management be improved in BREFs? How should the goal of the European Green Deal be considered in BREFs?”**

The first Stakeholder speech was held by Stefan Drees from CEFIC, who presented views on the interlinkage of the EGD and IED. Stefan Drees stated that the IED is only one piece of legislation contributing to the zero-pollution ambition of the EGD. Concerning identification of hazardous substances in the BREF process, he emphasized that KEIs are already part of the process, but that substances could be better selected in the preparation phase of the BREFs. Concerning Circular Economy issues in BREFs it was pointed out that Chemical industry already intensely (re-) uses by-products, side-streams and recovers energy, but there should be a better evaluation of the cross-media effects. The use of side streams or other “non-virgin” material could be incentivized if flexible BAT-AELs would be introduced. Sometimes emissions can increase if secondary material streams are used.

Jean-Luc Wietor from the European Environmental Bureau (EEB) suggested complementary solutions to improve chemical management in industrial installations. He proposed to look beyond BAT and also to consider existing legislation in Member States (which he referred to as the “BIER concept” (Best Industrial Environmental Regulation)). A positive example is the long-standing German ordinance on hazardous substances (GefStoffV), which prescribes inventories on hazardous substances, investigations beyond patchy SDS information and routine assessments of substitution potential.

Brigitte Winter from the Austrian Environmental Protection Agency pointed out that detailed knowledge about chemicals used and pollutants emitted is already necessary for initial positions and this needs time and resources in the BREF Technical Working Groups. It is dangerous to exclude relevant parameters from the scope of the BREF at the time of the Kick-off Meeting and before the data sampling with questionnaires starts. Therefore, she is of the opinion that for relevant hazardous substances BAT-AELs should be elaborated. A good cooperation and information exchange between chemical inspection under REACH and environmental inspection and permitting under IED is necessary. Available information from different regulatory frameworks such as Water Framework Directive, POP-Regulation, BAT/BEP guidances elaborated under the Stockholm Convention, REACH and emission inventories should be utilised to capture all relevant substances a per sector. The European Green Deal’s zero pollution ambition for a toxic free environment supports the aim to have BAT-AELs for relevant hazardous substances in the BREFs and ambitious BAT-AEL ranges.

Tom Boonen from the Flemish Government welcomed that the EIPPCB has picked up the chemical management and the inventory in the current review of the Textiles BREF. The purpose of the chemical inventory is, among other things, to identify and (potentially) substitute chemical products that contain hazardous and non-biodegradable substances. The chemical inventory is also an important reference for

permitting authorities, as the data on chemicals from the operators can be used to develop relevant permit conditions or substitution requirements. He pointed out that to allow a chemical management plan to be effective, knowledge on high quality extended safety data sheets (eSDS) and exposure scenarios (ES) is key. Release pathways of chemicals are needed to identify adequate techniques to reduce emissions. Information gaps in eSDS (and ES) and confidentiality issues are limiting the potential to ensure efficient use of REACH data. In his presentation it was pointed out that both the EIPPCB and member states should have full access to all ECHA's information.

4. Next steps in the HAZBREF Project

The Project manager Kaj Forsius wrapped up the seminar by presenting the foreseen next steps in the project, which are:

- Finalisation of sector guidance reports
 - The sector guidance for textile industry will be published during the summer
 - The comprehensive reports for the STM & CHEM sectors will be available for comments during the summer
- Draft WP2 report concerning approaches for the Identification of relevant target substances available in September 2020
- Draft 3.2 report on method to include substances into BREFs available in September 2020

All publications will be finalised by the end of the year. All reports and information on deadlines for commenting will be made available at the are made available at [HAZBREF webpages](http://www.syke.fi/projects/hazbref) (www.syke.fi/projects/hazbref).

5. Questions and answers sessions

The comments and questions from the chat during the seminar are presented in this section. Some of the answers were delivered during the webinar and some of the answers have been prepared afterwards by the HAZBREF team.

Questions related to REACH and IED

- Comment: A closed-loop system is not always a permanent solution for using hazardous substances. If a substance is authorised under REACH and listed in the Appendix XIV of REACH a company may apply for authorisation for the use of the substance. The ultimate target in REACH authorisation process is however that the use of authorised substance will be stopped at the end.
- Also, you can state that REACH authorisations are not per se permanent but limited in time and you have to prove that substitution is NOT possible. You are granted 12 years under certain conditions and need to prove that you did all to find a substitute also during this time.

