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Helsinki Chemicals Forum

Stakeholder views on hot topics in chemicals safety and sustainability



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International think-tank

Welcome to this report on the debates held at the 14th annual Helsinki Chemicals Forum. The conference was run as a hybrid event, with delegates able to attend in person or join virtually.

This year, almost 150 delegates, and an additional 80 online, from more than 50 countries participated in the Forum discussions on five main themes:

- the new Global Framework on Chemicals and how it aims to influence global supply chains towards safer chemicals management;
- how the EU's substitution planning efforts can help create regulatory certainty, promote investments in safer alternatives and speed up the substitution of the most harmful chemicals;
- learnings from changes to chemicals legislation around the world (US, Canada, Australia and Japan);
- increasing the use of economic Instruments for Chemicals Management; and
- the role of the EU's Transition Pathways for Sustainability in showing the way to how industrial sectors can achieve both the bloc's chemicals and industrial strategies.

The Helsinki think-tank promoted the case for the safe management of chemicals while taking stock of the diverse political landscape and the hurdles to preserving human health and the environment.

Setting the scene, the forum's opening panel discussed the vision, objectives and targets of the Global Framework on Chemicals, adopted last year at the fifth International Conference on Chemicals Management (ICCM5), and how the framework guides supply chains towards the better management of chemicals.

This was followed by panel two, which saw an exchange of views on how the EU's plans to strengthen the role of substitution planning, in the context of REACH and other EU chemicals legislation, could drive the bloc towards regulatory certainty, targeted investment and speed up the transition to safer substances.

Moving onto panel three, the discussion focused on the evolution of various chemicals management frameworks that are being administered and amended around the world, specifically the US, Canada, Japan and Australia.

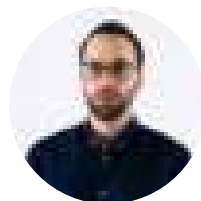
Panel four delved into the potential use of, as well as the challenges, to using economic instruments to manage chemicals, including fees and tradeable quotas.

And the final debate of the event focused on the EU's transition pathways, which set out specific areas that need to be considered to achieve the objectives of the Green Deal, including

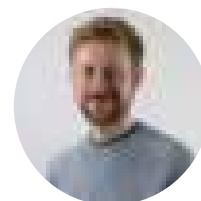
infrastructure, investment, regulation, skills and education, research and innovation and competitiveness.

This report, prepared by independent intelligence and insight provider Chemical Watch News & Insight, intends to be a balanced and accessible reflection of two days of debate and hopefully acts as a means to further understanding. We have not taken sides or judged comments on their accuracy, veracity or fairness.

This is not a formal report because the annual forum is not an official session and its conclusions do not represent a consensus. Instead, the report offers a reference point for policy makers, companies, academics and others – presenting the voices of the people in the room at this important global gathering.



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Keynote 1: Chemicals policy at the crossroads - achievements and challenges for the future European Commission

Kristin Schreiber, Director, DG GROW, European Commission

The European chemicals industry is facing major geo-economic and geopolitical developments that endanger the continent's prosperity and economic capacity. In addition to the energy and supply crisis brought on by Russia's invasion of Ukraine, current high administrative and regulatory costs create a difficult economic context for EU industry.

"All this makes the risk very real that Europe will set the standards but that many of the solutions will come from elsewhere," Schreiber said.

Therefore, the trade bloc needs to create and maintain a solid business case for its domestic industry so that companies can continue innovating and investing in Europe.

Substitution

One of the bloc's thorny and protracted issues is the safe substitution of hazardous chemicals to meet green objectives.

But the suitability of alternatives and uses deemed 'critical' for society "depends on a large variety of factors", Schreiber said.

 **We need an appropriate chemicals regulatory framework that facilitates the transition to safer and more sustainable chemicals**

Europe's initiatives will only succeed in helping both companies and the environment "if we manage to move away from regulatory micromanagement and complement regulation with simpler and more flexible tools".

Stakeholders need to start with a much earlier analysis of alternatives and technological challenges to better focus action and avoid regrettable substitution, Schreiber said. Joined-up action to identify what needs to be done to substitute substances in particular cases is necessary.

"We really need close interaction between legislators and industry, as well as between actors in the entire supply chain and

alternatives providers, of course involving, very closely, academia and NGOs."

'Holistic approach'

Resilience is needed to support the EU's economic prosperity, and the importance of industry must be acknowledged as industry drives the green and digital transition.

"So, does this mean we need to reduce the ambition of the chemicals strategy for sustainability?" Schreiber asked. "I don't think so, but we need a renewed and holistic approach to avoid disruptive effects on value chains and reach sustainable competitiveness."


To be successful, we need to identify win-win solutions for sustainability and competitiveness objectives, "and we need an appropriate chemicals regulatory framework that facilitates the transition to safer and more sustainable chemicals and at the same time secures European competitive advantages".

