

# Eliminating Plastic and Micro-Plastic Pollution – an Urgent Need 2<sup>nd</sup> Stakeholder Conference

Tuesday, 20<sup>th</sup> November 2018

Permanent Representation of Estonia to the EU, Rue Guimard 11/13, 1040 Brussels

## Documentation and Conclusions



On November 20<sup>th</sup>, 2018, the second Stakeholder Conference “Eliminating Plastic and Micro-Plastic Pollution - an Urgent Need” took place in Brussels. This report documents main messages from key notes, presentations and discussions and summarizes the outcomes of the workshop session.

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## Agenda

<b>Registration and Welcome</b>	
9:00	<b>Registration</b>
9:30 – 9:50	<b>Welcome</b> <b>Clyde KULL</b> , Deputy Permanent Representative of Estonia <b>Elisabeth FREYTAG-RIGLER</b> , Head of EU-Coordination Unit, Austrian Federal Ministry for Sustainability and Tourism <b>Luc BAS</b> , IUCN
<b>Key Notes and Panel Discussion (Moderation: Luc BAS, IUCN)</b>	
9:50 – 11:10	<b>Christian HOLZER</b> , Austrian Federal Ministry for Sustainability and Tourism <b>Daniel CALLEJA-CRESPO</b> , Director General DG ENV, European Commission  <b>Lilian BUSSE</b> , German Environment Agency <b>Karl FÖRSTER</b> , PlasticsEurope <b>Virginia JANSSENS</b> , The European Organization for Packaging and the Environment <b>Patrick ten BRINK</b> , European Environmental Bureau
11:10 – 11:30	<b>Coffee Break</b>
<b>Session on Status of Knowledge and Assessment (Moderation: Alberto ARROYO, IUCN)</b>	
11:30 – 13:00	<b>Introduction</b> <b>Georg REBERNIG</b> , Environment Agency Austria <b>Short presentations</b> <b>Nina MAIER</b> (German Environment Agency), EPA Network Interest Group Plastics <b>Hugo-Maria SCHALLY</b> (Directorate General Environment), Single Use Items Legislation <b>Hannah HILDONEN</b> (Norwegian Environment Agency), Tyre and Road Wear Particles <b>Eugenio LONGO</b> (Borealis), Project STOP and Operations Clean Sweep <b>Fabrizio Calenti</b> (Aquafil), ECONYL project
13:00 – 14:00	<b>Lunch Break</b>
14:00 – 15:30	<b>Moderated Break Out Sessions – Workshop</b> Each break-out session will focus on specific issues defined by the presentations in the previous session and will be accompanied by a moderator who will report back to plenary. Questions to focus in each workshop could include: “how can the political agenda be supported and implemented” “what is still needed to be addressed – embracing the global level” <b>Outcome - Presentation by table rapporteurs, summary</b>
15:30 – 16:00	<b>Conclusions and Outlook</b> <b>Georg Rebernig</b> , Environment Agency Austria
16:00	<b>Closure</b>

## Preface

Plastic and micro-plastic are still of high political, societal and scientific concern. Several processes to beat plastic pollution are ongoing or in the pipeline with the principal aim of involving all stakeholders. The EU is a frontrunner in tackling the issue of marine litter and plastic in the environment and a lot has been achieved in the last couple of years. At the political level, the EU Plastics Strategy has been issued and a proposal for a directive addressing single-use plastic items is under negotiation.

However, increased efforts are needed, especially at the global level, to reduce plastic and micro-plastic pollution and there is a clear need to involve all stakeholders to better support the political framework. Industry is a key stakeholder in this process and can contribute to the success of these measures along the whole product value chain.

In this respect, the conference “Eliminating Plastic and Micro-Plastic Pollution – an Urgent Need” focused on the current situation and activities ongoing in the EU, but also embraced the global scale by displaying examples of good practice and initiatives to transfer knowledge outside the EU. The overall question was: how can stakeholders best support the political process and which initiatives and actions complement the way forward by transferring best practices and knowledge beyond the EU?