Answered by Monique Pillet, ECHA in chat: The REACH authorisation is granted for a specific time period, after which the company holding the authorisation needs to provide a review report (if they wish to continue using the substance) that will need to be evaluated again.

Comment: the authorisations granted under REACH, operational conditions are not always well addressed in the provisions of authorisation and it would be worth to supplement them with precise conditions. It should be done in permits (for example on monitoring, on implementation of techniques to prevent/reduce emissions to a level as low as possible).

- Question: Safety data Sheets (SDS) are available, but not always complete. Extended SDS and exposure scenarios (ES) are difficult to obtain for Member State authorities. We would like a response from ECHA if the eSDS and exposure scenarios are available for MS authorities under the current REACH legislation?
Answer by Monique Pillet from ECHA: ECHA does not have the eSDSs. According to REACH Article 36 each manufacturer, importer, downstream user and distributor shall assemble and keep available all the information he requires to carry out his duties under this Regulation for a period of at least 10 years after he last manufactured, imported, supplied or used the substance or mixture. That manufacturer, importer, downstream user or distributor shall submit this information or make it available without delay upon request to any competent authority of the Member State in which he is established. Safety data sheets are part of the information a downstream user needs to carry out his REACH duties and should therefore be made available to any competent authority of the MS upon request.
- Question: Is the prioritization methodology report of ECHA presented by Monique available or when it will be? Do you intend to elaborate an equivalent methodology for emissions to air?

Answer by Monique Pillet: The report is in progress, but it is not yet known, when it can be distributed. The EIPPCB has shared the draft methodology with the TWG for TXT BREF end of June 2020 for comments. Stakeholders not part of that TWG can contact Monique Pillet in ECHA if they are interested in getting a copy of the document.

- Comment: REACH is the main legislation concerning chemicals and the BREF shall not exceed REACH with regarding the chemical use restrictions. BREF is not designed to change the evaluation regarding hazard, which is an exclusive competence of other EU chemical legislation.
- Question: Is it possible to assess consequences for innovations if full composition of mixtures is available?

Answer by HAZBREF: The composition of a “chemical product” is known to the supplier but is not always communicated to the downstream users for competitive reasons. Only the notification of the content of “substances of very high concern” (SVHC) is mandatory. It is therefore the duty of the manufacturers (suppliers of chemicals) to assess the potential for elimination in waste treatment, if necessary, in co-operation with specific plants. This does not inhibit innovation in chemicals use.

Questions related to Chemical management practices in installation

- Question after Benoit Zerger’s presentation (EIPPCB): How does the interaction of the “substance inventory” work (inputs/outputs) at the site in practice (BAT 1 in draft TXT BREF concerning Chemical Management System) in case that ECHA / REACH develops new requirements for chemical users? E.g. if there are classifications changes how do the permits catch up?

Answer by Benoit Zerger, EIPPCB: The first draft of the TXT BREF mentions an inventory of inputs and outputs in BAT 2. The inputs are incoming textile materials and process chemicals. BAT 14 details further the inventory of process chemicals. BAT 2 mentions that the inventory is maintained and regularly reviewed, including when a significant change occurs. So, if the classification of a substance in REACH changes, it will be captured in the review of the inventory.

- Comment from industry: The Non-ferrous metal industry (NFM) has developed a tool to inform how such a classification change impacts on other legislation to support our operators.

Questions related to the Systematic method to address hazardous substances in BREFs

- Question/comment: A BREF already takes 3–4 years to finalize and the Work Programme for BREFs is lagging for the existing review cycle. An addition of 15 months to all BREFs, suggested by HAZBREF, will delay the update of BREFs and consequently permits for the sector. Are these aspects considered by the suggestions of HAZBREF?

Answer by HAZBREF: The intention by HAZBREF is not to extend the revision process by 15 months but to shift basically some of the work usually performed later to the frontloading process.

- Question/comment: The determination of Key Environmental Issues is a key aspect of the BREF process, as the name suggests. The KEI is supposed to be based on 4 criteria. In the future, can we have transparent assessment of the 4 criteria? In current BREFs, the assessment of the criteria is missing.

Answer by Benoit Zerger:

1. At the very beginning of the BREF review, the EIPPCB calls for the Initial Positions of the Technical Working Group, including Initial Positions concerning the KEIs.
2. The EIPPCB analyses these Initial Positions in a Background Paper. This Background Paper contains a systematic assessment of all proposed KEIs according to the 4 criteria.
3. This Background Paper supports the discussions of the Technical Working Group (TWG) at the Kick-off Meeting of the BREF review, where the TWG concludes upon the KEIs. The use of 4 criteria for evaluating KEIs is an important, but not the only, element that TWGs can take into account to make their decisions.

