



EUROPEAN MANUFACTURING – PLASTICS STRATEGY IMPLEMENTATION

*18h30 - 22h00 Roundtable Dinner Debate
Wednesday 10 October 2018*

European Parliament



José Inácio FARIA MEP, (EPP, Portugal), Environment, Public Health & Food Safety Committee

As Chair of the EFM Roundtable Dinner Debate, he welcomed manufacturers, the Commission and fellow MEPs to the evening and introduced the first speaker from the European Commission





Kestutis SADAUSKAS, EUROPEAN COMMISSION, Director,
Circular Economy & Green Growth

- European Commission's overarching goal is to make the European Plastics industry the smartest, most innovative, and most sustainable in the world. The EU Plastics Strategy does not put the benefits that plastics bring to our society and our economy into question. We act because we are against the way plastic materials are often used: littering, quick disposal after a very short useful life, low recycling rates. Plastics are too valuable to be treated in this way.
- Today, less than 30% of plastic waste generated in the EU is recycled. Landfilling and incineration of plastic waste remain the most popular waste management regimes in many Member States. This has clear environmental and economic costs for our society - and for the industry.
- We think that separate collection, reuse, and recycling activities integrated in the production chains will deliver great benefits and prosperity in Europe. The plastics industry can become a symbol of a successful transformation from a linear to a circular economic model. What needs to be done to achieve this?
- Increasing the volume, profitability and quality of plastics recycling is one of the central aims of the Plastics Strategy. We looked at the whole value-chain, and we are convinced that we need greater dialogue and collaboration amongst all key players, from plastic producers to recyclers.
- Annexes to Commission often do not make headlines in newspapers, but they are of crucial importance to make each of our proposals a success story – they distil the essence from the narrative of the political text. The Annex lists future EU measures to implement the Strategy, as well as a list of measures recommended to national authorities and industry. These are precisely the steps that we believe have to be taken to successfully achieve the goals of the Plastics Strategy.
- The Plastics Strategy is not the end – it is the beginning of our journey to make the industry a strong example of what we can achieve if we work together to make our economy more circular. The European Commission will implement an ambitious set of 39 actions.
- We have already addressed the waste management part of the value chain in the recent review of the EU waste legislation. It was time to focus on the design and production of plastics and plastic products, and the market for recycled plastics.
- This work is one pillar of the Plastics Strategy. The other three include:
 - Action against littering, mostly via the recent Directive on single-use plastics and fishing gear
 - More and better innovation investments in the value chain – here, we will develop a Strategic Research and Innovation Agenda on plastics to provide guidance for future research and innovation funding after 2020





- Global action to reduce plastics pollution, as action is needed not only in Europe but also at global level
- Commission's action will not be enough to make the plastics industry flourish as a circular industry for the decades to come. We will need all industry's expertise and action. The pledging campaign is not the only action we recommend from the industry, as described in the Annex to the Plastics Strategy. For example, we also recommend the industry to take concrete steps to improve dialogue and cooperation across the value chain, in particular on material and product design aspects, or to pursue and implement cross-industry agreements to reduce the release of microplastics in the environment.
- The industry of tomorrow will be more interconnected, more innovative, more circular. This will be the case for all sectors in our economy, and for the plastics sector as well. Therefore, I want to stress today that the plastics industry is in a privileged position, as it is set to become a frontrunner in this circular transition.
- I am convinced that the plastics industry will encompass a more sustainable and smart use of its resources, and set an example for other industries. It will ultimately demonstrate to other sectors that circular industries bring great benefits for our environment while creating a wealth of opportunities for businesses, and for the economy.



Mella Frewen, FOODDRINKEUROPE, Director General

FoodDrinkEurope is Europe's food and drink industry organization – the European food and drink industry is the largest manufacturing sector in the EU in terms of turnover, employment and value added. It brings together 26 national food and drink federations, 27 European sector associations and 21 major food and drink companies.

Our members work to continuously improve resource efficiency throughout their operations and across the entire value chain. The Food and Drink industry's contributions to a circular economy and sustainable growth are therefore supporting the European Commission's desire to move towards a more resource efficient economy.

Additionally, our industry has actively contributed to food waste prevention. Within this context, we have developed with other stakeholders the 'Every Crumb Counts' joint food waste declaration and more recently, food donation guidelines.

Another relevant area in implementing the Circular Economy in the food and drink sector is sustainable packaging, the topic of today's debate.