The outcome of the European Parliament elections in June and the composition of the future Commission will be crucial to determine the way forward on chemicals policy, especially the delayed REACH revision.

The safe use of chemicals remains a cornerstone at the base of European value chains. "Therefore we need to set health and environment standards for future generations in a way that facilitates the contribution of safe and sustainable chemicals to the success of the European economic model in a more complex, challenging and hostile world environment."

"All the different elements of chemicals policy need to be inserted into a holistic political framework to achieve all these different dimensions: of health and environmental protection, simplification and administrative burden reduction as well as innovation, competitiveness and resilience."

A holistic approach requires engagement from all relevant actors, Schreiber concluded.



Keynote 2: What will be the future role of ECHA under the EU's revised set chemicals regulations

Sharon McGuinness, Executive Director, ECHA

In order for the European Chemicals Agency to effectively administer the extra legislation it has been given, or will soon become responsible for, greater engagement in the form of collaboration is vital.

This is one of the key messages in ECHA's new five-year strategy (2024-2028) in which the agency sets out its vision for the future of chemicals safety through science collaboration and knowledge.

ECHA's five goals for the next five years are:

- be a trusted chemicals agency;
- respond to emerging challenges and changes in legal landscape;
- communicate and engage;
- lead on chemicals knowledge and experience; and
- invest in people and organisational excellence.

Amid these objectives, the nature of the agency's expanding responsibilities is "very much moving at pace and we are expecting to get more legislation", McGuinness said. It is the evolution, and "sometimes the revolution" of the agency as it goes into the future, she added.

Since 2020, ECHA has taken on responsibilities under drinking water legislation, the eighth environmental action programme (8EAP), and batteries regulation. Under the Commission's new one substance, one assessment package proposal, the agency will

take charge of the common data platform and also become heavily involved in RoHS, medical devices, toys and POPs legislation.

👍👍 We need to do this together much more collectively and much more strategically into the future if want to make real changes

While the agency has performed many of the same duties before, the increasing demands from citizens, the workplace and from industry means that "we need to do this together much more collectively and much more strategically into the future if want to make real changes".

Throughout all the challenges the EU faces, ECHA remains focused on protecting health and the environment through its work on chemicals safety, McGuinness said.

"We are committed to advancing scientific knowledge and understanding and we look forward to collaborating with our partners and stakeholders as we implement not just our existing legislation but also our tasks and the new strategy over the coming years."



Keynote 3: Personal reflections from ICCM-5 and perspectives of the new Global Framework on Chemicals

Anita Breyer, President of the Fifth Session of the International Conference on Chemicals Management (ICCM-5)

While 27 European countries are members of an overarching, well-developed chemicals regulatory system, 100 other countries do not have sufficient institutional capacities for the management of hazard substances and waste.

The Fifth Session of the International Conference on Chemicals Management (ICCM-5) in September saw a dramatic shift in focus from the European perspective to the global perspective, Anita Breyer said.

“Chemicals management concerns all stakeholders ... and we achieved a true masterpiece of multi stakeholder and cross-sector collaboration.”

The conference saw the adoption of the Global Framework on Chemicals - For a Planet Free of Harm from Chemicals and Waste, with its five strategic objectives and 28 targets. ICCM5 also adopted a number of resolutions, including priority topics and various means of implementing the global framework on chemicals.

ICCM-5 adopted the Bonn Declaration for the urgent need to tackle global pollution through chemicals and waste, and the global framework on chemicals fund.

Implementing the global framework ‘seems complex but we already have many tools at hand to start action immediately’

Targets

The ICCM-5’s adopted targets set out an ambitious vision that can only be achieved through collaboration with willing stakeholders:

- by 2030, governments would have adopted and are implementing legal frameworks and would have established

appropriate institutional capacity to prevent or minimise adverse effects from chemicals and waste.

“This includes Europe,” Breyer said. “We have wonderful legislation, but still we know we are not there yet with what we really need to tackle.”

- all countries would have access to poison centres equipped with suitable capabilities to respond to poisoning.
- by 2035 stakeholders would have taken effective measures to phase out highly hazardous pesticides in agriculture.
- safer alternatives, innovative and sustainable solutions in product value chains would be in place to benefit human health and the environment and risks would be prevented or minimised.

“By 2030 companies [will] consistently invest in and achieve innovation towards advancing sustainable chemistry and resource efficiency throughout the lifecycle of chemicals. That is a centrepiece.”

- by 2035, governments would implement policies that encourage production using safe alternatives and sustainable approaches throughout the lifecycle; and
- by 2030, sustainable chemicals and waste management strategies would be developed and implemented in major economic and industry sectors.