## The conference

More than 80 representatives of EU and national public administration, science, industry and international organizations joined in the conference. The conference was designed in three sessions, starting with two key-note speeches and a high level political panel discussion, a session on the status of knowledge and assessment and lastly, an interactive workshop. The workshop featured four discussion groups on topics along the plastic value chain: production, use and application, waste and environment. The workshop addressed specific questions summarizing major achievements and defined additional needs for the next couple of years.

The participants were welcomed by ambassador Clyde Kull at the premises of the Permanent Representation of Estonia in Brussels. Kull wished success to the conference and to help identify the most urgent issues related to micro-plastics and plastics in the environment as well as the actions that need to be taken. Elisabeth Freytag-Rigler (*Austrian Federal Ministry for Sustainability and Tourism*) also welcomed participants and highlighted the excellent opportunity to exchange views and solutions with such important stakeholders. She stressed the development of a possible 8<sup>th</sup> Environmental Action Programme, underlining this apt timing for influencing environmental policies in Europe. Luc BAS (IUCN) highlighted several important policy responses on the issue of plastics; in particular the 2018 EU Strategy on Plastics, the European Commission’s proposal for a single-use plastics directive, as well as the current discussions on a Global Plastic Protocol.

## Key Notes

*“Plastic waste/Marine litter is today’s fastest growing environmental concern”. Director General Christian Holzer*



Picture 1: Director General Christian Holzer, Austrian Federal Ministry for Sustainability and Tourism representing the Austrian Council Presidency

Keynotes from the Austrian Presidency by Director General Christian Holzer and by the European Commission by Director General Daniel Calleja-Crespo opened the conference. **Christian Holzer** emphasised the suitable timing of this conference, with the 2019 European Parliament Elections, the 2021-2027 Multi-annual financial framework (MFF) coming up, as well as the EU’s legislative proposal on single-use plastics. He gave an update on the negotiations of the latter, explaining that there is hope to achieve a conclusion before the end of the Austrian presidency.

There is large support for the EU Plastics strategy, highlighted as a corner stone in the Circular Economy and establishing measures for the whole life cycle of plastics. He also emphasised the importance of the interface with legislation on chemicals. Important progress has been made with the

launching of a 10 point Action Plan for the Danube River in Austria, a result of a national study on plastics in the Danube River. The aim of this plan was to avoid plastic waste in and along the river as well as to raise awareness of the problem.

Holzer explained how the 2015 stakeholder conference on Plastics in Brussels was a measure contributing to the same effect. Since 2014, micro-plastics have been brought to the agenda of the European Council and the European Parliament, for example with the discussions around the ban on intentionally added micro-plastics to cosmetics.

Holzer insisted that plastic pollution is one of the fastest growing environmental problems of the world. Production of plastics will double within 20 years, while waste management systems are still of varying standards around the globe. Therefore, the prevention of plastic pollution in the first place should be the focus of all action, with the need of all actors working together.

**Director-General Daniel Calleja-Crespo** emphasized the importance of circular economy in his key note. As we never consumed more energy, more fossil resources, more water than ever before, there is a need to change from the linear to the circular model. In particular, he mentioned big economic opportunities and the benefits for society in a circular economy. To change the way we consume and produce from linear to circular, Calleja Crespo stressed the importance of "closing the loop" of product lifecycles through greater recycling and re-use, bringing benefits for both the environment and the economy. From a European standpoint, currently only 30 percent of plastics is recycled, which means a loss of 105 billion Euros. This is a wasted opportunity. However, he emphasised that there is hope, showcased by the rapid development and swift reply on the issue, recalling how two years ago, no one had talked about plastic.



Picture 2: Director General Daniel Calleja-Crespo, Directorate General Environment European Commission

The EU Plastics Strategy focuses on four pillars: Improving the economy, curbing waste and littering, driving innovation and harnessing global action. The proposal on single-use plastics will target the 10 single-use plastic products most often found on Europe's beaches and seas, as well as lost and abandoned fishing gear. Together, these constitute 70 percent of all marine litter items. However, there are additional initiatives needed, such as the pledging campaign asking industry to support recycled plastics, the use of plastics in take-away meals as well as the potential lying in green public procurement.

Daniel Calleja-Crespo then elaborated on the EC proposal to tax non-recycled plastic packaging waste unveiled in the proposed Multiannual Financial Framework. The financial proposal would force EU Member States to pay for each kilogram of unrecycled plastic. This is the first time such an environmental fee would be introduced in the EU. Daniel Calleja-Crespo concluded that the transition to a circular economy platform and economy is unavoidable, and that we should aim at setting the standard rather than merely follow it.

