

# **1<sup>st</sup> meeting of the High Level Roundtable on the implementation of the Chemicals Strategy for Sustainability**

**5 May 2021**

**Meeting Report**

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## Welcome and Introduction

### Welcome and Introduction

#### **Virginijus Sinkevičius, European Commissioner for Environment, Oceans and Fisheries**

Commissioner Sinkevičius welcomed the new members to the **first High-Level Roundtable** on the **Chemicals Strategy for Sustainability**. He said the Roundtable was organised to help make the objectives of the Chemicals Strategy a reality. This requires inputs from all the main actors, from science, industry, civil society and international organisations.

The selection process for stakeholders' participation was very competitive, with 116 applications received for only 28 seats. He said that he is confident the finest economic, societal and environmental representatives sit around the table. Noting that this Roundtable is virtual, he hoped they can reconvene in person in the near future.

Commissioner Sinkevičius said he knew the members of the Roundtable were all fully committed to being **ambassadors and influencers in their networks** for the societal transition to safe and sustainable chemicals, and a toxic-free environment.

The aim of the Roundtable is to **identify the obstacles** that different stakeholders face, **and find solutions together**, he said. Discussions will focus on how to make new chemicals legislation more preventive and how to boost the development and uptake of chemicals, materials and products that are innovative, safe and sustainable.

Each meeting of the Roundtable will include an update on the implementation of the Chemicals Strategy from the Commission, and a discussion focussed on a particular strategic topic. For the first meeting, the topic is the **industrial transition** to safe and sustainable chemicals.

#### **Update on the Chemicals Strategy for Sustainability**

Half a year after its adoption, the Commission remains fully committed to the Strategy's vision and the timely delivery of its actions, Commissioner Sinkevičius said. He was grateful to see so strong an alignment and engagement on the proposed ambition, including the support of Member States. In particular, he thanked Minister Matos Fernandes, for the Council conclusions adopted in March under the Portuguese presidency.

He highlighted some of the progress made on the 85 actions announced in the Chemicals Strategy. Firstly, on the revision of REACH and on the Regulation on Classification, Labelling and Packaging of Chemicals (CLP), and the just published (4 May 2021) **REACH and CLP Inception Impact Assessments** (roadmaps). He encouraged participants to provide feedback on these, and to reach out to others in their networks to do the same. These two revisions will deliver some of the main actions of the Strategy, he said, such as establishing a hazard class for endocrine disruptors, introducing a mixture assessment factor, and restricting the most harmful substances in consumer products.

Secondly, the Commission is working on defining two **key concepts** of the Strategy: **'Safe and Sustainable by Design'** and **'Essential Uses'**, with the involvement of Member States and stakeholders.

Thirdly, said Commissioner Sinkevičius, we are on track with the **'one substance – one assessment'** process. The Commission is creating a new coordination mechanism on safety assessment across chemicals legislation. It is looking to extend the public activities coordination tool (PACT), to include more legislation in REACH and CLP, and three legal initiatives will be proposed in 2022 and 2023. These actions will bring greater **transparency, predictability** and efficient allocation of scientific work on chemicals, and increase the **transparency** and **data reusability** of chemical data.

He concluded with an important announcement: the Commission is about to adopt a **Zero Pollution Action Plan**. It will complement the Chemicals Strategy for Sustainability and further drive the zero pollution ambition for a toxic-free environment, as enshrined in the European Green Deal.

## Tour de Table: Expectations on the role of the Roundtable and comments on the implementation of the Chemicals Strategy for Sustainability

### Tour de Table: Expectations on the role of the Roundtable and comments on the implementation of the Chemicals Strategy for Sustainability

#### Chair: Commissioner Sinkevičius

The Commissioner asked the members of this new expert group to address the following:

- What are your main expectations for the work of the Roundtable?
- What are the topics that you would like the Roundtable to address?
- How do you see your role as ambassadors to promote the transition to safe and sustainable chemicals and a toxic-free environment?

#### João Pedro Matos Fernandes, Minister for Environment and Energy Transition, Portugal

The EU Chemicals Strategy for Sustainability is considered as the first step towards a toxic-free environment, said Mr Matos Fernandes. It is not only a central component of the green recovery plan, but also a key initiative of the European Green Deal and its goals to make the EU climate neutral by 2050 and its economy sustainable, circular, inclusive and protective of the environment and human health.

Aware of its relevance, the **Portuguese Presidency strove to urgently adopt the Council's conclusions on the Chemicals Strategy** to send a strong political message on the EU's high level ambition as regards chemicals, both within and outside the EU.

The success of the Strategy will only be possible with **close cooperation** among the Commission, Member States and all stakeholders, he said, so this High-Level Roundtable will be an important tool to achieve its ambitious goals.

These meetings will provide a **forum for innovative ideas and inspirations** that address the challenges. We must focus on how to make chemicals legislation work in a more efficient and effective way, promoting sustainability and the circular economy, he concluded.

#### David Azoulay, Managing Attorney Director of the Environmental Health programme, Centre for International Environmental Law (CIEL)

David Azoulay said that CIEL's expectation for the Roundtable was that members work together for an effective, efficient and timely implementation of the Chemicals Strategy for Sustainability. In adopting the Strategy, the EU has laid down clear objectives and some ways to achieve them, he said, but there are some important points to consider:

- In order to design **functional solutions**, we need to look at the **holistic situation**, without any blind spots;

- It is important to **consider all the scientific data** and all the information available, for instance, about environmental justice, toxicity, and impacts on society at large;
- It is necessary to consider **precaution in innovation**. Studies show that far from hindering innovation, precaution helps in orienting innovation in a way that benefits society.

We will be here to support and help, he said, and bring the perspectives of a lot of different EU and societal stakeholders to this Roundtable.

**Anne-Sofie Bäckar, Executive Director of the International Chemical Secretariat (ChemSec)**

Anne-Sofie Bäckar said the aims of the Chemicals Strategy for Sustainability were clear, but the path to achieving them less so. Therefore, ChemSec's expectation for the Roundtable was that solutions for its implementation will be discussed. We need to find ways to protect human health and our environment, and at the same time support industry, she said. Joint discussions can help identify solutions for industry, whereby innovations and new business models deliver sustainable, non-toxic material flows.

ChemSec communicates and cooperates with many front-runner companies, said Ms Bäckar, who show how it is **perfectly possible to prosper while reducing hazardous chemicals** in their products. Companies leading the way to non-toxic chemistry are now being favoured by investors and the stock market. However, for a successful Chemicals Strategy two things are needed from the Commission:

- The Strategy must create **predictability**, as the needed changes require dedicated work and it will not always be smooth sailing;
- There is a need to establish a **mechanism**, in addition to bans and stricter regulations, **to support the transition to a non-toxic market**.

The Chemicals Strategy is set and we are here to discuss the solutions, she said.

**Heather Barker, Vice President of the International Association for Soaps, Detergents and Maintenance Products (A.I.S.E.)**

Heather Barker said that A.I.S.E. shares the goals of the Chemicals Strategy for Sustainability to protect human health and the environment, while supporting a strong and innovative future for industry. Their expectation for the Roundtable is that it establishes a real partnership, to agree on progress to achieve these goals.

Ambitious policy goals need to be supported by **clear, robust, coherent and predictable legislation**, said Ms Barker. This provides a framework for investment and ensures harmonised enforcement. Therefore, we urge the Commission not to rush the decision-making process, for REACH, CLP or other legislation, to meet tight timelines, as it needs robust analysis and impact assessment, she said. In addition:

- REACH should be **regulated on the basis of sound science**, reflecting both hazard and exposure for safe usage, and rationale for changes to this approach should be properly discussed and justified;

- Establishing **clear criteria for Safe and Sustainable by Design** should be a priority to foster innovation;
- There is need for a more consistent and joined up approach to **enforcement**, especially for e-commerce and imports.

We look forward to serving as ambassadors and as partners to find solutions together to achieve our goals, with open and honest feedback.

**Martin Bruder Müller, President of the European Chemical Industry Council (Cefic)**

Martin Bruder Müller said that the Chemicals Strategy for Sustainability is a paradigm shift and the impact on the chemicals industry cannot be underestimated, so it has to be done right. Cefic would like to see the following topics discussed:

- **Consistency** with other EU Green Deal objectives and policies, particularly climate and circularity, and exploring digital opportunities;
- Measures to **enforce** chemicals legislation, particularly regarding imported products and online sales;
- Ensuring a **predictable regulatory framework**, to provide clearer signals for investments and clarity on new concepts and definitions;
- **Safe and Sustainable by Design**, including innovation, transitional measures, and accelerating alternatives to animal testing;
- **Global dimension**, taking into account the Chemicals Strategy's impact on trade and international chemicals management.

We need to define clear deliverables, he said, and we should first focus on issues where we can **reach early consensus**, for example, how to better enforce current and new legislation, and how to speed up and fund innovation. Cefic believes that two meetings a year for this Roundtable is not enough to achieve this, he said, a point taken up by other Roundtable members (see Annex 1: Chat roundup).

Cefic is committed to serve as an effective ambassador and encourage the transition towards safer and more sustainable chemicals in the EU, Mr Bruder Müller said. He concluded with a question to the Commissioner: what does success look like for you?

**Barbara Demeneix, Professor of Endocrinology and Chair of the Endocrine Society's EDC advisory group**

Barbara Demeneix said the Endocrine Society applauds the Commission's commitment to **limit exposure to endocrine disrupting chemicals (EDCs)**. There is overwhelming evidence that EDCs contribute to the epidemic of non-communicable diseases, she said, and the link between EDC exposure and increased vulnerability to COVID-19 has been highlighted. Monitoring studies show that many consumer products contain EDCs, which end up in the environment and our bodies, with unborn babies, children and adolescents being particularly vulnerable.