Implementing the global framework “seems complex but we already have many tools at hand to start action immediately”, Breyer said.

This is a multi-stakeholder consensus and everyone can start straight away. “Start right now, because everyone who can change things is on board.”

High-level awareness-raising and communication is important and political awareness is key “to help make us all change our behaviour”.



PANEL 1

How does the new Global Framework on Chemicals influence global supply chains to manage chemicals more safely during the whole product lifecycle?

Context

The UN's second edition of the Global Chemicals Outlook confirmed that the Strategic Approach to International Chemicals Management (SAICM) did not achieve its goal of sound management of chemicals globally by 2020. A contributing factor was the lack of industry awareness and engagement in SAICM. Its successor – the Global Framework on Chemicals (GFC), adopted last year – sets out a clearer vision, with targets and objectives for all stakeholders. This will have implications for global supply chains and, with all stakeholders contributing, has the potential to move towards the safer production and use of chemicals around the world.

Moderator: Jacqueline Alvarez, Chief of Chemicals & Health Branch, Industry and Economy Division, UNEP

Panelists:

- Anita Breyer, director-general for chemical safety, emission control and transport, federal ministry for the environment, Germany
- Chrysanthi Sofokleous, chemicals legislation manager, CEFIC and the International Council of Chemical Associations (ICCA)
- Satish Sinha, associate director, Toxics Link
- Arthur Fong, environmental technologies smarter chemistry lead, Apple and co-chair California Green Ribbon Science Panel

Sectoral approach and transparency

- The Global Framework on Chemicals considers and plans to address issues of the past, as well as current and future problems
- Like SAICM, the GFC still calls for the uptake of basic chemicals management systems in all countries and capacity building, including the global implementation of safety data sheets and the Globally Harmonised System (GHS) for the classification and labelling of chemicals
- The GFC brings a new way of thinking, particularly its focus on sectors and supply chains
- A sectoral approach is essential considering chemicals are contained in 95% of all manufactured goods
- The 'puzzle' of information, transparency and communication along the value chains remain major barriers to globally sound chemicals management for several reasons, related in particular to the complex and dynamic nature of the supply chains
- A global supply chain approach to managing chemicals is more pressing than ever and the Global Framework has the potential to engage and stimulate sectoral actions globally
- The ongoing geographical shift of chemical production, largely to Brazil, Russia, India, China and South Africa (BRICS), means the global framework is paramount to addressing these collective environmental and human health issues
- Challenges for developing regions are different to those confronted by the developed world, including technology barriers, illegal transboundary movement of chemicals and waste, lack of awareness and a lack of safer affordable alternatives

- Textiles is an example of a sector where industry coalitions and initiatives are supporting and encouraging the supply chain to 'detoxify'
- The chemical industry is a key actor in the supply chain; partnerships with all actors are necessary to move forward; working in isolation is not sufficient
- There is a clear business case for stronger and closer ties along the value chain that would bring with it significant benefits, including reduction in costs, avoiding disruption along supply chains and improved reputation for companies involved
- Individual, unique solutions, for example IT systems or standards, for each sector supply chain must be avoided - the use of digital technologies that are interoperable and interchangeable will be key
- Information needs for each actor must be identified and stakeholders must develop a pragmatic system that unlocks information as the product moves through the supply chain at the right time and in a way that is relevant, understandable and useful to the recipient supply chain actor
- Industry continues to stress that there is data - not relevant to safety and sustainability - that is commercially sensitive, and this must be considered during discussions around transparency
- This is not a time to change at the margins, this is the moment for ambition, collaboration and leadership

Predictable regulation

- To create this change, and realise the innovation potential, industry needs a predictable regulatory environment that spans years ahead
- Differing regulatory systems around the world create challenges for industry and global supply chains - convergence, consistency, synergies and mutual acceptance and understanding where possible is needed
- The global framework can help create this global consistency, bringing collaboration and convergence
- The focus must be on the objective of moving away from hazardous chemicals to safer chemistry - ie concentrating efforts on innovation to make this happen as opposed to the administrative burden of impractical regulatory systems
- It is important to get all stakeholders' views from the beginning of the process when developing policy or regulation - this helps make regulation practical, achievable and meaningful
- Collaboration is also key to driving progress towards achieving global objectives - this requires trust between potential partners, within industry but also between industry, regulators and civil society





PANEL 2

How can substitution planning help to create regulatory certainty, promote investments in safer alternatives and speed up the substitution of the most harmful chemicals?

Context

Past reviews of REACH have highlighted issues with the restriction and authorisation processes. In December 2023, the European Commission launched a study to investigate how to fortify the framework for substitution planning in the context of this regulation and others. The initiative aims to make the REACH restriction process more efficient by harnessing the grouping approach. It will also tackle issues around the sluggish and burdensome authorisation regime. The EU executive hopes to collaborate with industry to find a way towards an easier, faster and more flexible system to provide investment certainty for current users of chemicals and alternative providers, where substitution processes are complex and take time.