### Panelists Statements

A panel consisting of Lilian Busse (*German Environment Agency*), Karl Förster (*PlasticsEurope*), Virginia Janssens (*The European Organization for Packaging and the Environment*) and Patrick ten BRINK (*European Environmental Bureau*) gathered on the stage, where each of them gave a short introductory statement.

**Lilian Busse** (*German Environment Agency*) explained the activities of the German Environment Agency on plastics, ranging from advising the ministry for the environment and policy makers, implementing laws, co-operating with chemical expertise, working to enhance sustainable production, to the protection of ecosystems. The German Environment Agency is also developing science concepts for monitoring plastic waste, as well as analysing the damage of human cells from micro-plastic. She explained how the EPA Network strategically addresses specific policy fields, also by providing technical knowledge from the EPA Network's Interest Groups. These groups benefit from gathering several national perspectives and exchanging expertise in an unbiased manner.

**Karl Förster** (*PlasticsEurope*) emphasised the highly aligned objectives of his organisation and the key notes being made. The shared goal is that plastics must not end up in the environment. The environmental challenges with plastics are not a plastic problem, but a waste problem, he emphasized. The imminent challenge is to understand how we can take care of the resource plastic. Karl Förster highlighted voluntary commitments and the major transformation needed from the existing system towards circularity. He indicated he is not happy with political populism suggesting simple solutions, as it is not enough to ban, as in his view, littering is the main problem (referring to the plastic bags discussion). He advocated for a more balanced view, requesting solutions on the problem of littering.

**Virginia Janssens** (*The European Organization for Packaging and the Environment*) provided an overview of how the packaging industry works together with municipalities and governments. Virginia Janssens supports the objectives of the key notes and the views expressed and requests more details on how they could be achieved. She emphasised not only the need to track compliance, but investment and innovation. The need is a harmonized market, but Janssens sees further fragmentation, which does not support the needs expressed.

**Patrick ten Brink** (*The European Environmental Bureau, EEB*) explained that the EEB is a network of about 140 environmental citizens' organisations and also part of the Rethink Plastics Alliance, an alliance of NGOs with 62 members in Europe with a vision of a future free from plastic pollution. Patrick ten Brink discussed market restrictions, fearing the efficiency of bans if they are too narrow, excluding other harmful uses of micro-plastic. He advocated for mandatory producer responsibility, that consumption reduction requirements are not made voluntary, and that legislation should aim at higher collection and recycling targets.

### Panel Discussion



Picture 3: Panelists. From left to right: Patrick ten Brink, Virginia Janssens, Lilian Busse, Daniel Calleja-Crespo, Christian Holzer, Karl Förster

The non-recycled plastic packaging tax, mentioned by Daniel Calleja-Crespo, could be quite effective, but it will nonetheless lead to less revenues if Member States increase recycling. Patrick ten Brink mentioned that such a tax would increase recycling but it would not include any incentive to encourage the reduction of plastic production upstream.

Lilian Busse emphasised the need for alternative materials while keeping an eye on the environmental effects of substitutes. Eco labels could drive these alternatives and are crucial, also for public debate and for raising awareness. Discussion followed on the need to look carefully at these alternatives to avoid focusing on too small initiatives, where we end up focusing on the wrong thing. Mega trends will offset small scale changes; the take-away food culture and rapidly growing online shopping trend could offset developments in alternative materials. Virginia Janssens emphasised that the packaging value chain varies a lot between different consumers, and we need to adapt to each of them to make real strides.

In terms of waste to energy and carbon capture and storage, Christian Holzer stated that such solutions play an important role, emphasising the Chinese ban on import of plastics and hazardous substances mixed with plastics. Our ambitious recycling goals have to be met by efforts to create a market for recycled plastic. Daniel Calleja-Crespo similarly emphasised the relevance of the waste hierarchy with highest priority on prevention, reuse and recycling. The last option is thermal recovery, whereas landfilling should be stopped altogether. Patrick ten Brink reminded about the links to lock-in and the importance of such choices of investment. The European Chemicals Agency (ECHA) could have a role in helping choose the right type of plastic.