The Endocrine Society has three priority goals:

- **Faster and better identification of EDCs** through a hazard-based approach under REACH and the CLP Regulation, and a new category of suspected EDCs;
- **Removal of EDCs from consumer products**, treating them like substances that are carcinogenic, mutagenic, or toxic to reproduction;
- **Strengthen data requirements for EDC identification**, and updated testing and screening methods.

In conclusion, she said, the science is cumulative and unequivocal, and it is essential to act now. You cannot wear a mask to protect yourself against endocrine disruption. Thank you for giving science a voice in this important discussion.

### **Sjoerd Dijkstra, Global Lead Strategic Marketing and Sustainability, Covestro AG**

Sjoerd Dijkstra noted that a recent acquisition (Resins & Functional Materials) boosts Covestro's ambition to become fully circular. Over the next decade, they anticipate the most radical portfolio shift the chemical sector has ever seen, due to the need to eliminate greenhouse gas emissions, introduce renewable raw materials, and design products for re-use, while guaranteeing safety along value chains.

They expect the Roundtable to deliver valuable contributions for decision-makers on how to address European Green Deal objectives and safeguard the global competitiveness of the EU chemical sector. Covestro encourages this Roundtable to identify opportunities to **strengthen legislation that will reward front-runner companies**, and further protect human health and the environment, he said.

Covestro is identifying priorities for substitution, driving increased transparency, developing product passports and digital traceability using blockchain. To this end, they would like to see **clarification of the concepts** of 'Safe and Sustainable by Design' and 'Essential Use', and a discussion of Chemicals Strategy in the international context.

In conclusion, Mr Dijkstra said, Covestro believes there is already a promising path using the strength of REACH to restrict and authorise chemicals. By working together the Chemicals Strategy and the overarching Green Deal can be successfully delivered.

### **Doreen Fedrigo, Industrial Transformation Policy Coordinator, Climate Action Network (CAN) Europe**

Doreen Fedrigo said CAN Europe were participating at the Roundtable as an NGO working on the **industrial transition to climate neutrality**, with a focus on energy-intensive industries. No industry will achieve climate neutrality by only focusing on technological decarbonisation, she said, companies will need to severely reduce resource and energy use, use low-impact materials, ecodesign products, and rethink business models. Compared to other energy-intensive industries, the chemical sector is flexible and dynamic enough to profit from new products. However, it continues to make problematic products, such as harmful chemicals and plastics that cannot be mechanically recycled.

The Roundtable is an opportunity to take a **systemic approach to chemicals**, said Ms Fedrigo, helping the sector **identify priority areas for action**. It can also contribute ideas to the updated **EU Industrial Strategy**, announced on the day of this Roundtable (5 May 2021), particularly in the industrial ecosystem transition pathways. This will help the sector meet 2030 and 2050 climate targets, alongside the interlinked environmental objectives of biodiversity protection, circular economy, and zero pollution in a toxic-free environment. All this within a wider just transformation, she said, engaging workers to make valuable contributions to societal improvements, aligned with the principles of 'do no harm', precaution and polluter pays, while also helping to provide quality, safe and sustainable jobs.

**Monique Goyens, Director-General, The European Consumer Organisation (BEUC)**

Monique Goyens said the Chemicals Strategy for Sustainability is an important milestone, not only to deliver the ambitions of the European Green Deal but also to **reduce consumers' exposure to dangerous substances**.

BEUC expects the Roundtable to be a place for dialogue and the common identification of strong, ambitious and concrete actions, and they encourage the Commission to reflect on advice it receives when implementing the Chemicals Strategy. Among the topics they would like to see discussed at the Roundtable are:

- **Stepping-up protection** against harmful chemicals, with new solutions to minimise consumers' exposure;
- **Swift action on early warning signs**;
- Delivery of real change on the ground, by encouraging Member States to **increase enforcement** actions;
- **Empower consumers** to drive the transition to a toxic-free environment;
- Achieve **policy consistency**, between the Chemicals Strategy and other policy tools, and establish synergies, especially with the New Consumer Agenda.

BEUC and its members will play a key role, said Ms Goyens, not only in bringing the consumer perspective to the policy debate, but also in mobilising consumers for the transition to a circular economy and a toxic-free environment.

**Andrea Hartwig, Professor of Food Chemistry and Toxicology, Karlsruhe Institute of Technology (KIT)**

Andrea Hartwig said the Roundtable is timely, because in chemical risk assessment a more holistic approach is needed. The transition towards green and sustainable chemistry, she believes, will require concomitant science-based toxicological risk assessment, both to substitute the most hazardous compounds with less or non-toxic alternatives, and to develop safe by design products.

To reach this goal, she would like to see the following aspects discussed:

- A **common database for toxicological data**, freely accessible for different chemical risk assessment purposes (occupational exposure limits, food-related contaminants, etc.);

- Research promoting the establishment of systems for different endpoints of toxicological concern, as preventive measures to ensure the **identification of hazardous properties before substances get into the market** and to promote **'Safe and Sustainable by Design'**;
- Research promoting **grouping of chemicals for risk assessment** based on toxicological properties (e.g. nanomaterials);
- Research promoting **biomonitoring** to assess internal exposure.

It is very important to identify risks before they occur, she said, through research, the identification of the most harmful substances, and products that are Safe and Sustainable by Design. If we replace one substance with another, we need to know the mode of action to be sure we are replacing it with a less harmful substance.

### **Nineta Hrastelj, Secretary General of the European Chemical Society (EuChemS)**

Nineta Hrastelj said that EuChemS is an independent organisation for **chemists** in Europe, who are **making an important contribution** to the safe and sustainable chemicals research and innovation.

She said their expectation for the Roundtable is that it provides a discussion platform for different groups of stakeholders, with the aim of achieving the best possible solutions towards the group's three-fold purpose, namely, supporting the Commission in achieving the objectives of the Chemicals Strategy; monitoring progress of the Strategy's implementation; and supporting the transition to safe and sustainable chemicals and to a toxic-free environment.

Members of EuChemS recognise **chemistry education** related to sustainability as a key factor in this endeavour, fuelling both **basic and more applied research**. EuChemS is committed to contributing to these efforts, she concluded. It has broad expertise across different chemistry subjects and strong connections to national chemicals societies all over Europe. Moreover, EuChemS is well positioned to stimulate these sustainability goals from an academic and research point-of-view.

### **Dorota Jarosińska, European Centre for Environment and Health of the World Health Organisation (WHO)**

Dorota Jarosińska said that the impact of chemicals on human health is substantial, though not yet fully understood. The global estimate of disease due to chemicals is 1.6 million lives lost due to exposure to selected chemicals. To facilitate the efforts of countries to implement sound management of chemicals, in 2017 the World Health Assembly adopted the WHO Chemicals Road Map. This identified concrete actions, and recognised the need for multi-sectoral chemical management.

The Chemicals Strategy for Sustainability is an innovative, important and significant implementation of the global **WHO Chemicals Road Map**, she said. As with the Road Map, the health benefits of the Chemicals Strategy will be maximised by the implementation of joined up efforts with other initiatives, like the zero pollution action plan and programmes targeting pesticides, workers' health, etc.

However, we are **hampered by not having good metrics to assess progress** in reducing negative impacts of unsound chemicals management, said Ms Jarosińska. How will we assess the extent to which the EU Strategy achieves its objectives? This could be a point for future discussion in this Roundtable. Opportunities for intersectoral action need to be explored to better manage chemicals, to strengthen the prevention of negative health impacts and to deliver equitable social benefits.

### **Génon Jensen, Executive Director of the Health and Environment Alliance (HEAL)**

Génon Jensen said the timely delivery of the Chemicals Strategy for Sustainability is a **unique opportunity for health improvements** and for the reduction of health-related costs. She noted the high stakes, for example, the role of toxic chemicals in reducing sperm counts by more than half in the past 40 years, threatening our ability to reproduce.

HEAL's expectations for the Roundtable are that the Commission urgently proceed with promises to **phase out hazardous chemicals** wherever possible, and to accelerate **safe substitution** through innovation. In particular:

- Let us be smart, regulate **groupings of chemicals** so we make quicker progress and avoid regrettable substitution, not only in Europe but also abroad through our exports;
- The Commission should make sure that national post-COVID pandemic **recovery plans do not finance chemical pollution**.

It is time to make the right health investments to implement the Chemicals Strategy. For us, it means a recovery that puts forward proposals and initiatives to beat chemical pollution and prevent diseases, concluded Ms Jensen. This is the moment to reward 'do no harm' innovation, so we can change the paradigm and reap the co-benefits to health, which we believe will be immense.

### **Ilham Kadri, CEO, Solvay**

Ilham Kadri said Solvay's leading position in the fields of science, innovation and social protection would enable it to make a significant contribution to the work of the Roundtable. She praised the diversity of the Roundtable, which will help establish indispensable trust to fulfill the ambition of the Chemicals Strategy for Sustainability. Working together, with our different views, will be essential to develop effective solutions to implement the Strategy, she said.

The Chemicals Strategy represents a **business opportunity, not a threat**, to transform Europe, its chemicals industry and the whole value chain, said Dr Kadri. Electrification, resources efficiency, digitalisation, none of these will be possible without companies like those around the table. Hence, we need the European chemicals industry to thrive while it undergoes the transformation. We need the **right conditions, incentives, competition policy, and a level playing field**. This will allow the chemical sector to remain competitive globally, while translating the Chemicals Strategy into an industrial chemical strategy for sustainability, benefitting Europe and its citizens.