Moderator: Otto Linher, Senior Expert, European Commission, DG Growth, REACH Unit

Panelists:

- Simon Cogen, Expert, Sustainable Economy Unit, Ministry Economic Affairs Belgium
- Christel Davidson, DUCC
- Theresa Kjell, Expert, Substitution planning, ChemSec
- Joel Tickner, Executive Director, Change Chemistry

Authorisation and restrictions

- Alternatives assessment and substitution planning are needed to avoid regrettable substitution
- The European Commission and member states should establish a roadmap – a kind of prioritisation list that is clear and identifies the substances that need to be substituted for which uses and by when
- With REACH authorisation, it is clear the applicant-by-applicant approach does not work – especially where there are widespread uses and many actors involved. The high number of applications, in particular for chromium VI, exceeds ECHA's capacity and results in “deadlocks and backlogs”
- Rather than spending excessive time analysing why companies cannot substitute, efforts should be put to identifying how substances can be substituted
- Some stakeholders behave in a reactive way. Industry should not wait until a chemical is on its way to the authorisation list to take action. Earlier assessments of safer alternatives are needed
- Authorisation has shown that it can work and that it can lead to substitution. One of the main pitfalls is that you only see the people who have not substituted or cannot substitute. You have not seen all those who can, or those who do not know they have an authorisation obligation
- It is clear we need to go to a group approach for broad restrictions
- Dossier submitters need to adopt a new mindset in interacting with scientific committees by applying a new methodology to assess the restriction, and focus on central uses shared by a number of similar substances
- Meanwhile, the role of authorities is to provide the means, the tools, to allow companies or consortia to set up a substitution plan to go forward and to preempt possible problems

Industry and the supply chain

- Substitution and business opportunities go hand in hand
- Industry continuously innovates and substitutes, but innovation can be complex and take time
- Engagement of the entire supply chain is needed to improve substitution planning. Stakeholders could then assess the alternatives and agree on a substitution plan. This should all be done within a defined timeframe
- Many brands are frustrated that they are unable to find out information from the supply chain on the hazards of chemicals used in their products
- There is an urgent need to improve transparency and information flow on substance uses

Alternatives

- Clear criteria are essential for a safer, sustainable and feasible alternative
- The scope of assessments must be broadened to address functional substitution and sufficient or 'fit for purpose' performance
- The current analysis of alternatives (AoA) approach in REACH needs to be improved – discussion on alternatives needs to start earlier
- There is a need for a transparent discussion on what works, what could eventually work and what does not work, taking into account positive experiences from trials as well as failures
- There has not really been an incentive for alternatives providers to submit information into the process, NGOs say

- Small players need an encouraging and enabling environment to bring their new ideas and solutions to the market and to be able to scale them – they can sometimes be overlooked or unreachable because of bigger industry players' market dominance, or they are impeded by costs and a lack of funding
- There is a need for independent technology/alternatives assessment. An authority like ECHA could have dedicated people with relevant expertise
- In line with the essential use concept, uses of targeted substances in uses which are critical for society or necessary for health and safety should only be allowed where there are no alternatives

Timelines

- The timeframe to get to safe and sustainable by design (SSbD) chemicals is 10-20 years. This can be sped up by making things more transparent and giving companies the skillset to identify chemicals of concern and start the substitution planning process earlier. Along the way, incentives are needed to motivate companies
- Studies for alternatives could take five years and be costly. It is important to look at 'failures', otherwise there could be an impression that nothing is being done
- However some perceive a company trying 12-15 PFAS alternatives to be a valuable exercise in accruing important information, rather than a 'failure'
- More discussions are needed on funding
- The R&D agenda needs to be linked much more closely with the regulatory agenda to try to solve these problems





PANEL 3

Learnings from changes to chemicals legislation elsewhere (US, Canada, Australia, and Japan)

Context

Countries around the world have developed, established and adjusted chemicals management systems. Different approaches are often used but fundamentally the same goal remains to protect people and environment from the adverse effects of chemicals. The US, Canada, Australia and Japan are countries with great experience of developing and implementing chemicals management frameworks and all have encountered challenges to regulating substances in their respective nations. Their experience helps them adapt to global challenges and the learnings from these countries shows just how important it is to be flexible, responsive and proactive in a time of great uncertainty.

