

pinfa Advisory Board – Ninth Meeting

Wednesday 3 February 2021
09:30 – 12:00 CET

VIRTUAL

The content of this report is a capture of the inputs from individual participants. The views included are therefore those of single participants and not the consensus of the group as a whole.

This report

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1. Participants

External representatives

Sicco Brandsma, *Senior Researcher, Vrije Universiteit Amsterdam*

Diane Daems, *Sr fire expert, Global Material & Industry sustainability, Huntsman Corporation*

Jacob De Boer, *Head of Department Environment and Health, Vrije Universiteit Amsterdam*

Quentin De Hults, *Senior Manager Construction Advocacy & Sustainability, BASF and Executive Chair of the Modern Building Alliance*

Sophie Duquesne, *Professor, Ecole Nationale Supérieure de Chimie de Lille, ENSCL*

Hervé Feuchter, *Fire Safety Engineer, CREPIM*

Anja Hofmann, *Fire Behaviour Engineer, Federal Institute for Materials Research & Testing and Vice President, Association for the Promotion of German Fire Protection (vfdb)*

Frank Kuebart, *Managing Director, ECO Institut Germany GmbH*

Pim Leonards, *Professor in Environmental Bioanalytical Chemistry, Vrije Universiteit Amsterdam*

Lisa Melymuk, *Assistant Professor at RECETOX, Research Centre for Toxic Compounds in the Environment*

Rudolf Pfaendner, *Division Director, Fraunhofer LBF*

Franck Poutch, *Director, CREPIM*

Monika Sabaranska, *EMEA Material Program & Poland Sustainability Manager, EMEA, HP*

Marc Sans Armenter, *Chief Officer, Catalan Fire Department*

Margaret McNamee, *Professor at Division of Fire Safety Engineering, Lund University*

Laurent Tribut, *Technical Expert, Schneider Electric*

Elie Van Strien, *Chairman, European Fire Safety Alliance*

pinfa representatives

Esther Agyeman-Budu, *General Secretary*

Adrian Beard, *Chairman*

Vincent Mans, *Technical Advisor*

External moderators

Simon Levitt, *Moderator, Harwood Levitt Consulting*

Lars Stollenwerk, *Assistant moderator, Harwood Levitt Consulting*

2. Purpose of the meeting

Pinfa represents the manufacturers of non-halogenated phosphorus, inorganic and nitrogen flame retardants (PIN FRs) and is a Sector Group within Cefic, the European Chemical Industry Council. Pinfa members share the common vision of continuously improving the environmental and health profile of their flame-retardant products. In addition, pinfa regards and promotes flame retardants as an essential element of fire safety technologies. These are the reasons why pinfa members seek to engage in a dialogue with the users of PIN FRs to identify the needs and technologies that they are looking for.

In recent years, there has been increased public discussion about FRs. Concerns have been raised about the environmental impacts of FRs, largely, but not solely, regarding halogenated FRs. Conversely, where FR use has decreased, concerns have been raised about fire safety. Consequently, a debate has emerged about the appropriate use of FRs and whether available alternatives provide sufficient fire safety.

This group convenes on average twice a year. It is an open group, meaning that pinfa extends invitations to new stakeholders depending on the topics discussed.

This ninth edition took place in February 2021. Travel in Europe was still largely suspended due to the COVID-19 pandemic. As such, for the third time, the Advisory Board meeting took place virtually. As last time, the meeting was scheduled to last for two hours rather than a full day to ensure optimal participation and engagement.

This report does not capture the content of the previous Advisory Board meetings, which is available in the separate document on [Background & Previous Meetings](#).

The Chatham House Rule

The meetings follow the Chatham House rule, whereby minutes include who attended and what was discussed, but opinions are not attributed to individual participants.

Competition and Compliance

The meetings are held in strict compliance with EU and international antitrust laws as well as Cefic dos and don'ts.

3. The 9th pinfa Advisory Board meeting

The 9th pinfa Advisory Board meeting took place on 3 February 2021 with a diverse group of stakeholders from the flame retardant (FR) industry, downstream user industries, testing and research institutes as well as firefighters and academic experts.

The meeting consisted of two sections. The first section focussed on pinfa Technical Advisor Vincent Mans' presentation on the Construction Products Regulation (CPR) and its relevance to flame retardants, which was followed by a discussion. The second part of the meeting outlined some key thoughts on the Chemicals Strategy for Sustainability for group reflection. This input will be used to structure and guide the next Advisory Board meeting.

a. Construction Products Regulation (CPR)

Background

The Construction Products Regulation (CPR) is the European legislation that regulates the harmonised rules on the marketing of construction products in the EU. The Regulation ensures that there is a common technical language to assess the performance of construction products and to ensure that reliable information is available to all stakeholders to compare the performance of products across manufacturers in various EU countries. Flame retardants are commonly used in construction products and as such the CPR is highly relevant to the flame retardant sector.