## **Klaus Kümmerer, Professor of Sustainable Chemistry and Material Resources, Leuphana University Lüneburg**

Klaus Kümmerer said that sustainable chemistry is not yet commonplace, because the chemical sector is locked into current manufacturing and consumption patterns that put sustainable alternatives at a disadvantage. Scientists at Leuphana University are working to better understand the concept of sustainable chemistry and ways to move it forward, and what chemistry will look like in a circular economy, he said.

Transforming the chemical sector into a sustainable one, in line with the Chemicals Strategy for Sustainability, will require:

- **Resources** being made available, for research and education;
- **Support for new business models** and adoption of new products;
- An understanding that both **green chemistry and the circular economy** have limitations, and should be considered as building blocks in a broader overarching approach, i.e. sustainable chemistry.

That means that not only minor innovations are needed, we need big steps forward, said Prof Kümmerer. This can create a lot of opportunities for the chemicals industry, for the new business models that are needed, and for new products. However, this requires science and education, more resources, and the strengthening of science policy.

## **Rodolfo Lacy, Environment Director of the Organisation for Economic Co-operation and Development (OECD)**

Rodolfo Lacy said that the OECD's main expectations are that the Roundtable will be able to identify parts of the Chemicals Strategy where implementation would benefit from a **stronger international intervention**, through collaboration with non-EU countries. A stronger international integration, especially through regulatory cooperation, could have significant economic benefits for economies. For instance, a recent OECD report showed how the OECD's chemicals programme saves industry and countries large amounts of money.

There are three topics that the OECD would like to raise in the Roundtable:

- The development of **innovative methods** for identifying hazardous substances and criteria for their classification (e.g. endocrine disruptors), which is at the core of the OECD chemicals programme;
- The **collection and dissemination of data** and their use for different regulatory settings worldwide;
- The development of **criteria for Safe and Sustainable by Design chemicals**, including guidance for identification and selection of safer alternatives, such as sustainable plastics.

## **Annegaaik Leopold, Past President, Society of Environmental Toxicology and Chemistry (SETAC) Europe**

Annegaaik Leopold said that SETAC Europe was a scientific society with a unique tripartite membership of academia, business and government. It provides a platform

for discussing science, she said, enabling it to contribute to a balanced science-based input at the Roundtable.

SETACs expectations of this Roundtable, also provided in their written responses, are to safeguard that the decisions taken for the implementation of the Chemicals Strategy for Sustainability are always justified against the background of the latest and most **robust scientific evidence**, she said. The topics SETAC Europe would like to discuss are:

- Building a **collaborative effort** to engage with the challenges and opportunities in the implementation of the Chemicals Strategy;
- Creating a **space for advice** based on independent science in a transparent, multi-stakeholder way, taking into consideration all relevant perspectives;
- Ensuring that **regulations are flexible**, allowing for integration of new science approaches as they develop.

SETAC Europe will be ambassadors of the Chemicals Strategy's objectives through the continuous dissemination of the key points in discussion with the society's 5 000+ strong membership, explained Ms Leopold. This will also carry the message beyond Europe, positioning the Chemicals Strategy as an exemplar for the development of policies and regulations for sustainable and safe chemicals globally.

**Monika MacDevette, International Environmental Technology Centre Economy Division, United Nations Environmental Programme (UNEP)**

Monika MacDevette said that UNEP welcomed the Commission's vision for a toxic-free environment, and would like to contribute to increasing the ambition of the Chemicals Strategy for Sustainability's implementation. UNEP's expectation for the Roundtable is to be able to promote and contribute to the implementation of the Chemicals Strategy in three key areas:

- Prioritising concerted action within an **international framework** to minimise impacts on human health and environment;
- Fostering **regional and bilateral initiatives** in mainstreaming management of chemicals at global, regional and national level;
- Promoting **collective action and innovation** for sound chemicals management throughout their life cycles.

In particular, UNEP views this forum as an opportunity for strengthening and coordinating partnerships between sectors and stakeholders, promoting mutual learning and sharing of effective policies, good practices, experiences, initiatives and green technologies, within and across countries and local contexts, she said.

Other UNEP goals relate to shifting industry's behaviour through transparency and accountability, eliminating the use of chemicals of high concern, enforcing stricter monitoring, and promoting sustainable chemistry education and innovation as important drivers of change.

### **Emily Mclvor, Advisor, PETA Science Consortium International (PSCI)**

Emily Mclvor said that animal protection NGOs occupy a distinct position within the chemicals debate. PSCI fully supports the highest ambitions for health and environmental protection, she said, and we are keen to **work with academic and industry scientists** to achieve those aims. Article 1 of REACH, describes the purpose of the Regulation as ensuring “a high level of protection of human health and the environment, including the **promotion of alternative methods** for assessment of hazards of substances, [ . . . ] while enhancing competitiveness and innovation”, and each of these **three objectives** are equally relevant today.

The transition away from animal testing and towards application of new and better methods is already happening within companies, in particular in those companies working to implement the EU cosmetic testing and marketing bans, noted Ms Mclvor. PSCI’s experience is that those bans paved the way for the rapid development of non-animal technologies, which are improvements on animal tests.

She has two requests for the Roundtable:

- That it can set up a sub-group to facilitate the **transition to new and better non-animal test methods**;
- That it embraces the strongly held desire of citizens and the European Parliament that the **cosmetics animal test bans be upheld and animal protection promoted**.

The Roundtable is about seeking common ground, concluded Ms Mclvor, and she believes the transition away from animal testing provides a win-win for all of us and for the Chemicals Strategy as a whole.

### **Sylvie Nicol, Executive Vice President Human Resources and Infrastructure Services, Henkel**

Sylvie Nicol said that for many decades Henkel has applied the principles of sustainability to their products, and this experience is what they are bringing to the table. We expect the establishment of a shared vision of sustainability between all members of the Roundtable, on how to achieve the right balance between the objectives of the Chemicals Strategy for Sustainability and the foreseen effects on the chemicals industry.

In the Roundtable, Henkel would like to discuss the **coherence of regulatory measures** within the Green Deal ambition, to ensure that all measures logically fit together and create a mutual benefit. How to implement the Chemicals Strategy should therefore be in the centre of the debate, said Ms Nicol, together with a **clarification of key conceptual elements** of the Chemicals Strategy before regulatory action is initiated. Regarding value chains, a **critical assessment of regulatory activities** is also needed.

Members of the Roundtable should ensure that the right scientific expertise is consulted to back up decisions, and communicate examples meeting the objectives of the Strategy already in the regulatory framework, she said. This should form a solid

basis for jointly finding workable solutions to implement the Chemicals Strategy's ambition and to help overcome different viewpoints.

**Christina Rudén, Professor of Regulatory Toxicology and Ecotoxicology, Stockholm University**

Christina Rudén expects the Roundtable to provide lively discussions, curiosity and many questions, to be answered patiently and politely.

She noted that members all had different backgrounds and perspectives, and this is an opportunity to learn from each other. True commitment is also expected, she said, to develop our society towards sustainability. She expects unprecedented progress, as **the time has come for a true green transition**, and we have the opportunity to write a chapter in history that will make our children and grandchildren proud of us.

Prof Rudén thinks the overarching challenge is to find ways to **work together towards a common goal**. Such collaboration can help build momentum and enable Roundtable members to act as global fore-runners. True success, she concluded, would be concrete results that have a **genuinely positive impact on society**.

**Stephen Russell, Secretary-General, ANEC (the European Consumer Voice in Standardisation)**

Stephen Russell said consumers want to have access to only safe products. Although ANEC's core mission is to represent the consumers' interest in standardisation, he said, **a standard is only as good as the law it supports**.

ANEC wants the Roundtable to ensure that the implementation of the Chemicals Strategy for Sustainability is efficient and effective across all sectors, he said. Given ANEC's key aim of protecting consumers from hazardous chemicals, they would like the following to be discussed:

- Development of a **consistent approach** to chemicals in consumer products;
- **Identifying gaps and failings** in the present regulatory framework;
- Identifying product areas where further **regulatory measures** are needed;
- Development of **specific regulatory frameworks** for chemicals in certain consumer products;
- Identification of a full set of **chemical rules**, including test protocols;
- Aiding **transparency** by ensuring information on chemicals is available throughout supply chains;
- **Grouping of chemicals** when setting limits/bans, taking into account cocktail and low-dose effects.

As ambassadors it is important to agree on common approaches to transparent communication in our respective networks. The Roundtable's dialogue should also extend to the international level, he concluded, to tackle the challenge of imported products that contain chemicals banned in the EU.

**Kateřina Šebková, Director, National Centre for Toxic Compounds (RECETOX), Czech Republic**

Kateřina Šebková said that RECETOX bring their experience of global chemical management to the Roundtable. They expect the Roundtable to be a forum with a common understanding that the situation requires the action of all stakeholders, but with an acknowledgement that the ways and means to achieve the transition to safe and sustainable chemicals could differ significantly.

RECETOX would like to see several topics discussed:

- **Transparency**, because the Chemicals Strategy states that transparency of information should be expanded to other pieces of legislation, following the steps in food legislation;
- **Responsibility**, because a lot of responsibility has been put into the hands of the chemicals industry, and enforcement is insufficient;
- **Strengthening the role of authorities** is therefore a very big question here;
- **Innovation**, and its meaning for different groups.

As ambassadors, we should make the Chemicals Strategy and its goals more widely known Ms Šebková concluded.