Moderator: Mercedes Viñas, Director of Submissions and Interaction, European Chemicals Agency (ECHA)

Panelists:

- Michal Freedhoff, Assistant Administrator for the Office of Chemical Safety and Pollution Prevention (OCSPP), at the US's EPA
- Bryan Stephens, Senior Legislative Policy Advisor, Environment and Climate Change Canada
- Heather McCready, Director General, Environment and Climate Change Canada
- Graeme Barden, Executive Director, Australian Industrial Chemical Introduction Scheme (AICIS)
- Erika Uchino, the director of chemical safety office, Chemical Management Policy Division, Japan

Different laws, same goals

- Many countries have different chemicals laws but all share the same goal – to protect human health and the environment
- Similar historical experiences with chemicals across countries and regions have resulted in similar regulatory approaches

Unites States

- In 1976, the US passed the Toxic Substances Control Act (TSCA). This was around the time when Congress was writing other laws to protect air, land and water

- The original TSCA was not as successful as other environmental laws because it was too weak. It grandfathered in thousands of chemicals already in commerce without additional review. EPA tried to use the law to ban asbestos, but that ban was overturned by a court
- In 2016, TSCA was updated to give the EPA the authority that the original law had lacked
- The law requires the EPA to review the thousands of chemicals that were grandfathered into the original 1976 version. This is a massive undertaking for the EPA and requires the agency to prioritise which chemicals to review in what order. The law also requires the EPA to review 100% of new chemicals before they

enter the market whereas before the agency only completed reviews on about 20% of new chemicals

- Many of the chemicals being evaluated or subject to evaluation are being used around the world, so the EPA is looking closely at how other countries are managing them, and in turn, the agency hopes its risk evaluations may be useful to others
- A major challenge for the US system, like many others, is data gaps for chemicals. Unlike the EU's REACH regulation, the EPA does not receive much data upfront when evaluating a new chemical
- This is countered by using models or by using structurally similar chemicals that are well understood to predict the hazards and exposure. The agency is also using non-animal methods (NAMs) to evaluate the effects of chemicals
- The science underpinning the EPA's work has improved its ability to thoroughly review the risks people face from chemicals already in commerce by looking at the cumulative risks and starting to examine aggregate chemical exposures
- As the science behind the EPA's work to review the safety of chemicals improves, the agency continues to adjust and improve approaches to better protect people from dangerous chemicals and hopes to collaborate further with other regulators to progress shared objectives

Canada

- Canada's environmental protection law holds similarities with TSCA in the US but there are differences
- CEPA is a law that delivers many of Canada's environmental protection programmes, including the country's chemicals management plan (CMP)
- The CMP, launched in 2006, aims to protect people and the environment from harmful substances through a predictable, science-based approach to assessing and managing chemicals
- The government has completed 97% of the risk assessments of 4,300 priority substances under the CMP
- This effort has resulted in risk management measures being adopted for around 500 substances, including the control of flame retardants, phthalates, many toxic metals, petroleum stream substances and asbestos
- CEPA has recently been amended to include a new post-market prioritisation process that goes beyond addressing hazard end points for persistence and bioaccumulation, to include CMRs and also looks at classes of chemicals in order to avoid regrettable substitution
- Canada amended CEPA to recognise the UN's landmark resolution stating that a healthy environment is a human right
- The amendment also aims to reduce the reliance on vertebrate animal testing

Australia

- Like Canada, Australia regulates chemicals via agencies across the Commonwealth state and local governments, each having specific roles