- Question: Regarding the suggestions for carrying out ‘identification of relevant hazardous substances’, how do you think that the checking of ‘good permits’ and assessing selected baseline reports should be performed? Do you think that the IED EU Industrial Registry platform would help?

Answer by HAZBREF: TWG Members may submit some exemplary permits that in their opinion contain provisions on measures concerning relevant hazardous substances for the sector of concern. It is the responsibility of TWG members to assess the quality and suitability for the purpose of these documents. According to our knowledge, in some current TWGs a smaller number of permits are already submitted for EIPPCB assessment. Baseline reports (acc. to art. 22 IED) are not yet used for the identification of hazardous substances in BREF sectors. A certain number could be provided to the TWG for assessment in the frontloading phase of BREF reviews. The IED EU Industrial Registry platform normally does not contain baseline reports. Only in a few MS baseline reports are available for the public.

- Question to Stefan Drees, CEFIC: If there is no data collected during a BREF process, no BAT-AEL can be derived for this parameter, which means again no data in the future. How does industry feel about monitoring without a BAT-AEL set in BAT Conclusions?

Answer by Stefan Drees: When an increase of monitoring is suggested, it is important to clearly define what is worthwhile to look at and for which purpose the data are eventually needed for. As monitoring does not come for free, we strongly advise not to impose monitoring requirement just for the sake of monitoring. The Draft 1 of the WGC BREF is one example which imposes monitoring requirements for 28 substances but also suggests focusing ‘relevant’ substances/parameters.

- Comment: Also experts on ecotoxicology would be needed in future if there will be more efforts on hazardous substances in BREF processes as suggested by HAZBREF. Then the TWGs would become very large.

Answer by HAZBREF: It is true that some TWGs are already quite large. HAZBREF however does not propose to generally include special experts on ecotoxicology. What we propose is firstly to better use **available** environmental data of used substances in the given sector from chemical registration (ECHA data base), baseline reports, BAT background reports, etc. submitted in the frontloading phase, etc. It is the responsibility of TWG members to establish the link to qualified experts needed for the assessment of data on chemicals in their given country and involve them in the BREF review at the right time (networking to all relevant experts). Secondly, for those industrial sectors that use relevant amounts and quantities of process or product auxiliaries and for which release of industrial chemicals to the environment is supposed to be relevant, HAZBREF proposes that chemical auxiliary suppliers and if possible, also machinery suppliers should definitely be part of the TWG (participation of CEFIC cannot replace sector specific chemical auxiliary experts). A key aspect to be considered here remain *expert judgement*, exchange of arguments between experts in a dedicated subgroup on chemical management, sharing knowledge on recent developments of substitutes, developments of machinery, etc. These experts may only meet in the subgroup for a certain time until their products are delivered and discussed by TWG all.

Questions related to Strengthening requirements for promotion of Circular economy issues in BREFs

- Question: What is meant by the statement in the presentation “in BREF release to environment during the entire life cycle”? Is the product meant or the production? IED is related to manufacturing at the installation.

Answer by HAZBREF: It is correct that the IED is primarily aimed at minimising emissions within an installation. Even if all risk reduction measures at the site are considered, hazardous chemicals naturally leave the plant with the treated or manufactured products. In individual cases, this can lead to an increased release of a substance of concern into the environment later in the use phase or during disposal. In this respect, it makes sense to think about the entire life cycle of a chemical already at this stage. The consideration of the entire life cycle of a hazardous chemical under the IED is initially a vision but considering the goals for Circular Economy and the Green Deal, this would be only logical.

- Question: How do you think to handle the release during the entire life cycle in BREFs, when the release occurs after the product has left the IED-installation?

Answer by HAZBREF: The current scope of BREFs does not provide opportunities to set criteria on the product quality or other properties, but if hazardous substances and chemicals are avoided in the processes, thus leading to less hazardous substances in the product itself, it could make recycling of the material easier after the product has been used. Such “non-toxic” material cycles could be promoted by including chemical inventory BAT in the sectoral BREFs, especially in sectors where hazardous chemicals are used.

- Question: Why are requirements on CE suggested to be strengthened under IED, because we have the product legislation, which is better fitted for CE aspects concerning products?