There is need to connect all stakeholders to develop the necessary circular streams. The proposal for a directive reducing the impact of certain plastics products on the environment is just the first step, whereas upstream measures need also to be considered. Further developing the Eco-design Directive could be a solution in that direction. Regions could play a bigger role, also in terms of financing.

Georg Rebernik (*Austrian Environment Agency*) asked about the idea of a convention or international plastic protocol, mentioned by Daniel Calleja-Crespo. Calleja-Crespo highlighted how the United Nations Environment Assembly (UNEA) of March next year could be an opportunity to forward a joint initiative to support countries and cities establishing policies to reduce plastic pollution. There is need for an international charter and Europe must show it can deal with it. Marine litter has been the centre of UN discussions and an international agreement could be useful. The need is to turn science into solutions. As regulatory approaches are ambitious endeavours, there is value in looking into what different countries are doing, i.e. a peer-to-peer sharing tool developed as an initiative from DG ENV.



## Session on Status of Knowledge and Assessment

The session was opened with a statement by Georg Rebernick (Austrian Environment Agency). He reminded the audience that plastics are essential materials in our daily life. Plastics are deeply integrated in issues of economy along the whole value chain and all these aspects connect to the circular economy model. There are obvious interfaces to other issues of environmental relevance, like e.g. chemicals which crosslink to human biomonitoring.

Impulse statements opened the floor for technical discussions. Presentations were given by Nina Maier (*German Environment Agency*), Hugo-Maria Schally (EU COM DG ENV), Hannah Hildonen (*Norwegian Environment Agency*), Eugenio Longo (*Borealis*) and Fabrizio Calenti (*AQUAFIL*).



Picture 4: Nina Maier,  
executive secretary of EPA  
Network's IG Plastics

**Nina Maier** (*German Environment Agency*) introduced the work of the EPA network and its Interest Group Plastics. She explained the value of the informal nature of the EPA Network and the benefit of the executive secretariat of the Interest Group Plastics. The members engaged in Interest Groups vary according to the topic. The Interest Group on Plastics was established in 2016 as a result of the 1<sup>st</sup> stakeholder conference on plastics, and the focus of the work lies on land based inputs of plastic. The first output of the IG Plastics was an input to the EU Plastic Strategy, culminating in a comprehensive report

of recommendations towards the EU Plastics Strategy. The priorities in 2018 have been biodegradable plastics and abrasion from tire and road wear particles. In 2019, the group will focus on littering and single-use plastics. The Interest Group successfully presented several concrete outputs since its establishment. Especially the close cooperation between different institutions (EPAs/European Commission) was highlighted as valuable, benefitting from the unbiased aggregated input the IG Plastics can provide on different topics. One of the challenges of the Interest Groups is the varying degrees of freedom different EPAs have in independently publishing recommendations. This could make it difficult to come up with consolidated yet clear and ambitious positions on different topics.



Picture 5: Hugo-Maria Schally,  
DG ENV

**Hugo-Maria Schally** (EU COM DG ENV) indicated that plastics is the material that encompasses all solutions but also problems of circularity. The challenge lies in inserting circularity in all existing elements and instruments along the whole value chain. The EU Plastics Strategy is not a stand alone instrument but has to be linked to the chemicals agenda in order to acquire knowledge on the presence of harmful substances in plastics and how to recycle the material. On the consumption side, the key tool is the currently prepared EU legislation on single-use plastics. Negotiations are positive with a clear joint wish for actions. However, fragmentation of markets by introducing national regulations needs to be avoided. Looking forward, the foci for

the new Commission in terms of plastic will be packaging, and more attention need to be on the construction and automotive sectors as well as the textiles industry, as in many stakeholders' opinion, "textiles is the new plastics".



Picture 6: Hannah Hildonen,  
Norwegian Environment  
Agency

**Hannah Hildonen** (Norwegian Environment Agency) presented key findings from a report on tire abrasion from The Norwegian Institute for Water Research (NIVA). The study had shown that 40-60 percent of tire material is synthetic rubber, hence subsuming tire abrasion to micro-plastic. Wear of tires is dependent on many different factors and more knowledge is still needed. Most of the material ends up in nature, but pathways and apportionment of particles in air water and soil, as well as content of particles and their fate is yet mostly unknown. However, because of the volume of tire wear, a mere 10 percent reduction would already have a considerable effect. Measures can range from emptying gully pots to road cleaning, but also consideration of tunnels and snow depots are suggested to be especially important. Up-stream measures such as reducing traffic, eco-driving, low emission tires and changing the size of vehicles and horse power will also have effect.