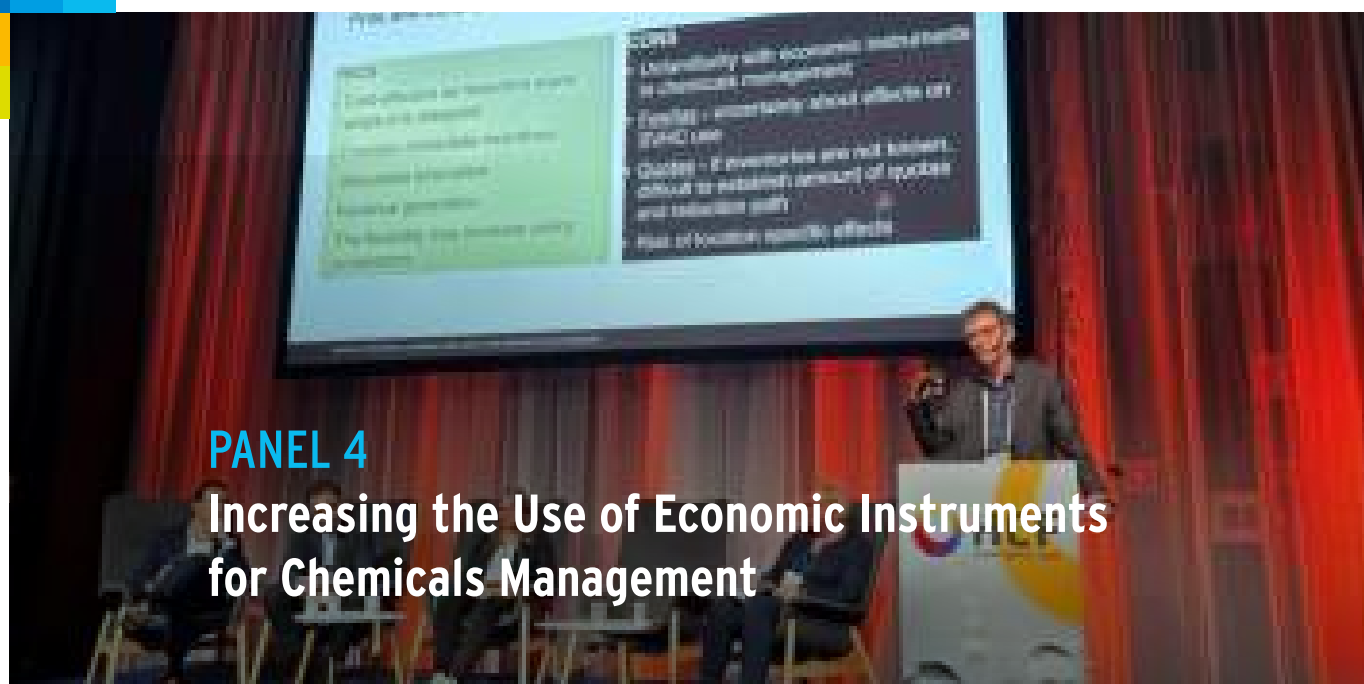
- Australia's Industrial Chemicals Act of 2019 sets out regulatory principles that can only be changed by the federal parliament but are supported by specific requirements set out in ministerial rules and guidelines issued by the regulator
- Central to Australia's Industrial Chemical Introduction Scheme (AICIS) is an obligation for companies wanting to bring a substance to the market to first carry out self-guided categorisation
- The categories are: two lower risk introduction pathways; a pathway after risk assessment and authorisation; a pathway for chemicals already on Australia's inventory; and a pathway for exceptional, for example emergency, circumstances
- In the first years of AICIS, risk proportionality saw finer descriptions of introduction scenarios that when catered for introduced complexity into the technical requirements
- The finer risk proportionality is described, the more complex and complicated the regulations can become
- Importation of industrial chemicals is the main route for introduction into Australia
- Introdurers can lack knowledge about the identity of the chemicals or the relationships required to access that information affecting their ability to meet regulatory requirements

Japan

- The objective of Japan's Chemical Substances Control Law (CSCL) is to prevent environmental pollution caused by chemicals that impact on human health and the eco-system
- The law, which takes a hazard-based approach to managing chemicals, was adopted in 1973 and was triggered by pollution incidents involving PCBs
- The CSCL has three main pillars: pre-market evaluation of new chemicals; a continuing management of chemicals after entering the market; and regulations and measures depending on a chemical's properties
- Three main amendments to the CSCL contribute to risk reduction by encouraging the government and industry to strengthen their management systems, improve voluntary management capabilities and eliminate concerns related to risk
- Japan is also trying to develop digital tools for evaluation, including utilisation of QSAR
- It is important to deepen the understanding of the differences between how countries manage chemicals and the ideas behind their approaches, and to harmonise them as much as possible for the benefit of all related countries
- To help this, countries should share basic principles regarding the evaluation of chemicals, as well as chemicals information and risk management methods
- There should also be a collaborative effort to develop, validate and promote alternative methods to animal testing

Challenges and opportunities

- New approach methods (NAMs) are still not able to replace all testing requirements, but to scale up their use could harmonised data requirements for regulatory assessments be specified with the relevant available NAMs?
- NAMs may be able to speed up the work of authorities in their evaluation efforts
- Advanced materials may present future challenges for regulators: do they need bespoke data requirements; are the hazards and risks atypical of traditional chemistry and could they even undermine the concept of harmonised test guidelines?
- Collaborative assessment of advanced materials to support harmonisation could help
- Data gaps for legacy chemicals remain. Clear communication of specific regulatory decisions in the absence of data may help the work to fill those gaps
- Class-based approaches to chemicals, rather than one-by-one, will help maximise the resources of regulatory authorities



PANEL 4 Increasing the Use of Economic Instruments for Chemicals Management

Context

Chemical risk management has typically focused on regulatory 'command and control' measures with less emphasis on market-based or voluntary approaches. Strong regulatory frameworks are needed. There is ample room to increase the use of economic instruments to create incentives for the private sector to shift to more proactive and sustainable chemical management solutions. It is also vital to demonstrate and communicate the (socio)economic value of both governments and industry improving chemicals management.