In the context of the Circular Economy Action Plan, FoodDrinkEurope has been an active contributor to the discussions for an ambitious implementation of the European Strategy for Plastics in a Circular Economy. FoodDrinkEurope also acknowledged earlier this year the adoption of the European Commission's proposal for a Directive by the European Parliament and the Council on the reduction of the impact of certain plastic products on the environment, which was voted earlier today in the ENVI Committee.



Food and drink packaging plays a vital role in protecting and preserving products for consumers. It maintains quality and food safety and extends the shelf-life of products by preventing spoilage; packaging also helps to reduce food waste; it provides a variety of portion sizes adapted to consumer requirements and provides information to consumers (labelling).

Nevertheless, we all know that some packaging – particularly plastics – ends up in nature and contributes to the growing problem of (marine) litter. In addition, different packaging materials face different challenges in terms of circularity.

Hence, there is an urgent need to ensure that all packaging is sustainable and reusable, recyclable or compostable to support a societal transition towards a circular economy. As a major user of packaging, the food and drink industry fully acknowledges that it has a share of the responsibility with regards to the impact of the packaging that it puts on the EU market.

Building on our continued efforts to support a circular economy for packaging, FoodDrinkEurope has developed its Roadmap on Sustainable Packaging. Our Roadmap presents – in a visually engaging way – the progress that has been achieved so far but, more importantly, what needs to be done moving forward.

Over the last decades, much progress has been made in reducing the amount of packaging used in the first place, boosting recycling rates, and making packaging more recyclable and reducing packaging waste.

Food and drink manufacturers have played an active role in setting up packaging recovery organisations in almost all Member States to ensure the recovery and recycling of packaging waste in the most economically efficient and ecologically sound manner.

But let us focus more on the way forward; in our roadmap, building on progress to date, food and drink manufacturers will focus on three key areas of work:

1. Improve packaging design
2. Actively support collection, sorting and recycling
3. Continue raising awareness

With regards to improving packaging design, our members are currently focusing on the following three objectives:

1. Ensuring better packaging design can be delivered in the near future to accelerate the transition towards a circular economy model. This needs to be matched by actions taken by national and local authorities to ensure a consistent offering to consumers in terms of materials collected for recycling from households and the necessary and efficient sorting and recycling facilities.

We are happy that as part of the Ellen MacArthur Foundation's New Plastics Economy Initiative, FoodDrinkEurope members such as Mars, Evian, PepsiCo, Coca-Cola, Unilever, and Nestlé have committed to work towards 100% reusable, recyclable or compostable packaging by 2025 or earlier.

2. Our members will continue to promote a market for secondary raw materials by integrating



recycled content into their packaging, ensuring that food safety and EU rules on food contact materials are respected.

To give you an example, the European Federation of Bottled Waters pledged in 2018 to be a driving force to collect 90% of all PET bottles by 2025 as an EU average. Also, Soft Drinks Europe (UNESDA) adopted in 2018 a similar target where soft drinks PET bottles will contain a minimum 25% recycled material on average also by 2025.

3. Third, our members will continue to explore the use of alternative materials with improved environmental performance.

Moving on to our roadmap pillar of actively supporting collection, sorting and recycling. The food and drink industry will continue to play an active role in supporting the development of well-functioning collection, sorting and recycling systems across Europe. The industry is also working with value chain partners and local authorities to develop new approaches to facilitate recycling.

For example, Coca-Cola has partnered with CITEO in France to collect 26 million additional plastic bottles and 6 million additional cans in Paris by 2019 as part of Coca-Cola's efforts to collect 100% of its packaging by 2025.

Last but not least, food and drink manufacturers will continue to contribute towards communication campaigns and action plans to prevent litter. FoodDrinkEurope will continue to advocate for education and awareness-raising campaigns as a crucial part of a joint effort to stop litter from arising in the first place.

Making food and drink packaging circular and sustainable is a societal challenge, and we cannot do it alone.

That's why we are asking you, esteemed Members of the European Parliament and Mr. Sadauskas, representing the Commission, to:

- Ensure full implementation and enforcement of the EU waste package
- Accelerate the release of EU funding aimed at stimulating investment in waste management infrastructure and innovative recycling technologies, such as chemical recycling
- Increase awareness raising activities and encourage Member States to develop educational programmes to motivate consumers to dispose of used packaging responsibly

We hope that our roadmap, together with this evening's discussions inspires actions and future aspirations in implementing in the best way possible the EU plastics strategy which will have an impact well beyond EU borders.