The European Commission is currently reviewing the CPR. A public consultation aimed at gathering stakeholder inputs ended on 25 December 2020. The options range from repealing the CPR completely and installing a new legal framework or amending the CPR as appropriate. pinfa supports the main points of the position of Construction Products Europe, the EU-level trade association for construction products manufacturers, namely to a) keep the framework of the CPR, b) improve certain legal aspects and have input in the EU Member States and c) optimise the use of the CE mark and the Declaration of Performance.

Discussion

The group agreed that the update of the CPR is especially relevant due to the growth of the e-mobility and sustainable energy sectors. Electrical cars, battery chargers, solar panels on roofs et cetera are great opportunities, but also require the legal framework for construction products manufacturing to be updated accordingly.

The group highlighted that while the CPR might need to be reviewed, its implementation is also a core aspect that needs to be improved. Participants agreed that fire safety should not just be a requirement for new and innovative materials but should apply to all as an essential requirement. It is important to evaluate the performance of whole building systems to assess the interaction between materials that are flame retarded and those that are not during a fire.

While CPR is of course important, it is also important to acknowledge its limitations: the CPR helps shape the single market for construction products but improving fire safety is not one of its core goals. Prevention, detection, and evacuation are basic pillars of fire safety improvement and are not necessarily related to the elements of the CPR. The performance of construction products is tested and declared in a harmonised way to remove trade barriers. The legislation concerning building codes is, and is likely to remain, at the national level. In addition, it is one thing to update the CPR and ensure that

future newly built buildings are fire safe. Most houses are of course already built and renovated with insulation materials. A common issue in some Southern countries is that chimneys and fireplaces are not well maintained, which can lead to extremely high temperatures and cause the vulnerable insulation to ignite.

The group expressed interest in concrete data concerning fires over the last decades, and how this has changed with the development of electric vehicles. Fire safety has improved in the last two to three decades due to, for example, the use of smoke detectors. However, this cannot be reliably linked to the CPR as the testing and classification of construction products only play a limited role in the entire fire safety framework. Concerning electric vehicles, most current examples are still anecdotal due to the novelty of the materials and the still small market share of these vehicles. While this is not a substantial issue yet for firefighters, it could be a worrying issue in the years to come. The deeper penetration of electric vehicles in Norway should offer an interesting case study for their impact on fires. A bigger contemporary issue is the performance of insulation products. The combination of legacy buildings with new insulation materials can create new risks.

The EU FireStat project aims to address the lack of EU level data on fire safety by defining and collecting fire statistics in categories to enable comparative statistics. This is currently extremely challenging because countries collect statistics in vastly different ways. In the case of vehicle fires, for example, countries do not differentiate between petrol vehicle fires or electrical vehicle fires. As such, available statistics do not usually capture this information, which leaves only anecdotal evidence to discuss if electric vehicles present fire safety challenges. The EU FireStat project has only had one Steering Committee meeting, in February 2021, so it is still in its starting phase. Their report is not expected before 2022 at the earliest.

b. Chemicals Strategy for Sustainability

Background

As outlined in the last pinfa Advisory Board meeting, the European Chemicals Strategy for Sustainability is an initiative by the European Commission that was published in October 2020 following a stakeholder consultation. The Chemicals Strategy for Sustainability aims to make sure that chemicals that are sold and used in Europe are safe and sustainable and to ban the most harmful chemicals. This has an impact on flame retardants as some might have hazardous properties.

The concept of essential use will be extremely important in the Strategy on the grounds that, if all hazardous chemicals were banned, petrol, ethanol and many other vital substances would be made illegal too. This is clearly unfeasible. So, a balance needs to be found between the real risk that the use of certain materials poses and the alternatives that are available.

At the same time, the competitiveness of the European chemicals sector needs to be defended. If the potentially hazardous chemicals are banned from production in Europe but products containing them can be imported from Asia and other parts of the world, the only thing hurt is the European industry and economy. This lack of surveillance of imported finished products is a shortcoming of REACH. The European Commission aims to address this issue in the Chemicals Strategy. On top of this, the supply chain of critical chemicals has proven to be vulnerable in the COVID pandemic. A lot of vital materials are not produced in Europe anymore but have been outsourced, which puts Europe at risk in a crisis. Having the capacity to produce sustainable chemicals while reducing exposure to harmful chemicals will improve this situation.