### **Malene Teller Blume, Quality Manager, Coop Danmark**

Malene Teller Blume said Coop Danmark, the biggest retailer in Denmark, expects to be a strong ambassador for the EU Chemicals Strategy for Sustainability. The consumer-owned cooperation has worked toward sustainability for many years, she said. They hope the Roundtable will focus on how to use the **precautionary principle in innovation**, and how to **work with suppliers** to develop more sustainable products.

Coop Danmark is focused on endocrine disruptor chemicals, and is a front-runner in the phasing out of many hazardous chemicals, she said. This is helped by the use of own-label products, contact with scientists, NGOs and authorities, and dialogue with suppliers to support good and safe chemical substitution.

We see this Roundtable as a strong initiative to bring **more collaboration** across industries, NGOs, authorities, experts, and us as a retailer, said Ms Teller Blume. This can accelerate safe and sustainable innovation. We hope this network will focus on solutions and how to involve consumers to choose **more sustainable products**, and help build the business case for bringing more sustainable products to the market.

### **Guy Thiran, Director General, Eurometaux (European Metals Association)**

Guy Thiran said that Eurometaux represents companies who produce, transform and recycle metals in Europe. Eurometaux welcomes the Roundtable, he said, and would like the following topics discussed:

- **Consistency and coherence** with other EU European Green Deal objectives and policies, such as climate and circular economy;
- **Predictable regulatory framework** to further encourage investments and innovation;
- **Enforcement** to guarantee a level playing field;

- **Better regulation** processes underpinning policy options aiming to prevent harm to people and the environment;
- **Global dimension**, particularly trade and international chemicals management, to regulate imports containing hazardous chemicals;
- **Innovation** towards sustainability;
- A better understanding of the **Essential Use concept** and its added value, and how it can ensure coherence with other EU policy objectives.

Eurometaux is committed to serve as an effective ambassador for the metals and inorganics sector, said Mr Thiran. We would like to introduce our **Safe and Sustainable Metal** concept to the discussions, which includes societal, innovation and cost-effectiveness aspects, and considers the full lifecycle of substances.

**Joel Tickner, Professor of Environmental Health, University of Massachusetts Lowell, and Director of the Green Chemistry and Commerce Council, USA**

Joel Tickner applauded the ambitious vision of the Chemicals Strategy for Sustainability, but noted that this has to be tempered with the pragmatism needed for its implementation. Our expectation for the Roundtable is for constructive dialogue and significant progress in **moving from principles to concrete actions**, he said.

The topics he would like to see discussed are:

- **The need to address barriers** to the commercialisation and adoption of alternative, safer and more sustainable chemicals, including the cost-effectiveness of existing chemicals, manufacturing changes, and a regulatory structure favouring chemicals already on the market;
- **Policies and strategies that de-risk companies** scaling up adoption of safer and sustainable chemicals;
- How to utilise scientific data on chemical hazards to prioritise **Safe and Sustainable by Design** research and innovation.

Strong regulatory policies are critical but not enough, he said, we need to scale the supply of safer, more sustainable alternatives. This requires collaboration, compromise in value chains, and adequate technical and capacity support and incentives, particularly for SMEs, to adopt innovations and avoid regrettable substitutions. The goals of the Chemicals Strategy will have to be backed by adequate resources, he concluded.

**Hervé Toutain, President, Cosmetics Europe**

Hervé Toutain said that Cosmetics Europe's expectation is that the Roundtable will, initially, define and agree its objectives, to set a roadmap with key milestones. They also expect the Roundtable to identify and provide solutions to roadblocks to the transition towards safe and sustainable chemicals.

The suggested topics for discussion:

- Priorities and practical steps for this critical transition, considering the **specificities of each industry sector**, the whole value chain, the diversity of

companies, and the inter-connectivity of the Chemicals Strategy with other vertical legislations;

- Making the implementation of the Chemicals Strategy **predictable** to all actors, and keeping it **consistent** with other European Green Deal objectives and policies;
- Facilitating the **definition of new concepts** introduced in the Chemicals Strategy, namely 'Safe and Sustainable by Design' and 'Essential Use'.

Cosmetics Europe will promote the Chemicals Strategy as a viable international framework for chemicals management, said Mr Toutain. While differences may exist on aspects of implementation, the goals of the policy can only be achieved if all stakeholders work together, find common ground, and help the Commission develop effective and practical solutions.

### **Michael Vassiliadis, President, industriAll European Trade Union**

Michael Vassiliadis said that many of the workers which IndustriAll Europe represents are in the chemicals industry, including chemicals experts. The Federation's contribution to the Roundtable will help reassure workers that the Green Deal, and especially the Chemicals Strategy for Sustainability, is **not a threat, but an opportunity for sustainable jobs**, he said.

IndustriAll Europe's expectations are that the Roundtable discussions achieve a balance, in which social, economic and environmental dimensions get equal attention. Topics suggested for discussion include:

- **Safe and Sustainable by Design**, with clear definitions for "essential uses", "non-essential uses" and "toxic-free environment" (e.g. sanitation relies on "toxic" substances); balance risks and benefits of chemical products;
- **Innovation through financial instruments**, and research and innovation programmes;
- **Identification of strategic value chains**;
- Making **substance assessment processes simpler and more transparent** ('one substance, one assessment').

Recognising and **supporting workers as innovators** and enablers of innovation in the Chemicals Strategy is important, including reskilling and upskilling measures. Based on my experience in Germany, said Mr Vassiliadis, without innovation in the chemicals industry to create new products the Green Deal will have no chance of success. It is absolutely necessary to have workers join this debate.

### **Michael Warhurst, Executive Director, CHEM Trust**

Michael Warhurst described CHEM Trust as an expert chemicals policy NGO, with long experience of EU chemicals policy. They welcome the Roundtable's focus on implementing the Chemicals Strategy for Sustainability, including the removal of hazardous chemicals from consumer products and addressing exposure to chemical mixtures. These are not new issues, he said, and now really is the time to move forward, for example, REACH needs to speed up.

Dr Warhurst stressed the need to end the current disruption to innovation, caused by moving from one problematic chemical to another similar one, and instead **promote innovation** to alternatives that are Safe and Sustainable by Design. This is what will help European industry **lead the global transition to sustainability**, not fighting old battles about old chemicals, he said. Industry should focus on rapid innovation towards safe and sustainable approaches, not continued paralysis by analysis.

It is important that the Roundtable does not take over from the processes around the Chemicals Strategy already in place, such as those involving the European Parliament and Council, he concluded. The Roundtable is a panel to discuss, and I think it is a positive way forward, but it is not a place to stop action on chemicals policy.

### **Jeremy Wates, Secretary-General, European Environmental Bureau (EEB)**

Jeremy Wates said the Chemicals Strategy for Sustainability marks a pivotal moment for European chemicals policy. The EEB expects the Roundtable to act as a consultation platform, making recommendations to the Commission on how best to achieve the objectives of the European Green Deal and the Chemicals Strategy in particular.

The starting point is to **recognise that we are not in a good place**, he said, with chemical pollution even in remote corners of the globe, in the air we breathe and food we eat. It is time for policymakers and regulatory bodies to comply with their obligations to protect people and the environment.

The EEB would like to see the Roundtable discuss:

- How to improve and **speed up protection from hazardous chemicals**, including an urgent phase out of endocrine disruptors;
- **Coherence and synergies within the regulatory framework**, so all policies (e.g. climate, circular economy) align with the goal of a toxic-free environment;
- How to **boost chemical substitution** and green chemistry innovation;
- The application of the **polluter pays** and **precautionary principles**;
- How to **clean the circular economy** from hazardous chemicals.

The EEB and its members can bring the NGO perspective to the Roundtable, he concluded, and mobilise their diverse network for the transition to a toxic-free environment.

### **Veronique Willems, Secretary-General, SMEunited**

Veronique Willems said that SMEunited's main expectation of the Roundtable is to guide the **implementation** of the Chemicals Strategy for Sustainability in a way **that is feasible for Small and Medium-sized Enterprises (SMEs)**. SMEs are active in the whole chemicals value chain, from suppliers of raw materials to producers of chemicals to end-users of those products, she said. We will bring to the table concrete proposals based on the everyday reality of SMEs.

Those proposals for discussion focus on:

- General **simplification of the chemicals legislation** to allow SMEs to comply without increased investments in staff resources or external advice;
- Making sure there is real **technical, financial and scientific support** for SMEs, who do not always have adequate resources, for example, to find alternative substances or innovate;
- Showing a **greater autonomy for European chemicals production**, making sure new raw materials can also be produced in Europe, which will also increase resilience of those chemical producers in Europe, especially SMEs.

Ms Willems said that she will kick-off her role as an ambassador by informing member SMEs of the Roundtable's work and get their views for future contributions.

### **Marcel Wubbolts, Chief Science and Sustainability Officer, Corbion**

Marcel Wubbolts introduced Corbion as a technology front-runner. The Dutch company's main expectation of the Roundtable is that it delivers the maximum ambition within its mandate, as a result of its members acting as ambassadors with a common voice.

If industry only keeps talking to industry we create echo chambers that won't achieve much, he said. Therefore, I am looking forward to hearing what NGOs, academia and others have to say, and how we as industry can come to agreements as much as possible.

Maximum ambition also means helping the Commission to implement the Chemicals Strategy as fast as possible, said Dr Wubbolts. Corbion will mainly be interested in how to promote solutions for the most **sustainable and clean ways to manufacture chemicals**. At Corbion, for instance, they have accelerated the shift from fossil-based feedstocks to bio-based feedstocks in the manufacturing of chemicals. I would be happy to share our experience with other Roundtable members, and I expect to learn from them about how we can improve our own business, he said.