MOVING TO A MORE SUSTAINABLE PACKAGING



Igor Chauvelot, DANONE, Director Plastics Circular Economy

At Danone, our mission is to bring health through food to as many people as possible. We believe if we are to bring people healthy food, we need a healthy planet. We simply cannot have one without another.

Packaging is fundamental to our ability to provide people around the world with nutritious, high- quality food and drinks – but we recognize that this cannot come at the expense of the health of the planet. We have a responsibility to help preserve and protect the planet’s resources, and our approach to packaging plays an important part of this.

Today’s worldwide packaging system is unsustainable because it is still primarily linear—raw materials are used to make packaging for a product, and after the product is consumed, the packaging is thrown away. This model is creating important environmental challenges, particularly where plastics are concerned.

We have started our environmental journey a while back, through:

- co-building and co-financing waste management system (Eco-Emballage 1992)
- pioneering recycled content (rPET in Germany mid 2000s, today 14% rPET in countries where allowed)
- development of social inclusiveness: Danone and the Danone Ecosystem Fund have launched projects to support waste pickers in 7 countries, including by ensuring they are paid appropriate wages and afforded greater social protections
- provision of more information about our footprint through corporate and brand campaigns (Lanjaron, Villavicencio, etc)

In November 2016, we published our Packaging Policy to affirm our commitment to co-building a circular economy of packaging by sourcing sustainable materials and creating a second life for all plastics. This policy includes five main commitments that cover the packaging cycle, from the choice of raw materials upstream to consumer behaviour at end of product life:

1. Use of sustainable resources
2. Optimization of packaging weight and eco-design
3. Achieving zero plastics to landfill for industrial waste
4. Innovation to simplify consumers’ lives and get them involved in sorting and recycling
5. Co-creating a second life for all plastic

As a company committed to protecting and nourishing the health of the planet and people, Danone wants to play its part to accelerate the transition from a linear to a circular one economy of packaging, where products and materials remain in use; waste and pollution are eliminated; and natural systems are regenerated. We have progressed on our circular economy strategy through internal transformation, alliances with new partners (including the Ellen MacArthur Foundation and the New Plastics Economy Initiative), and brand engagement/piloting of new solutions. For instance,



in 2018, evian committed to making all bottles from 100% rPET by 2025, and Aqua in Indonesia committed to recover more than it uses by 2025.

Indeed, we want to fulfil our mission to deliver health through food to as many people as possible in and through 100% circular packaging. This means that we need to continue:

- Eliminating the packaging we don't need
- Innovating so all the packaging we do need is designed to be safely reused, recycled or composted
- Ensuring the material we produce stays in the economy and never becomes waste or pollution

In order to fulfill our ambition, we will need to:

- Accelerate our collaboration and partnerships with actors of the value chain, including pre- competitive research (Nestle/Danone/Pepsi on Natur'All bottle alliance etc)
- Have the right policy framework which will set a high level of ambition, while leaving enough room for manoeuvre locally to develop the most efficient means to reach these objectives
- Benefit from new financing scheme to support and accelerate the transition

About Danone (www.danone.com)

Dedicated to bringing health through food to as many people as possible, Danone is a leading global food & beverage company built on four businesses: Essential Dairy and Plant-Based Products, Waters, Early Life Nutrition and Advanced Medical Nutrition. Danone aims to inspire healthier and more sustainable eating and drinking practices, in line with its vision -Danone, One Planet. One Health- which reflects a strong belief that the health of people and the health of the planet are interconnected. Building on health-focused categories, Danone commits to operating in an efficient and responsible manner to create and share sustainable value.

Danone holds itself to the highest standards in doing business, as reflected by its ambition to become one of the first multinationals certified as B Corp. With products sold in over 120 markets, Danone generated sales of €24.7 billion in 2017. Danone's portfolio includes leading international brands (Actimel, Activia, Alpro, Aptamil, Danette, Danio, Danonino, evian, Nutricia, Nutrilon, Volvic, among others) as well as strong local and regional brands (including AQUA, Blédina, Bonafont, Cow & Gate, Horizon, Mizone, Oikos, Prostokvashino, Silk, Vega).

Listed on Euronext Paris and on the OTCQX market via an ADR (American Depositary Receipt) program, Danone is a component stock of leading social responsibility indexes including the Dow Jones Sustainability Indexes, Vigeo Eiris, the Ethibel Sustainability Index, MSCI Global Sustainability, MSCI Global SRI Indexes and the FTSE4Good Index.