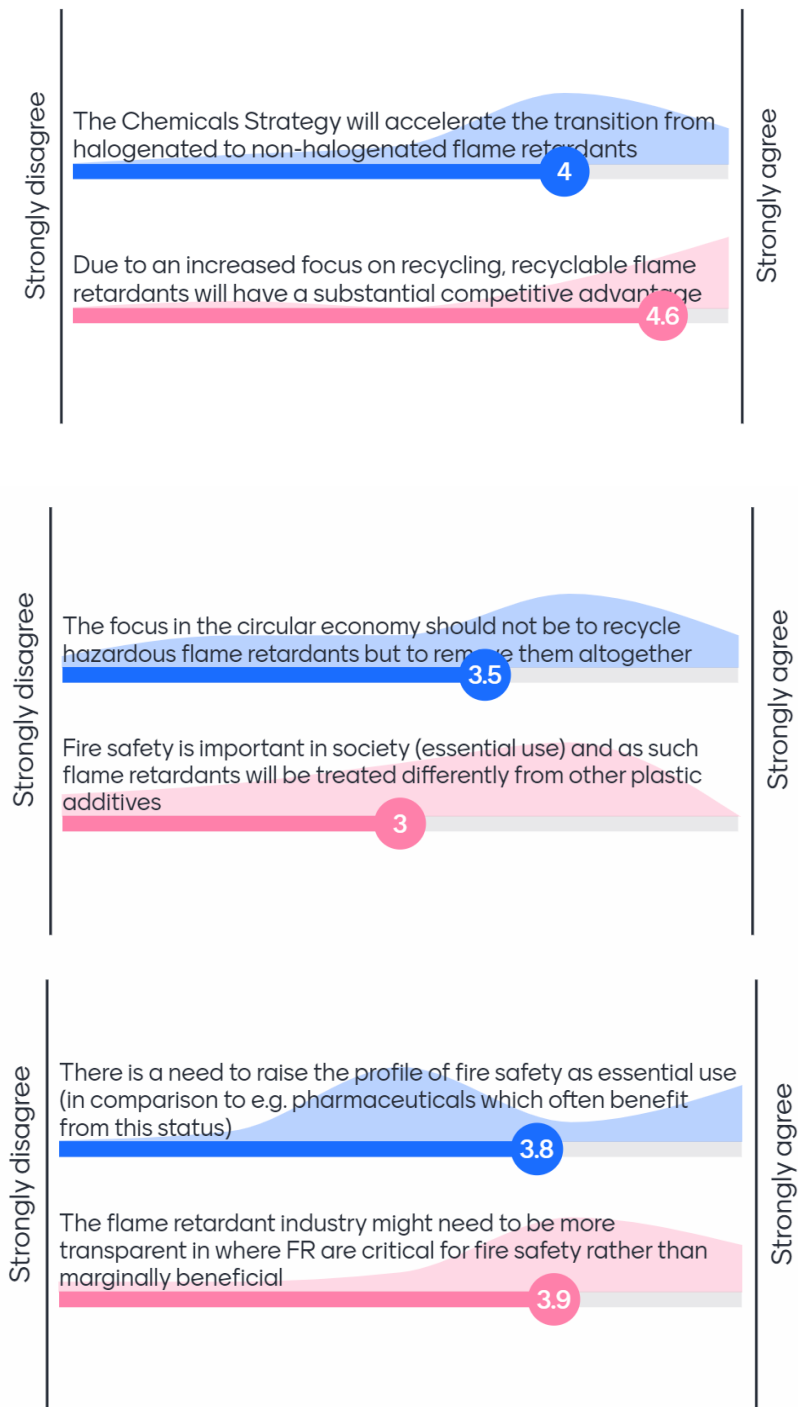
The Chemicals Strategy for Sustainability is available on this [link](#).

Laying the groundwork for the next meeting

Due to time constraints, the group focussed on establishing a rough outline to start a deeper discussion during the next Advisory Board meeting. As the Chemicals Strategy is a multi-faceted and complex topic, the groundwork was laid by voting on six questions that zoom in on various elements of the Strategy. This highlights areas of agreement or division within the group. The screenshots of the six questions and the voting results are included below.

The Chemicals Strategy will be a priority for pinfa and Cefic due to its immediate impact as well as far-reaching consequences. pinfa will be looking to demonstrate the sustainable properties of Phosphorus, Inorganic, and Nitrogen flame retardants and specifically at data-sharing projects. Given that flame retardants are an extremely complex topic, good and clear communication will be essential. The discussion about flame retardants has become more 'emotional' in the United States, which harms efforts to promote science-based policy. This is a threat that could also develop in the EU. To give two thought starters for the next meeting, the initial voting shows strong agreement that recyclable flame retardants will have a strong competitive advantage. There is less certainty in the group on if flame retardants will be considered as essential use.

The results of the questions are listed below and will be used to guide the discussion at the next Advisory Board meeting.



4. Ideas to Move Forward

The group was again positive about the initiative of the Advisory Board meetings. The fact that there were participants from the scientific community was welcomed, particularly given the range of backgrounds and expertise in the room.

The solutions proposed in this document are high-level and can be difficult and costly to implement. Indeed, pinfa has neither the resources nor the power to change standards alone. Nonetheless, the group believes there are concrete actions this group can take in assessing what key questions need to be addressed and what possible solutions other relevant stakeholders can take forward.

The next meeting will likely take place in June 2021.

Once agreed by the participants, this document can be used by any member of the group for discussions with others, to show the areas of exchange and to encourage collaboration on the topics involved.