**Commissioner Sinkevičius** concluded this session of the first High Level Roundtable on the implementation of the Chemicals Strategy for Sustainability.

The aim, he clarified, is firstly to get to know one another and hear everyone's expectations. The Roundtable will support the achievement of the objectives of the Chemicals Strategy; monitor the progress of implementation; and support the transition to safe and sustainable chemicals. It will complement legislative and regulatory consultations and provide advice on better regulation.

## **Discussion: Social and economic dimensions for the industrial transition to safe and sustainable chemicals**

Discussion: Social and economic dimensions for the industrial transition to safe and sustainable chemicals

### **Introduction**

#### **Virginijus Sinkevičius, European Commissioner for Environment, Oceans and Fisheries**

This session will focus on **the industrial transition** to safe and sustainable chemicals, Commissioner Sinkevičius said. This is a key pillar of the Chemicals Strategy, but it is much more than that, it is absolutely vital for putting the European economy on a more sustainable path in line with the vision of the European Green Deal. The Green Deal has four main policy goals, which are all interlinked and together they will drive the societal transition: **climate neutrality, circular economy, biodiversity protection, and the zero pollution toxic-free ambition**. We need safe and sustainable chemicals for all of those goals, explained the Commissioner.

In Europe, we have the scientific and technical capacity to achieve these goals, he said. Our front-runners are already showing it is possible to use chemicals that are safer and more sustainable, but they face economic and technical barriers. We need to find ways to have more of those front-runners, noted Commissioner Sinkevičius, and we need more industrial uptake.

#### **Thierry Breton, European Commissioner for Internal Market**

The Chemicals Strategy for Sustainability was adopted last October. Now we have vaccines, including those developed by chemical companies, and are reopening our borders and industry, so it is a good time to step up progress, said Commissioner Breton.

Chemicals are essential for society, and the chemicals industry is the fourth largest in the EU. The chemicals industry and its value chains need to move to more sustainable chemicals, he said. The transition to chemicals that are safe and sustainable by design is not only a high environment and health priority, it is also a great economic opportunity.

As announced in the Chemicals Strategy, the Commission wants to improve the clarity of the regulatory framework, which is too complex, he said. We want to support the EU chemicals industry by creating a level playing field and by making the EU an attractive place to invest in. This includes strict controls and bans on the imports of consumer products containing chemicals that are restricted in Europe.

We intend to create a business environment where companies can flourish and compete because of their ability to innovate, Commissioner Breton said. It is evident that the EU chemicals industry and its value chains are keen to transform to become safer and greener, and companies are seeing the potential of sustainable production.

However, he said, we know the chemicals industry faces many challenges, including international competition and high energy prices. These many challenges must be addressed when implementing the Chemicals Strategy.

Another thing about the transition is that it implies major investment in technology and infrastructure. The Commission will support Member States through green investment, and research and innovation programmes, low-carbon solutions, innovative business models, and the upskilling of the workforce.

### **Exchange of experiences and views on how to support the industrial transition: best practices, policy tools, investment needs**

#### **Chair: Thierry Breton, European Commissioner for Internal Market**

The first thing I want to ask you around the table, said Commissioner Breton, is if you have **experiences of good practices or success stories to share about a transition to safe and sustainable chemicals that has a competitive advantage**. What are the success stories, from which we can learn?

Another question is what do you expect from the Commission? What are **the most pressing investment needs to ensure the industrial transition to safe and sustainable chemicals**, for example, in terms of technology or infrastructure?

We are also interested to hear your views on how to **monitor the transition** and which key indicators would be best for you, and what you think are the **main policy tools which can support the transition to safe and sustainable chemicals**.

#### **João Pedro Matos Fernandes, Minister for Environment and Energy Transition, Portugal**

Safe and sustainable chemicals are the future, said Mr Matos Fernandes, enabling a new relationship with the environment and a commitment to the next generation. We are fully aware of the **urgency of the implementation** of the Chemicals Strategy for Sustainability. It will ensure improvements in human health and environment protection, while boosting innovation and competitiveness through the production and use of safe and sustainable chemicals. The **new lifecycle approach** that takes into account the toxicity of chemicals at all stages of their existence will prevent hazardous chemicals from entering products at the design phase, he said. The transition to safer and more sustainable substances, materials and products will also lead to a cleaner circular economy. He concluded by noting that Member States are fully committed to the implementation of the Strategy towards a transition to safe and sustainable chemicals and a toxic-free environment.

#### **Marcel Wubbolts, Corbion**

Corbion has a large **collection of solutions** based on safe and sustainable chemistry, said Marcel Wubbolts. These include the production of natural ingredients for food preservation; biobased plastics from sugar that reduce greenhouse gas (GHG) emissions by 75% compared to petrochemical plastics; biodegradable and safe solutions for home and personal care; innovative coatings, for instance, for slow-

release fertilisers; and self-healing concrete. These are proven concepts, but the market uptake could be better, he said.

The main **policy tools** to support the industrial transition, according to Corbion, will aim to:

- **Improve availability of sustainable feedstocks** to replace fossil fuels in the manufacturing of chemicals;
- **Improve the metrics to evaluate sustainable products** that are currently favouring fossil fuels (in some cases petrochemical solutions are still promoted more than new solutions);
- **Implement lifecycle analyses** taking both economic and societal effects into account, in the short-term but also up to 2050 (climate neutrality target).

Forthcoming EU legislation, in the opinion of Corbion, should also reward not just reductions in Scope 1 and 2 GHG emissions (related to energy), but also Scope 3 emissions (coming from key raw materials and transport). As a Roundtable, I think we should focus on all three, concludes Mr Wubbolts.

### **Veronique Willems, SMEunited**

Compliance tasks take time, said Veronique Willems, which small and medium-sized enterprises (SMEs) could spend on innovation. **Investment** should foster entrepreneurship and cooperation between research institutions, universities and SMEs, and **synergies between big and small companies** in the value chain. Sufficient financial support is also required for vocational **education and training**, to meet the changing qualification needs of the new economy.

Looking at **best practices**, SMEunited has been involved in projects that bring SMEs together and exploit business opportunities related to sustainability. These projects include some aiming to improve resource use efficiency and the circular economy in different sectors. SMEunited recommend three approaches to promote best practice:

- A dedicated and constantly updated **website** devoted to sustainable chemicals, in all EU languages, with case studies;
- Showcase best practices at **events** at EU, Member State and regional level, and finance projects (using EU programmes) to duplicate those best practices;
- Use **outreach** of SME organisations and also **strengthen their capacity**.

The EU's **current regulatory approach is complex** and burdensome for SMEs, said Ms Willems. Therefore, a transition that brings SMEs on board needs:

- **Simplification** of chemicals legislation;
- **Proportionality** with more emphasis on cost-benefit assessments and a large set of regulatory alternatives;
- **Fairness**, to establish a level playing field, close loopholes in enforcement, and remove the disproportional bureaucracy burden on SMEs.

### **Jeremy Wates, EEB**

The EEB considers the following as important to support the industrial transition:

1. A **financially sustainable transition**, based on both **incentives** to industry and **disincentives** to the production and use of hazardous chemicals (e.g. taxes, fines), in line with the **polluter pays principle**, to make it fairer for companies investing in sustainable chemicals;
2. A **strong regulatory framework**;
3. Tough **enforcement** of legislation;
4. Change the old view that the **precautionary principle** and **innovation** are competing opposites. Apply the precautionary principle to determine the direction of innovation;
5. Regulators and industry need to be ambitiously **future orientated**, recognising that the future is sustainable chemicals, materials, products and technologies, so keeping the EU as a global leader;
6. **Robust trade measures** to protect the EU's leadership position;
7. **Avoidance of trade-offs** with other policy goals, for example, the use of hazardous chemicals in technologies to combat climate change should accelerate their substitution, not prolong their use;
8. The **regulatory framework should support front-runners** researching and providing safer alternatives, and help **downstream users** towards a transition to safer alternatives;
9. **Transparency**, especially for information on substances present in materials and consumer products, and **traceability** to allow authorities to act and allow consumers to make informed choices. Incorporating chemicals information in a **product passport**, for example, would allow an **early warning system** for identifying new chemical threats;
10. The industrial transition to safe and sustainable chemicals must **respect planetary and social boundaries**.

### **Michael Vassiliadis, IndustriAll**

We need to find a way to make the Industrial transition very concrete, said Michael Vassiliadis. This will help in the difficult task of phasing out problematic products, and securing the needed investment and innovation.

At the end of the day, as a trade union movement in Europe, we are very supportive of a transition to a green future, he explained, but **the details need to be clear**. This includes setting out how to build a framework for chemical companies to innovate and invest in new production sites throughout Europe. It is also important to ensure that the experts in my membership will support the path to a green chemical future because they are motivated to support it, said Mr Vassiliadis.

The transition must be backed by **real investment**, otherwise I think we will lose the support of the people. My part in the Roundtable will be to help ensure that my trade union members and the public will support a sustainable future, he said. Mr Vassiliadis pointed to his experience through the energy transition in Germany and asked for a holistic approach, with a view to the most impacted regions, otherwise worker and society support will be lost.

## Guy Thiran, Eurometaux

**Investment** is needed in areas that may become bottlenecks for the Green Deal objectives, said Guy Thiran. For instance, investment in **new 'closed loop' systems** for managing end-of-life materials, including carrier metals used to recycle other metals, and **capacity expansion projects** able to reduce dependency on critical raw materials. We also think that investments in Europe, including in mining, are preferable to imports from competing regions with non-equivalent safety and sustainability standards, said Mr Thiran.