Answer by HAZBREF: The aim of the HAZBREF study on Circular Economy was to assess the possibilities to promote CE aspects in BREFs. The finding was that the IED and BREF documents can promote CE objectives, but only to a limited extent. However, more can be done to make better use of the current mechanisms in the BREF reviews to include requirements that promote CE issues.

- Question: Only waste is mentioned in Approach 1 of the HAZBREF Circular economy study. Why are not by-products mentioned, since both waste and by-products can be used? In the BREFs for Iron and steel industry (IS) and Ferrous metals processing (FMP) these issues are already well covered.

Answer by HAZBREF: We agree that waste and by-products could both be presented in Approach 1 to some extent, but the boundaries between the approaches presented in the CE study are simplified. Our finding is that there is better opportunity to promote production waste utilization in the BREFs, compared to setting requirements on the use of secondary raw materials. The utilization of secondary materials can also be promoted in BREFs by better connection between BREF sectors in the review processes.

- Question: What is meant by a “non-toxic” circular economy and how is “non-toxic” defined?
Answer: The concept of a “non-toxic environment” originally goes back to a mandate to the EU Commission under the 7th Framework Programme. However, the term “non-toxic” was unfortunate and meant that the release of pollutants into the environment through the production and use of chemicals should be reduced to the lowest possible level – this is a moving target and that is why we are now talking of a “zero-pollution ambition”. In circular economy it is important to follow the life cycle of potentially hazardous substances and to avoid that a necessary use at one stage of the life cycle leads to reappearance of the substance at another stage, e.g. in recycling.
- Question: The presentation says that 80% of the environmental influences at the “end of life” in the textile sector is depending on the design phase. Is this based on an LCA and how does the textile sector differ from other economic sectors (e.g. automotive, furniture production, electrical industry)?
Answer by HAZBREF: The comment is right that the environmental impact apparently applies to more sectors than just the textile industry (however, not only “at the end of life” but the whole life cycle). The HAZBREF CE study refers to the EU Commission that has stated multiple times that more than 80% of the environmental impacts of a product are determined at the design stage. Therefore, regulating on the design of the product through the so-called ecodesign framework plays a significant role in achieving CE objectives. See e.g.: <https://ec.europa.eu/jrc/en/research-topic/sustainable-product-policy>
- Question: If incoming waste is also processed in a company, the plant must be approved as a waste treatment facility. Would it then fall under another BREF (waste treatment)? There is therefore a strong case for not mixing the IED and the circular economy. If so, it must be reduced to production waste.

Answer by HAZBREF: In many cases waste-based materials which are utilized in industrial production plants cease to be waste (Art. 6 of Waste Directive) when or before entering the plant. In these situations, there is no need to be permitted as waste treatment facility.

- Comment: IED chapter II holds obligations for MS for permits. In this way relevant circular economy issues or use of chemicals linked that have to be 'permitted' are relevant for BREF's
- Comment: Few years ago, the EC published a communication on overlapping policies that deal with products, waste and chemicals. I am afraid in a couple of years after putting management of hazardous chemicals and circularity of economy into a recasted IED (and in BREFs) we have another layer of inconsistencies or overlaps. Let us think about where identified problems need to be fixed before thinking about "overloading" IED.

Questions related to the European Green Deal and the Zero pollution ambition

- Question after Ian Hodgson's presentation (DG ENV): Does Ian Hodgson mean the Zero Pollution ambition or action plan when talking of the roadmap? As the two parts of the ambition (Chemicals for Sustainability Strategy CSS and IED) have already their own roadmaps.
Answer by Ian Hodgson: The roadmap for the Zero Pollution Action Plan was meant.
- Question: Do you think that the BREF process can help on delivering on the toxic free environment goal? E.g. one of the BAT criteria is to use "less hazardous substances" and to enhance clean material cycles which seems to mean not to produce them from the start. There is this "non-essential" use approach e.g. PFAS as good approach, do you agree? For example: Instead of biocides, let's also promote the use of non-chemical methods in the BREFs.
Answer by Benoit Zerger: Indeed, one of the BAT criteria mentioned in Annex III of the IED is the use of less hazardous substances and several BREFs include BATs answering this criterion. For example, the first draft of the TXT BREF contains BATs to reduce the amount of hazardous substances used and to substitute hazardous substances. Also, the BAT1 in the Chlor-Alkali BREF (CAK) mentions that "the mercury cell technique cannot be considered BAT under any circumstances", thus leading to a change of process involving less hazardous substances.