Bart Vandewaetere, NESTLÉ, Head of Corporate Communications & Government Relations Europe, Middle East, Africa

Plastic packaging plays an important role in safely and conveniently delivering food and drinks to consumers. However, its increasing accumulation in the natural environment is today one of the most pressing global challenges we face.

Nestlé shares the vision that no plastic waste should end up in the environment. We believe that with the right approach, plastic packaging can be collected and recycled without having a detrimental impact. For this reason, our ambition is that by 2025, 100% of our packaging is recyclable or reusable.



In order to reach this ambition we are focusing on 4 core areas:

- Eliminating non-recyclable plastics, e.g. polystyrene used in yoghurt pots
- Encouraging the use of plastics that allow better recycling rates of major plastics used today, where value already exists
- Working to eliminate or change complicated combinations of packaging materials (from multi-layers to monolayers)
- We will also work on changing the colours of our plastic packaging to make them easier to recycle from the outset, e.g. lighter colours are easier to recycle

We are also committed to play an active role in the development of well-functioning collection, sorting and recycling schemes across the countries where we operate, including to collect 90% by 2025 of our PET bottles and their caps in Europe.

We have also pledged to stimulate a market for recycled plastics by continuing to increase the proportion of recycled plastics in our packaging, including 25% recycled content by 2025 in PET bottles in Europe.

Recognizing the important role that consumers play in helping to get waste packaging back into appropriate usage streams in order to be recycled, we are committed to putting consistent and standardized packaging labelling on recyclability to help consumers dispose of packaging in the right way. Therefore, we will work together within our industry associations and with governments to have easy-to-understand recycling information.

In order to achieve our commitments, we believe that working collaboratively with other industry partners and actors across the packaging economy is the smartest and most effective and efficient way of stimulating the changes needed, at the scale needed, within the shortest possible time.

Nestlé launched its global plastics packaging commitments in April 2018.

On 27 September 2018, we took another concrete step to achieve our packaging commitments.



Nestlé pledged to increase the use of recycled plastics in the European Union:

- By 2025 our PET bottles will contain at least 25% rPET (recycled Polyethylene terephthalate)
- By 2025 the PET layer in the respective laminates will contain 25% rPET
- By 2025 the caps on our glass jars and tins will contain 30% rPP (recycled Polypropylene)
- By 2025 the trays for our meat products will contain 50% rPET
- By 2025 the shrink films for display trays will contain 50% rPE (recycled Polyethylene)

Nestlé has a strong commitment on the uptake of recycled plastics for which certain framework conditions need to be in place. Secondary raw materials as basis for recycled plastic content need to be available in sufficient quantity and quality.

We need legal certainty when using recycled material. Hence, appropriate quality standards based on a sound regulatory framework have to be in place. The procedures of recycling processes for safe use of recycled material in food contact need to be approved by the European Commission. Today (September 2018), these authorization procedures are still pending. We ask for a swift approval. Since food safety for consumers is the first priority for Nestlé, we underline the crucial importance of a clear regulatory guidance. With this pledge, Nestlé also contributes to the voluntary pledging exercise on recycled content by the European Commission.

Theresa GRIFFIN MEP, (UK S&D), Industry, Research & Energy Committee

According to the European Commission, about three quarters of the marine litter in the world's seas is plastic. It estimates that 4.8 to 12.7 million tonnes of plastic, or 2 to 5% of plastic waste generated, enter the oceans each year. On European beaches, plastics make up 80–85% of marine litter and single-use plastics account for about half of all marine litter. Most of the plastic in our oceans originates from land-based sources, except in the North-East Atlantic where sea-based litter is equally important.

Besides being a major threat to marine and coastal biodiversity, marine litter induces socio-economic impacts. Degradation of marine litter is estimated to cost the EU economy between €259 million and €695 million per year, affecting mainly the tourism and recreation sector (up to €630 million) and the fisheries sector (up to €62 million). Both sectors are also a source of marine litter (European Commission, Proposal for a Directive of the European Parliament and of the Council on the reduction of the impact of certain plastic products on the environment, COM(2018) 340).



Due to climate change and negative environmental impacts, we are currently seeing a dramatic shift in people's perception and use of plastics. Whereas plastics revolutionised our lives over the last century, from reducing food waste, to creating high performance insulation and from sterile medical applications to mass consumer electronics, such as radios and telephones, the negative impact will be felt for centuries to come. According to a 2017 Eurobarometer survey, a



large majority of Europeans are concerned about the impacts of everyday plastic products on their health (74%) and on the environment (87%).