Moderator: Eeva Leinala Principal Administrator, Environment Health and Safety Programme, OECD

Panelists:

- Rafael Cayuela, Corporate Chief Economist, Dow
- Daniel Slunge, Director Centre for Future chemical Risk Assessment and Management, University of Gothenburg
- Sonja Haider, Senior Business and Investors Advisor, ChemSec
- Peter Korytar, European Commission, DG ENV, Sustainable Chemicals unit

Shift the market

- When considering chemicals management, people do not naturally think about economic instruments because it is a highly regulated space
- When risks are identified it is usually more appropriate to put in place regulatory measures, such as bans or restrictions
- Because of this traditional regulatory approach, economic instruments have not been used to shift the markets, particularly for highly hazardous chemicals that have been through the regulatory process
- However, countries are noticing that regulatory processes are not necessarily achieving all the aims set out to manage chemicals
- Economic instruments could fill the gaps and help shift the market to safer chemicals
- Economic instruments can come in many forms, most common a fees-based system or tax, or tradeable quotas
- Last year, the OECD introduced a chemicals management domain to its Policy Instruments for the Environment database. This shows that 398 economic policy instruments, including tax and fees, subsidies and tradeable permits, are being used across OECD member countries
- The OECD is looking at the monetised benefits of reducing chemicals related to negative health effects

Experience versus tradition

- There is a long history of using economic instruments in environmental policy, such as fees and tradeable quotas
- A fees-based approach was taken in California to phase out the use of perchloroethylene in dry cleaning operations
- The revenue was used for information campaigns, demonstration facilities and smaller grants, all of which informed on the availability of alternatives
- Norway also introduced a similar fees system in 2000, which saw a phase out of perchloroethylene
- Such a fees-based system could be applied to the EU's list of substances of very high concern (SVHC) with the aim of making it economically supportive of their substitution
- Fees generated on their use could then be invested in a research and development programmes that aim to find alternatives
- Transferable quotas is another economic-based approach that has seen successful results in environmental policy
- Could transferable quotas be used for SVHCs in the EU? They are already being used in the US and EU to phase down fluorinated greenhouse gases
- Using a similar phase-down approach via transferable quotas, the EU could set reduction targets for all SVHCs with a timeline pathway
- An equal cost to each tonne of an SVHC would be applied, unless toxicologists decided different prices should be adopted
- Companies can then trade any unused quotas or bank them for a

set period, for example three years

- However, economic instruments face challenges for their application to chemicals, including uncertainty about the effects on their use and general unfamiliarity with such approaches
- Economic instruments could complement regulations but could and should not replace them

Investors

- Investors are becoming far more aware of the material risks associated with the production, use and disposal of chemicals of concern
- The Investors Initiative on Hazardous Chemicals (IIHC) was established last year and now comprises more than 60 investment firms around the world
- Investor interest and engagement has grown partly due to the massive litigation cases over recent years, such as those related to PFAS and glyphosate
- Investors want transparency from chemical companies and downstream businesses to ensure they can make sound investment decisions
- Those in the IIHC are calling for companies to set time-bound phase out plans for persistent chemicals or products that contain them
- They also want to know what sectors and companies are developing safer alternatives, as this presents investment possibilities
- Guiding its own investment plans, the EU has developed policy that directs investors towards activities that contribute towards the objectives of the Green Deal – known as the EU sustainable finance framework
- The aim is to help finance the EU shift towards a safer and more sustainable region and includes the Taxonomy Regulation, which directs investment towards activities that contribute to the Green Deal objectives
- Under the Taxonomy, activities that lead to the manufacture, placing on the market or use of certain chemicals of concern are discouraged from investment
- The framework also encompasses a number of reporting and disclosure obligations under the Corporate Sustainability Reporting Directive (CSRD), Taxonomy Regulation and the Sustainable Finance Disclosure Regulation

'De-growth' is here

- Gross Domestic Product (GDP) is based on capturing all economic production of individuals, companies and governments
- The GDP, when adopted, did not factor in environmental externalities and planetary boundaries, which means when considering these aspects we are likely to be experiencing a de-growth phase in history
- This makes a clear business case for addressing environmental issues

- For chemicals, this requires massive change because substances are in 95% of all manufactured goods
- For example, if chemicals production and use is not defossilised and decarbonised, then society in general cannot decarbonise
- The EU Green Deal has brought about the legislation needed to transition but it has also been overwhelming for some in industry, with almost 50,000 pages of regulations written since 2019
- Implementation of these regulation is only possible with a functioning market that considers supply, demand and financing aspects
- Policy alignment that links the regulatory framework to the supply, demand and financial aspects of the markets will be key over the coming years
- Policy alignment also needs to cut across value chains, as well as regulation that reduces investment risk and clearly explains the societal value
- The chemicals industry has led the launch of an Industrial Declaration that sets out measures to boost demand for net zero, low carbon and circular products
- Economic instruments can play a part but they need to provide incentives and also ensure the market environment that enables the transition, for example a customer base for biomaterials
- Information gaps remain a major issue to sound chemicals management and a fees or tradable quotas system could reveal, for example, the amounts of SVHCs that are on the EU market, data that is currently unknown
- Another way to generate the funding to make this transition is to simply redeploy finances that currently fund activities that do not contribute to global societal and environmental goals, and redirect them into innovations that help achieve these ambitions





PANEL 5

Are Transition Pathways for Sustainability demonstrating how industrial sectors can achieve both the EU's chemicals and industrial strategies?