Eurometaux has developed a **Safe and Sustainable Metal** concept, which considers all aspects of sustainability relevant for metals and most inorganic compounds, including mixtures and complex products. Our industry has already started the transition, for example, developing closed loop application for batteries and voluntary responsible-resourcing initiatives for metals or minerals, he said.

**Policy tools** can encourage this sustainable transition, and Eurometaux highlights:

- The fine-tuning, adjustment and better enforcement of **existing policy tools**;
- **Clear, timely definitions** and impact assessments of the concepts introduced by the Chemicals Strategy, for example, Safe and Sustainable by Design, Essential Uses, 'most harmful chemicals', 'non-toxic material cycles' and 'substances of concern';
- A flexible and result-driven **sectoral approach** which aligns the Chemicals Strategy with other policies to deliver on Green Deal objectives;
- A new, **independent mechanism to monitor and measure the coherence and consistency of the Chemicals Strategy** with other EU and international policies;
- A **value chain approach** aligned with the **14 industrial ecosystems** in Europe to enhance coherence;
- Policy and funding **support for digitalisation tools** to improve traceability through the value chain, and recyclability.

## Christina Rudén, Stockholm University

The task is to develop a **regulatory system** for the safe and sustainable use of chemicals, said Christina Rudén. The system should be:

- **Pro-active**, to identify hazards before people and the environment are exposed. This requires high-quality data to ensure robust pre-market hazard assessment. The principle that industry is responsible for the safety of their products needs to be clarified, and the polluter pays principle strengthened;
- **Protective**, to ensure a high level of protection, including for sensitive subpopulations, by identifying, phasing out or limiting the use of hazardous chemicals. Total exposure should also be reduced to account for mixture effects;
- **Transparent** along supply chains. In a system where manufacturers are responsible for assessing their own products, sufficient resources to control the

quality of this work must be secured, to ensure integrity and objectivity in data and assessments;

- **Innovative**, with investments to support research and education. Innovation and precaution must go hand-in-hand, innovation must be sustainable, and industrial front-runners should be encouraged;
- **Comprehensive**, as several issues need to be tackled in the transition to sustainability, including climate change, biodiversity loss and chemical pollution, so solutions must tackle them all at the same time.

### **Sylvie Nicol, Henkel, and on behalf of A.I.S.E. and Cosmetics Europe**

We consider that current chemicals regulation is fit for purpose and the safe use of chemicals is a reality, said Sylvie Nicol. In relation to **investment needs**, she highlighted three elements:

- Future industry competitiveness will depend on **market-based incentives** to deliver on the Green Deal objective (rather than a prescriptive regulatory framework);
- **Innovation** needs a market to move away from its R&D status, so it is vital to connect the chemicals industry and consumers' expectations;
- **Consumer demand** will influence investment needs for products.

In terms of **best practice**, at Henkel sustainability has been mainstreamed into in-house production of chemicals products, she said. The safe and sustainable production and use of chemicals has required a conceptual enlargement for the application of chemical formulations in goods and services. The transition has therefore started.

Relating to **policy tools**, Ms Nicol highlighted that a successful transition demands the precise definition of major new concepts, such as 'Safe and Sustainable by Design', 'Essential Uses' and 'most harmful chemicals', in line with science, and better regulation principles. Policy should facilitate a value-chain approach that ensures Chemicals Strategy implementation delivers on all the objectives of the Green Deal, she concluded; and, particularly for cosmetics, finding alternatives to animal testing requires innovation at ingredient-level.

### **Rodolfo Lacy, OECD, and on behalf of UNEP and WHO**

Speaking for the three international organisations at the Roundtable, Rodolfo Lacy said that at the core of the industrial transition is the question of what chemistry is needed to move forwards. To respond to this challenge needs massive **investment in new chemical solutions**. It is likely that many new chemicals with novel properties will be introduced in the market in the near future, he said.

We stress that human health and environmental considerations are strongly integrated, to ensure that chemical solutions are safe and sustainable, said Mr Lacy. This should be the case at all stages of development and application, taking into account the needs of all civil society, particularly vulnerable groups.

To align financial flows to safe and sustainable chemical solutions, the development of criteria for what constitutes these chemicals is crucial, he said. Safety aspects also need to be integrated early to ensure that novel chemical solutions are actually safe and sustainable. That means cost-effective tools are necessary to allow rapid screening of hazardous properties for regulatory purposes. It makes sense to develop those within international arenas, such as the OECD Chemicals programme, said Mr Lacy: we look forward to being able to contribute with our tools and policy advice.

### **Klaus Kümmerer, Leuphana University Lüneburg / ISC3**

Sustainable chemistry is not yet commonplace because the existing chemical sector is highly integrated into current manufacturing and consumption, putting sustainable alternatives at a disadvantage, Klaus Kümmerer said. Transforming the chemical sector in line with the Chemicals Strategy for Sustainability will provide business opportunities, but needs:

- **Resources** for sustainable chemistry, including for research and education;
- **Support** for new business models, new products and their adoption within and outside the chemical sector;
- An **understanding** that both **green chemistry** and the **circular economy** have limitations, and should only be considered as building blocks within the broader approach of sustainable chemistry.

In particular, he emphasised the need for a better scientific understanding of **sustainable chemistry** and **Safe and Sustainable by Design**.

Sustainable chemistry should start by considering the function and service needed, and contribute in a sustainable manner that addresses whole lifecycles, going far beyond product supply and value chains. We need to use all the knowledge along the entire lifecycle, he said, and include ethics and fairness for all stakeholders.

Safe and Sustainable by Design also requires a systems approach, explained Prof Kümmerer, first thinking about the system before specific chemicals. Chemicals and products must be assessed at the beginning of their lifecycle by taking into account their end-of-life. This needs strong cooperation, a global perspective, and a broad understanding of 'essential use', meaning essential for society.

### **Martin Brudermüller, Cefic**

The chemicals industry is facing a digital transition, targets for climate neutrality by 2050 and, uniquely among industrial sectors, the need to become fully circular and sustainable. That is a massive transformation, said Martin Brudermüller, requiring many investment decisions. Chemical demand is growing globally, and a key question is how much of this will be met by European companies. In particular, how can the chemical sector make these transitions, while remaining a world leader?

Today (5 May 2021) the Commission launched the **Industrial Strategy**, he said. This has a strong focus on value chains and crucial materials for Europe's transition. We support the Commission's drive to strengthen the sector, but the speed of Europe's transformation on climate and toward sustainable chemicals is different from

elsewhere in the world, he said. A key performance indicator is how much investment in new chemical technology in Europe can be achieved.

In this context, policy tools should focus on:

- **Stability**, as Europe has the leading chemical regime in the world, so the REACH reopening needs to remain targeted and limited;
- **Coordination**, with REACH remaining a centrepiece for chemicals policy;
- **Enforcement**, including enforcement by Member States on imports into Europe, including internet sales;
- **Standardisation**, supported across the world and by government public procurement;
- **Innovation**, including the setting up of a large-scale innovation programme for those products where no alternatives currently exist.

**Safe and Sustainable by Design** is considered by industry as the cornerstone for achieving a balance between improving chemical safety and maintaining industry's competitive edge globally, at the same time. Most importantly, said Mr Bruder Müller, we need a **smart regulation system** that rewards more than punishes, that supports investments, creates markets, and that has as little complexity as possible.

Cefic called on the Commissioner to follow the Chemicals Strategy with a chemicals industry transformation strategy, to ensure its success while delivering the Green Deal.

### **Anne-Sofie Bäckar, ChemSec**

Europe aims to have an industry at the forefront of innovation, said Anne-Sofie Bäckar. Regulation and, in particular, anticipation of regulation drives chemical substitution and steers innovation in the right direction. Therefore, one focus for the Roundtable should be the development of tools to support the chemical sector's transition towards more sustainable chemical alternatives.

To support this transition, the EU needs to **support and invest in the innovative companies leading the way**. In building a resilient industry, decision makers must also accept that not all companies will survive the necessary changes, meaning that companies should not be saved at any cost, she said.

Today, producers of safer alternatives risk being disadvantaged and may move production from the EU because of lack of market options, explained Ms Bäckar, and this needs to change. ChemSec are in contact with many European companies well on their way to sustainability. A fully implemented Chemicals Strategy will greatly support their work and ambitions for the ongoing transition. These **companies would benefit from stricter regulation**. For example, many companies are struggling to phase out PFAS, she said, and regulation would help them develop alternatives and communicate this along supply chains.

To summarise, she said, European citizens require a non-toxic future. With the right balance of carrots and sticks the aims of the Strategy can be fulfilled, and the EU will have a **chemicals industry fit for the future**.

## **Discussion**

### **Chair: Commissioner Breton**

#### **Michael Warhurst, CHEM Trust**

The key thing with innovation is that it is not inevitably good, said Michael Warhurst, just look at the scale of innovation in online fraud. We should be clear about the direction of innovation and avoid problematic innovations, such as reusable bamboo cups. We also need to address the fact that established chemicals are generally cheaper than new products with their recent research and innovation costs. The main way to shift the market to a newer product, he said, is if the older one is under clear regulatory pressure and there is going to be a need for a safer chemical. Regulation drives a large part of the innovation in the chemical market, and it is important to get those regulations doing their job.