The way we have approached the use of plastic, as with all things reliant on fossil fuels, is therefore, unsustainable. The idea of single-use plastic is a colossal waste of a precious resource, which we can no longer afford. From the millions of tonnes of plastic in our oceans to the heaps of waste ending up in landfill, this is not only incredibly bad for the environment, but also bad for the consumer.

We must now as a society switch to a more 'circular' model of plastic use. The 'hierarchy of waste' tells us that we should attempt to avoid or reduce the use of plastics (or indeed any resource), find ways to re-use existing plastics, then send those goods for recycling, and so on until, finally, any residual waste is properly disposed of.

It is equally important to remember that, while this is true for individual consumers, the onus must be on governments and producers to adopt these standards. The change we require is both cultural and structural. This is why it is vital to create change at an EU-wide level to tackle this issue.

In May 2018, the European Commission put forward a legislative proposal seeking to address single-use plastics and the issue of marine litter. The proposal focuses on the top 10 single-use plastics items found on beaches as well as on fishing gear. If approved, the proposed Directive would, by 2030, reduce marine litter on EU beaches by about a quarter; avoid the emission of 3.4 million tonnes of CO₂ equivalent; avoid environmental damages which would cost the equivalent of €22 billion; and save consumers a projected €6.5 billion (http://europa.eu/rapid/press-release_IP-18-3927_en.htm)

We also know that manufacturing and innovative technology can tackle societal challenges but policy and social change/demand are also key factors. There are different scenarios and pathways that can lead us towards a real circular economy, such as:

1. Supporting a viable and better integrated market for recycled plastics
2. Pioneering new and innovative materials
3. Using high quality and latest technology for recycling
4. Better packaging design – possible penalties for wasteful design
5. Ambitious recycling targets
6. Decoupling plastics generation from economic growth
7. More rigorous origins rules
8. Widely advertising best practices
9. Greater consumer participation in markets for recycling

A shift towards minimal and sustainable packaging is vital if we are to reduce the amount of waste from entering the consumer economy and the environment. This shift should be coupled with a more integrated recycling of the remaining plastic into our economy. We should provide research grants and positive tax environments for innovative materials and processes, as well as for businesses, which seek to minimise waste and create a cleaner, greener and more circular economy. As an endpoint, sending to landfill would be a very last resort, rather than the default.

All of this must be taken in conjunction with a whole package of structural reforms, including energy efficiency in homes, businesses and transport, along with measures to tackle energy pov-



erty directly. In regions, which are currently reliant on fossil fuels, there are discussions around a 'Just Transition' Fund, which would aim to upskill the workforce of communities impacted by the change from a fossil-fuels economy to a low-carbon economy, in order to avoid the post-industrial decline we have previously seen in our towns and cities. As we move away from the idea of 'single-use' towards a circular economy, the concept of 'Just Transition' could also be applied to ensure communities are not financially disadvantaged by this particular change. Excess and single use packaging also acts as a barrier for, for instance, arthritis sufferers; no more apples in plastics!

In conclusion, we need to reduce waste by finding new and innovative ways of manufacturing and packaging goods. We can achieve this shift by making reuse and recycling methods culturally ubiquitous and by embedding those goods into circular processes, so that there is an economically positive feedback loop on efficient consumer consumption. Followed-up by providing 'Just Transition' approaches to communities in order to facilitate the shift to a circular economy and by acknowledging that sustainable packaging also has social benefits. Finally, by creating a governmental and commercial policy framework, whereby waste is dis-incentivised and circular approaches are rewarded.

Quite simply, as we were taught in primary school, we need to reduce, reuse, recycle and change the way we view and use plastics in our society.

Jo LEINEN MEP (S&D Germany) Environment, Public Health & Food Safety Committee

- With the Plastics Strategy and the Single Use Directive we do not want to condemn plastic
- The material has a value in many parts of our lives and can contribute to saving emissions and energy as well as protecting food and makes it more durable
- The Commission's initiative will help companies to develop innovations and to kick off the competition for the best and most sustainable solutions
- We need to keep valuable raw materials within the loop as long as possible
- After the waste legislation, the Plastic Strategy and the Single Use Directive will help to increase separate collection and recycling rates
- Mandatory rules for product design and product requirement can additionally ease recycling
- Apart from the economic potential, we do have a responsibility for our nature and marine environment
- The Single Use Directive targets specific products and will help to reduce littering and the pollution of rivers and seas
- This alone will not solve the global problem of plastic pollution in our oceans, but it already created a lot of attention for consumers as well as manufacturers and retailers
- Many companies, including some present here, have announced new packaging ideas or recycling targets for their own products