Context

The EU's ambition of transitioning to a green, digital and resilient economy – set out under the Green Deal and Industrial Strategy – requires the direct involvement of industrial sectors. To achieve Europe's goals, authorities in collaboration with industry are developing transition pathways for key industrial ecosystems, including chemicals, construction and textiles. The challenge of these transitional 'blueprints' is ensuring industry is fully resilient, can compete globally and at the same time tackle the sustainability objectives set out under the Green Deal and chemicals strategy for sustainability to address the most harmful chemicals.

Moderator: Leigh Stringer, Managing Editor Europe, Chemical Watch News & Insight (Enhesa)

Panelists:

- Sylvie Lemoine, Deputy Director General, Cefic
- Simon Cook, Chemicals Management Advisor, Eurometaux
- Sonja Haider, Senior Business and Investors Advisor, Chemsec
- Kristin Schreiber, Director, DG GROW, European Commission

Objectives

- The transition pathway document for chemicals is an initiative co-created with stakeholders. It is not a new chemicals strategy and does not include any new regulatory action. It is about building a business case for the transformation towards a digital, green and resilient chemicals sector
- It is the common objective of all stakeholders to have a strong, innovative and more sustainable chemicals industry in the next 20-30 years
- Everyone must be aware of what needs to be done, what industry has to do, but also what is coming up in terms of regulation so that businesses can adjust to it
- The whole idea is to make the Green Deal work in a way to preserve/boost competitiveness of EU companies
- The pathway is helpful in that it prompts everyone to change

mindsets. One way of doing this is to encourage universities to teach safe and sustainable by design

Progress

- It took 150 years to build the chemicals industry. With the 2050 goals in mind, we have about 20 to 30 years to change it and we need to change not only what we produce but how we produce. We have long investment cycles, typically 20 years, so there is no place for mistakes. And it must happen in the next decade
- To date, 11% of the 190 actions in the transition pathway for the chemicals industry document are finalised and two-thirds are still in progress
- Member states have submitted 112 initiatives so far under the pathway. Two-thirds focus on alternative feedstocks, clean energy infrastructure, digitalisation and chemical substitution
- And yet industry would like to see greater involvement of

member states in the transition pathway process to install more national governance. It is an initiative that concerns everyone

Changing industrial environment

- The current economic environment and the global context are challenging for Europe's competitiveness on the international market
- The Green Deal is enshrined in the pathway document, and the awareness is there, but it is not enough because the problem is that the outside environment has changed
- Countries like the US and China are massively supporting investments in technologies that tackle environmental challenges
- Europe needs to go faster and that's why the Antwerp Declaration, which has 10 actions, was conceived and adopted. The involvement of the Belgian Presidency of the Council of the EU, the president of the European Commission and some member states gave the political signal that this was missing
- One thousand organisations and entities have now signed the declaration that, according to industry, complements the Green Deal
- The transition pathway is very operational but industry needs both - the political signal and the operational way of managing the green transition
- The focus for the next Commission is likely to be sustainable competitiveness and enforcement. The Commission and member states need to do more to meet business and environmental goals at the same time

Metals

- In collaboration with the European Commission, Eurometaux and Eurofer are planning to produce their draft transition pathway for metals by the end of May

- There is no twin transition in any industrial system without metals
- The situation on the digital transition is similar. There are a series of electrical and electronic technologies that also depend on different metals. Metals are essential both for the clean and the digital transition. For the EU to be autonomous it needs a healthy and growing metals sector
- While there are challenges in the lifecycle stages of metals, the Green Deal creates an increasing demand for them

NGO perspective - missed opportunities?

- NGOs want to see more measurable targets for human health and the environment in the transition pathway for the chemicals industry document
- More criteria for taxonomy to identify what the chemical industry is doing in deep green activities is needed, but is not available at the moment, throwing up questions about solutions to environmental problems, NGOs say
- Are the things that sustainable chemicals investors need reflected in this transition pathway?
- While there are some notions on developing safer chemistry and safer and sustainable by design, the transition document does not make it clear that this would lead to large production volumes
- Overall, the initiative gives the impression of moving the green agenda a "tiny" step forward
- Environmental legislation is an enabler. For innovation, it is not a cost, it is not a hindrance, it is an enabler, and it is the same with sustainability reporting



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