#### **Monique Goyens, BEUC**

Monique Goyens agree that support should not be given to innovation *per se*, but only when it is sustainable and genuinely meets societal needs. It is also important to consider the consumer perspective. Consumers expect products, including those purchased online, to be safe, she said. However, currently there are a lot of products that do not comply with chemicals legislation coming into the market, especially via e-commerce. Therefore, BEUC believes that the whole EU regulatory framework needs to be tightened up, including enforcement structures at Member State level, to protect against imports of non-compliant products. This will benefit consumers, enhance consumer trust, and protect industry against unfair competition from non-compliant imports, she said.

#### **Kateřina Šebková, RECETOX**

In addition to investment and changing technologies, there is also a need for safe testing capacities, models and tools, and infrastructures, for industry and to help policymakers enforce the systems being put in place. Kateřina Šebková noted that, in line with the Chemicals Strategy for Sustainability and the Horizon Europe programme, there is a focus on new pan-European infrastructures, for example, for New Generation Risk Assessment. This ensures that for the innovations and investments required, the information is transparent. Another point she raised was the importance of an interdisciplinary education curricula that takes into account clustering and networking among institutions. We need new generations of people with new qualities of knowledge, she said, but without the previous silo aspect.

#### **Emily Mclvor, PETA Science Consortium International**

Industrial transformation will be undermined if based on the same test methods that have contributed to delays and “paralysis by analysis” in the past, said Emily Mclvor. Next generation safety assessments are needed now, and my organisation and others have identified specific practical means in the near term. Many of us regret that more resources were not made available earlier to investigate non-animal methods, said Ms Mclvor, but let us not make that mistake this time. Just as massive investment is needed to develop safer chemistries, the same level of support is needed for a focused

multi-stakeholder effort for innovation and promotion of non-animal, new approach methodologies. I invite any stakeholder here today to discuss these strategies with animal protection organisations, so we can find common ground.

### **Klaus Kümmerer, Leuphana University Lüneburg**

Innovation needs policy support, added Klaus Kümmerer, but what is often overlooked is that innovation is based on new ideas. These need time and space to germinate, and may come a little bit by chance. This needs universities and research institutions that are less dependent on competitive third party money or projects.

### **Joel Tickner, University of Massachusetts Lowell**

The industrial transition will not be easy, said Joel Tickner, because we have built an economy based on certain chemistries and materials that are highly integrated into complex value chains. It will require significant investment to obtain and use knowledge about chemical hazards and risks to design the safer chemicals of the future, and to support innovation and its implementation. For this, he said, we need clear criteria, and transparent tools and metrics for evaluating progress toward meeting the goals in government and industry. We need to convene stakeholders along the value chain in meaningful and open dialogue on how to address barriers to the transition to Safe and Sustainable by Design. We also need research funding and support for next generation practitioners.

### **Heather Barker, A.I.S.E.**

In response to PETA SCI's invitation on animal testing, Heather Barker responded that A.I.S.E. fully supports the project by the European Partnership for Alternative Approaches to Animal Testing using the latest state-of-the-art methodology to avoid any increased demand in animal testing.

### **David Azoulay, CIEL**

David Azoulay said it would be useful to hear from industry actors about how they are planning to support and implement calls for greater transparency and internalisation of costs; and also on precautionary regulation as a key driver for societally-beneficial innovation. He also raised a point about making a global level playing field. We should avoid levelling through the lowest common denominator, he said, we need a level playing field but an ambitious one. In that respect the Chemicals Strategy for Sustainability has a clear global policy element in relation to the EU position in the Basel, Rotterdam and Stockholm Convention. There is an upcoming Convention COP, he continued, which is a great opportunity, as well as ongoing discussion around SAICM (Strategic Approach to International Chemicals Management), in which the EU is playing an important role.

### **Marcel Wubbolts, Corbion**

We have mentioned innovation quite a few times and the need to generate new ideas, said Marcel Wubbolts, but on the other hand there are also existing innovations that are currently not competitive. I think it is important that we look for new things, but also work with people over the entire value chain to harvest the 'low hanging fruit' that is

already out there. The goal for the regulatory environment is to make it clear for industry what is possible, he said, and part of that is transparency.

## Conclusion

### Conclusion

#### **Thierry Breton, European Commissioner for Internal Market**

In concluding the first meeting of the High Level Roundtable on the implementation of the Chemicals Strategy for Sustainability, Commissioner Breton was encouraged by the level of engagement and cooperation. He noted that the members of the Roundtable have provided **good examples of innovative, sustainable and competitive solutions**.

There are many challenges, he said, but you have been clear that we need to address these together. The framework is clear and the direction is known, he said. Regulation will play a key role, but alone regulation is not enough to support the business case, and for this we will need all our tools.

Another important aspect is **the international dimension**, and Europe needs to be in the driving seat to initiate the global transition over the next decades.

This Roundtable will complement legislative and regulatory consultations, and provide important discussion, advice and recommendations in support of the Chemicals Strategy.

The Commission will come back with a **draft work programme** by the summer, he said. This will support the achievement of the objectives of the Chemicals Strategy, and help monitor the progress of its implementation.

The **next meeting of the Roundtable** will be in autumn 2021.

In the meantime, written submissions by Roundtable members to address the questions asked before this meeting by the Commission will be available to read on the Roundtable's website.

## Annex 1

### Annex 1: Chat roundup

#### Tour de table

Guy Thiran (Eurometaux): I support the call for 3 meetings a year to enable us to cope with the ambition and challenges of the Chemicals Strategy for Sustainability.

Heather Barker (AISE): Likewise. AISE also supports 3 meetings.

Hervé Toutain (Cosmetics Europe): I support also the call for 3 meetings.

Sjoerd Dijkstra (Covestro): Covestro would also support 3 meetings.

Michael Vassiliadis (IndustriAll Europe): IndustriAll also supports 3 meetings.

David Azoulay (CIEL): More important than the question of number of meeting for CIEL, is to define clear, functional process and strategy to deliver on the objectives of the round table. CIEL is not opposed to a greater number of meetings, but only if we are clear about how an increased number of meeting actually helps us deliver. This will likely require an adjusted process and a clarification on expected outcomes for the round table process as a whole, and for each of the meetings.

Monique Goyens (BEUC): I agree with David.

Guy Thiran (Eurometaux): I also agree with you, David.

Christina Rudén (Stockholm University): I agree with David too.

Michael Warhurst (CHEM Trust): I agree with David and I would also make the point that there are going to be many processes going forward from the Chemicals Strategy, and so we need to be very clear how they all fit together and avoid duplication and inefficiency.

Stephen Russell (ANEC): Agreed too. No meetings for the sake of meetings. Expected outputs need to be defined for each meeting, with the Sherpas working between meetings to that aim.

Nineta Hrastelj (EuChemS): Agreed as well. Lots of work will probably need to be done in between meetings first.

Doreen Fedrigo (CAN Europe): I also agree with David, and from my not-so-positive experience of industrial alliances, we need to be clear on the rules of the game.

Heather Barker (AISE): Excellent build David and all. I'm aligned.

Klaus Kümmerer (Leuphana University): I do agree, however, where will the resources come from to do this as a level playing field for all?

Martin Bruder Müller (Cefic): Indeed there are many measures addressed in the Chemicals Strategy and other plans such as the Zero Pollution Action Plan and Fitfor55. They have to be viewed in a holistic way that all goes together, is prioritised in the right way and are not counterproductive among each other!

Genon Jensen (HEAL): I also agree with David.

Guy Thiran (Eurometaux): Fully support Martin's remark.

Monique Goyens (BEUC): Consistency across policy files is key, especially trade policy, so that all chemicals on the EU market comply with EU rules, which is essential both for consumers and industry, I guess.

Annegaaiké Leopold (SETAC Europe): I totally support earlier comments from Stephen and others that we need very clear goals and outputs need to be clearly established ahead of every meeting.

Martin Brudermüller (Cefic): It becomes very evident by listening to all members' expectations that we need solid working structures in between the meetings. All issues are tough, rich of content, complex. Compromises need solid and controversial discussions by experts who prepare decisions and make agreeable proposals for us High level Roundtable members!

Monique Goyens (BEUC): I fully agreed, but as others said, it is important not to duplicate other initiatives that are going on. So what is the specific added value (unique selling proposition) of this Roundtable?

Hervé Toutain (Cosmetics Europe): Fully agree. It is critical to ensure the success of the High Level Roundtable.

Martin Brudermüller (Cefic): The High Level Roundtable should be the body to agree on the elements of implementation, the EU COM later follows!

Michael Warhurst (CHEM Trust): The High Level Roundtable is not a part of the EU's governance structures - it's not part of its role to "agree on the elements of implementation".

Anne-Sofie Bäckar (ChemSec): To me, the High Level Roundtable should be a forum for discussions. It cannot overrun other forums, there are not mandates for that.

Monique Goyens (BEUC): There are plenty of possibilities to discuss. We can also exchange our policy positions. It is crucial to provide a specific status to the work of this Roundtable; e.g. if we agree on recommendations, then if the Commission does not follow up, there should be a possibility for the Roundtable to have an explanation from the Commission, before publication of the EU initiative.

David Azoulay (CIEL): I am concerned to see discussion moving towards making this Roundtable a gate-keeper of decisions. As mentioned by Michael and others, the Roundtable is NOT a decision making space and the lack of consensus on any specific point in this space should not mean indefinite delay in adopting the measures needed to implement the Chemicals Strategy. All the more reason to clarify the expected outcomes and processes to reach them, so as we can all have a common understanding of our work together.

Anne-Sofie Bäckar (ChemSec): I do agree with David on this topic.

Doreen Fedrigo (CAN Europe): I also support this Roundtable not being treated as a decision-making body. Simple terms of reference and operating procedures are needed.