Picture 7: Eugenio Longo,  
Borealis

**Eugenio Longo** (Borealis) explained how Borealis as a producer of polyolefins is working on the circular economy and sees economic opportunities therein. Borealis is a founding member of the polyolefin circular economy platform PCEP, aiming at mobilizing industry. Borealis maintains a dialogue with clients on how to re-design products to make them recyclable (e.g. by using flexible labels on bottles to be removed before recycling). Borealis is also involved in an initiative to stop pellet loss, based on pledge making and self auditing. Turning their attention to South-East Asia, they have now established the project STOP, an initiative to contribute to the plastic marine litter problem in South-East Asia. The goal is zero leakage, increased recycling and social benefits. The project is bottom-up, with

a focus of putting in place waste management schemes. The aim is to create pressure to successfully forcing politicians to act.



Picture 8: Fabrizio Calenti,  
Aquafil

**Fabrizio Calenti** (AQUAFIL) represents a nylon company, which produces 100 million tonnes fibers each year. Consumers apparently show interest in using recycled plastic fibres, and industry is producing recycled products already without being legally obliged to. Waste, however, has the least acceptance in circular economy discussions, but there are good examples how business can be successful with (chemically) recycled materials. Aquafil has agreements with approximately 300 brands to add a sustainable value to products by using the "Econyl" brand. This is an example of making money from a circular economy business model. Fabrizio Calenti raised the question

about the balance between cleaning plastics from the environment and preventing it from being introduced in the first place. Legislators need to impose rules which support prevention, Calenti emphasized.

## Discussion

There was broad consensus that prevention should be the focus of all activities, whereas cleaning actions come second. Prevention and infrastructure supporting preventive actions create awareness, such as port reception facilities, municipal waste bins, and cigarette trays, and at the same time encourage “green” behaviour.

It was mentioned that also cost-effectiveness is an important factor when it comes to measures, as these are often far-reaching and expensive. However, emotional engagement is needed, stressing the social impacts of plastic pollution and the related costs and potential loss of life, which should not be minimised.

Related to car tire material, it was noted that natural rubber particles are not considered micro-plastic. However, car tires consist of modified rubber, which is why its wear and tear is subsumed as micro-plastic.

## Workshop

Alberto Arroyo-Schnell (IUCN) chaired the workshop session and familiarized participants with the workshop’s aim. The session on “status of knowledge and assessment” demonstrated that a lot has been achieved but still there is much more to be done. Embracing the global scale, the overall question is how can stakeholders best support the political process and which initiatives and actions complement the way forward by transferring best practices and knowledge beyond the EU?

The audience split into four break-out groups to focus on the following key themes, each chaired by a moderator (in brackets):

- **Plastic Production** (Lilian Busse, German Environment Agency)
- **Use/Conversion/Application of Plastic** (Elisabeth Freytag-Rigler, Austrian Ministry for Sustainability and Tourism)
- **Plastic Waste** (Lars Mortensen, European Environment Agency)
- **Environmental and Health Impact of Plastic** (Philipp Hohenblum, Austrian Environment Agency)

Each break-out workshop focussed on two questions:

“How can the political agenda be supported and implemented”

“What is still needed to be addressed – embracing the global level”

Moderators collected statements from participants comprising own experiences, new ideas and concerns and presented their results on flip charts to the plenum. Main results for all break-out groups are summarized below:

### How can the political process be supported and implemented?

Participants concluded that the political agenda on EU-level is currently defined by the EU Plastics Strategy, the current proposal for a directive on single use plastic items and the circular economy package. A suite of instruments is needed to sort the problem:

- Both legislation and voluntary schemes by industry and in both cases an open dialogue between all stakeholders needs to be maintained; additionally, it is essential to raise and increase awareness from consumers, industry and retailers for the environmental implications of plastic waste.
- As legislation needs to be enforced, also voluntary schemes should be controlled, assessed and evaluated.
- In order to manage expectations, legislators have to learn about the needs as there are different demands for legislation along the supply chain (i.e. packaging, construction, automotive, textiles etc.).
- Extended producer responsibility examples demonstrate best practices and effectiveness e.g. in pilot project work, return schemes, waste management, successful guidance on product demands, etc.
- Local/regional authorities play an important role in waste management and should share best practices and successful guidance. However, local, regional or national empowerment must not threaten a free and unfragmented EU single market.
- Green public procurement was identified as an important instrument to increase acceptance of secondary plastic use and to raise awareness among the public sector to act as a role model.
- Need for more collaboration of EC directorates with member states' research bodies and authorities by establishing platforms for more research, which would bring higher degrees of consistency and comparability of individual approaches and results; platforms could be complemented by involvement of ECHA, EFSA, EEA, and others.
- Use existing platforms like the EPA Network Interest Group to help form opinions, eg. emerging sub-issues like textiles. On the other hand, members of the Interest Groups could put additional pressure on relevant national actors in order to accelerate progress on standardization processes.

## What is still needed to be addressed – embracing the global level

It was generally agreed that plastics play an important role in the circular economy which is key to eliminate plastic and micro-plastic pollution, also at the global scale. Several elements have been identified:

- In terms of **sustainable plastic production**, goals are already set in the EU Plastics Strategy
  - However, implementation needs to be addressed at the EU and the global level, and much more importantly, be linked to and implemented at the global level as producers are (mostly) global players
  - Several role models for global approaches and good practices have been demonstrated by the industry. Involvement and encouragement should be further increased
- After prevention and reuse, **recycling** is one key factor in a circular economy. However, in terms of plastic waste and waste management, several gaps exist at the EU and the global level that need to be addressed
  - There is the challenge of different levels of waste management in EU countries and in extra-EU countries, which could be levelled by stopping landfilling of plastic. Also, plastics have its economic value both as virgin material and as recycled feedstock, to which an increased market for secondary plastics could contribute. Furthermore, eco-design requirements can promote the use of recyclates.
  - There is a need to fill the gap between chemical legislation and waste legislation in order to promote recycling while protecting consumers and the environment
- In order to design appropriate monitoring strategies and comparable data to understand the environmental burden with plastic, its additives and environmental fate thereof, as well as toxicology and health impacts, more science is needed.
  - Still, standards for defining the nature of plastics is needed to be able to properly design monitoring strategies and produce comparable data. This includes standards for sampling and measurement and definition of descriptive parameters depending on the size fractions investigated (mass balance, particle counting etc.).

## Conclusions and Outlook

The managing director of the Austrian Environment Agency, Georg Rebernick, concluded the conference and emphasised important messages and arguments observed in the course of the conference.

- We have to acknowledge the huge benefits of plastics; plastic products are an integral part of our daily life, but we also have to resolve the grave problems connected to plastic waste issues in the environment.
- As a follow up, this conference documents a very dynamic process which has taken place since first Stakeholder Conference in 2015 – thanks to the Estonian Permanent Representation for hosting the conference.
- The conference showed that multi-disciplinary approaches are needed to tackle plastic in the environment. Policy makers demonstrated their approaches and ideas like the use of economic instruments to increase reuse (refund) or recycling (levies), and industry showed several impressive initiatives, from projects to business models. It has been emphasised repeatedly that, as there are such diverse uses of plastics, only a variety of measures and actions along the value chain and continued collaboration of all stakeholders can reduce plastic pollution. Initiatives like the EPA Network's Interest Groups help liaising between stakeholders.
- But also, global economic pressures can help building opportunities like by the ban of plastic waste exports to China, which can help stimulate a market for secondary raw materials and develop standards to increase quality, trust and reduce costs for recycling.
- Some options to further promote the topic lie ahead of us: an 8<sup>th</sup> Environmental Action Programme, a major Stakeholder Conference on Circular Economy, Regional Maritime Protection Conventions or – on the global scale – the upcoming fourth session of the UN Environment Assembly (UNEA-4) in March 2019 in Nairobi.



Picture 9: Georg Rebernick,  
Umweltbundesamt Austria