Genon Jensen (HEAL): Yes, agree with both David, Monique and Michael - this is not a decision making space, this is super important, we are ambassadors, not decision makers.

Stephen Russell (ANEC): Background document 1 clarifies the mandate of the High Level Roundtable and it is not a decision-making body.

Barbara Demeneix (Endocrine Society): Agree with David, Monique and Michael.

Doreen Fedrigo (CAN Europe): The call for applications document talks about the group adopting opinions, recommendations or reports by consensus.

### **Discussion: Social and economic dimensions for the industrial transition**

Monique Goyens (BEUC): I would like to stress that it is crucial that innovation per se should not be supported. Not only should it be sustainable, it should also meet genuine societal needs.

Michael Warhurst (CHEM Trust): Agree with Monique - not all innovation is good for society, just look at the scale of innovation in on-line fraud.

Barbara Demeneix (Endocrine Society): Agreed with Monique and Michael.

David Azoulay (CIEL): In support of the point made by Monique and Michael above, there is clear data showing that precaution-based regulation is the most effective way to drive innovation beyond mere

novelty towards societal progress and benefits, and avoid regrettable substitutions:  
[http://www.ciel.org/Publications/Innovation\\_Chemical\\_Feb2013.pdf](http://www.ciel.org/Publications/Innovation_Chemical_Feb2013.pdf)

Monique Goyens (BEUC): Innovation, e.g. via e-labelling, also bears the risk of exclusion and of not hitting the objective of properly informing consumers about risks linked to the use of certain products.

Genon Jensen (HEAL): Agree with Monique - innovation is not an end in itself or the goal, it must meet real societal need and be inclusive. Thanks for the resource David.

Klaus Kümmerer (Leuphana University and ISC3): It may be a challenge for circular economy, e.g. recycling, as for composition and speed of introduction of new products. The question of innovation is for what and for whom, where and when?

Sjoerd Dijkstra (Covestro RFM): I think it would be helpful to recognise that a huge innovation force is required to develop safer alternative, lower CO<sub>2</sub> footprint and move away from fossil-based feedstocks. I think this all is answering pressing societal needs. I believe this is a great opportunity for industry, if supported in the right way.

Joel Tickner (University of Massachusetts): Agree with Sylvie that market incentives through the value chain, such as recognition programmes, are essential. The safer, more sustainable chemicals are often more expensive (requiring significant reformulation and capitalisation) and the value chain is often not willing to accept increased cost, making it difficult for key actors - suppliers and formulators - to make the investment. We have a new report about to come out showing that products certified or labelled as having safer chemicals are growing significantly faster in the market than incumbents in the same product category, but these still represent a very small percentage of the market.

Monique Goyens (BEUC): Here is some reading for those interested in BEUC's take on "when innovation means progress": [https://www.beuc.eu/publications/beuc-x-2019-073\\_when\\_innovation\\_means\\_progress-view\\_on\\_innovation\\_in\\_the\\_eu.pdf](https://www.beuc.eu/publications/beuc-x-2019-073_when_innovation_means_progress-view_on_innovation_in_the_eu.pdf)

Annegaaike Leopold (SETAC Europe): Thank you, Monique, for these references.

Sjoerd Dijkstra (Covestro RFM): Thanks Joel, that's exactly what I meant.

Monique Goyens (BEUC): To Joel, of course there is need for innovation that we also will support. But what is important to factor in is to make the sustainable option the most affordable, the most attractive one for the consumers, so that they can drive the much needed transition. And for that, you need to involve, include societal concerns, behavioural biases, etc. In other words, talk to us (and others).

Nineta Hrastelj (EuChemS): Sharing an interesting aspect: [https://en.wikipedia.org/wiki/Cradle-to-cradle\\_design](https://en.wikipedia.org/wiki/Cradle-to-cradle_design)

David Azoulay (CIEL): In support of Monique's point above, internalisation of costs is the most effective market mechanisms to support innovation to address societal needs.

Michael Warhurst (CHEM Trust): I would be cautious about the claim that safe by design is somehow 'new', in reality it is a continuation of science and debates that have been going on for well over 20 years. The main issue is getting action on these issues, rather than allowing continued delays.

Joel Tickner (University of Massachusetts): To Monique. Thank you and agree. We need to make the sustainable options the most affordable for everyone, which means clear incentives for the more sustainable options to make them competitive.

Guy Thiran (Eurometaux): Strong market forces already exist to substitute harmful chemicals when suitable alternatives exist.

Klaus Kümmerer (Leuphana University and ISC3): Examples for education of the future in addition to the existing ones: <https://www.leuphana.de/en/professional-school/masters-studies/sustainable-chemistry.html>, <https://www.leuphana.de/en/professional-school/masters-studies/sustainable-chemistry-management.html>

David Azoulay (CIEL): To Guy Thiran, other market forces (such as economies of scale for existing chemicals and externalisation of cost) hinder safe substitution and market uptake of safer alternatives

Michael Warhurst (CHEM Trust): Price remains an important market signal, and old chemicals, where the investment has already been paid off, are generally cheaper than new ones. Effective and predictable regulatory controls are vital in moving away from old chemicals to newer ones

David Azoulay (CIEL): Both push and pulls need to be considered.

Stephen Russell (ANEC): To Guy - but information on the chemicals in products throughout the supply chain is missing. We need to ensure it.

Kateřina Šebková (Masaryk University (CZ)): Very much agree with Dr. Kümmerer on the need of education and interdisciplinary qualities of the education curricula to build enough qualified potential innovators for the future.

Joel Tickner (University of Massachusetts): To David - agree the literature and experience are quite clear that both push and pull is necessary to innovation - what is also referred to as willingness and capacity.

Guy Thiran (Eurometaux): We would like to understand what the Commission intends to achieve with the Essential Use Concept (EUC) and we would welcome an open debate on its "added value". We also seek clarification on how introduction of the EUC would help the EU achieve its other policy objectives, for example carbon neutrality, strategic autonomy and industrial growth through a safe, sustainable domestic circular economy.

Barbara Demeneix (Endocrine Society): Agree with Michael Warhurst.

Christina Rudén (Stockholm University): Important points Michael!

Stephen Russell (ANEC): Hear, hear, Monique. We also need to ensure international coordination and enforcement.

Genon Jensen (HEAL): Michael's point is super important, also very good illustrations.

Barbara Demeneix (Endocrine Society): I agree that innovation needs to be qualified - with the example of cyber fraud an excellent example.

Heather Barker (AISE): To build on Sylvie Nicol's remarks, we need to ensure innovation and the supporting regulatory frameworks do enable products that meet an identified consumer need to come into the market. On consumers wanting safer products, it is absolutely true but we all have a responsibility to inform and educate consumers with a fact based approach.

Monique Goyens (BEUC): What do colleagues think about fee-based enforcement systems, which exist in other areas, e.g. food?

Sylvie Nicol (Henkel): Innovations are certainly based on "new ideas" but as well on tangible consumer and customer needs. We should make sure that they are part of our conversation as well.

Stephen Russell (ANEC): To Heather - I agree, but information and education (and warnings) must not replace safety where it is possible and practicable to attain.

Annegaaiké Leopold (SETAC Europe): It is not only a matter of educating consumers but also of listening to their concerns, and by doing so protecting the public's trust towards institutions and regulations.

Klaus Kümmerer (Leuphana University and ISC3): I do agree with Joel Tickner!

Monique Goyens (BEUC): On consumer information - it is of course of a no brainer, this means also more disclosure, too often currently chemical content is a black box for consumers. Also information should not be an excuse for shifting responsibility for unsafe/unsustainable products to the consumer.

Stephen Russell (ANEC): To Monique - fees and fines that deter and finance more surveillance and enforcement.

Sylvie Nicol (Henkel): Very good points Joel.

Klaus Kümmerer (Leuphana University and ISC3): I'm wondering whether education of consumers would be a good goal and a feasible one. Even as a chemist I'm often puzzled when reading ingredients lists coming to a decision as a consumer. The future should be that the consumer can buy whatever he/she wants being on the safe side for health, environment and sustainability

From Monique Goyens (BEUC): Fully agree with Klaus. Investing in consumer education is costly and not the most effective way of promoting chemical safety.

Andrea Hartwig (KIT): I agree with Klaus Kümmerer - safety has to be insured for all innovative products on a scientific basis.

Nineta Hrastelj (EuChemS): Citizen Science in this respect is the approach to apply.

Klaus Kümmerer (Leuphana University and ISC3): I think in toxicology and pharmacy it's called inherent safety.

Michael Warhurst (CHEM Trust): Whenever surveys are done of the public you find that they assume that chemicals can only be used if they have been shown to be safe, which is still not the case (e.g. see ECHA Chemical Universe project).

Monique Goyens (BEUC): We could also call it "leaving no one behind"!

Monika MacDevette (UNEP Chemicals & Health): Well said David - we mustn't forget the role of the EU in implementing its strategy to the global leadership that will be set in doing so, and the demand for sharing of best practices and technology transfer by developing countries and countries with economies in transition. The role in supporting achievement of SDGs has to be considered as well.

Heather Barker (AISE): Meaningful consumer education so they can make informed choices.

Monique Goyens (BEUC): I don't want to need a PhD in chemistry to understand what I am buying! No time for that, no skills for that.

Michael Warhurst (CHEM Trust): Consumers are busy - the main protection should come from regulators, not loading more responsibility on them.

David Azoulay (CIEL): But consumers should only have the choice between safe and sustainable products which makes education irrelevant in that respect.

Stephen Russell (ANEC): Agree - the burden here cannot and should not be on the consumer.

ENDS