- Consumers as well look for ways to prevent unnecessary plastic packaging and question their own behaviour
- The plastic bag directive several years ago marked a similar moment when many stakeholders wanted to avoid a mandatory reduction target, and people did not want EU rules to interfere with their consumption pattern
- In the end the consumption of plastic bags is going down and people got used to using less bags
- Today's vote on the Single Use Directive improved the Commission proposal:
 - extending the market restrictions and adding more clarity to provisions
 - introducing national consumption targets
 - minimum recycled-content target of 35% in bottles up from 2025
 - minimum separate collection and recycling target for plastic bottles of 90% in 2025
 - better labelling on products to prevent littering and to indicate the right way to dispose a product
- Clear, EU-wide rules and product requirements can also be beneficial for the manufacturers and retailers as they bring clarity and will apply to all in the same way, thereby ensuring a fair competition
- The Progressive Alliance of Socialists and Democrats (S&D) could have imagined to even set concrete reduction targets, now the ENVI compromise foresees national targets and can lead to disparities in the member states which might not be helpful for the industry
- We also need to be very clear in the definitions, we want to regulate single use items that often end up into the environment, but not packaging that is usually used at home and disposed correctly
- The interpretation of the definitions must be clear to give security to companies
- Regular food packaging for example should not fall under the Single Use Directive, but is already covered by measures of the waste and packaging waste directives
- Another question that remains contestant is on the producer responsibility and how much producers should be involved in the clean up costs
- Increasing the sustainability of products and packaging will also mean to look at substitute materials
- It will be crucial to have a close look at the availability and sustainability of these alternative materials like paper or bioplastics
- I am happy that one of my own amendments addressing this issue, passed today (Amendment 141)
- I am interested to hear the companies' response to these open issues.

Gesine MEISSNER MEP, (ALDE Germany) Environment, Public Health & Food Safety Committee, Industry, Research & Energy Committee

Moving to More Sustainable Packaging

Packaging a product throughout its supply chain is a key part in every industry. It helps to protect a product, make it safe, communicate information and designing it in an attractive way helps to sell the product. At the same time, packaging generates massive amounts of waste, leads to plastic





pollution and is a source of CO₂ emissions. Despite its abundance, only 14% of global plastic packaging is recycled.

Packaging also contributes to marine litter, a global issue threatening biodiversity and the health of animals, ecosystems and humans. Entering the oceans via rivers, 80% of marine litter is land-based, meaning that a plastic bag that was littered into the environment hundreds of kilometres from the coast eventually ends up in the oceans. Sea based sources include fishing equipment or other material lost at sea. Marine litter usually enters the sea as macro plastic, which in scientific terms is considered any item larger than 5 millimetre. However, not only macro plastics cause entanglement and suffocation to animals, micro plastics that degrade from macro plastics have direct consequences to humans. By absorbing toxic pollutants, the plastic becomes hazardous waste. Through the food chain, toxic micro plastic particles then end up on our plates. What makes marine litter a challenging issue is its long degradation time. Once in the ocean, plastic items take several hundred years to decompose.

Since packaging contributes to this global pollution issue, the approach to reducing marine litter includes rethinking and redesigning the packaging we use. In economic terms, packaging materials with a value of €80-120 billion are being lost every year. In ecological terms, the environment and especially the oceans are being polluted and incineration of plastic emits toxic substances into the air. These issues call for new and innovative ways to change the way products are packaged. Packaging a product throughout its entire supply chain in a sustainable way has received increased attention. Multiple advantages speak for rethinking and redesigning the way products are packaged.

1) Sustainable packaging contributes to sustainable development. Packaging that is fit for purpose and designed for reuse and recycling can contribute to reducing the environmental impact and the ecological footprint allowing future generations to meet their own needs.

2) Sustainable packaging that is based on recycled material can create an economy where plastics are used repeatedly, therefore boosting the circular economy. At the same time, it reduces waste generation and CO₂ emission. An important aspect of this is that plastic pollution in the environment and especially in the oceans can be greatly reduced.

3) Moving to more sustainable packaging is in line with the Single-Use Plastic Directive. Out of the ten single-use plastic items most found on beaches, five can be used for packaging. Moving away from conventional packaging therefore helps to achieve the goal of preventing and reducing plastic marine litter from single use plastic items under the Single-Use Plastic Directive.

4) The population is becoming increasingly aware about plastic pollution and changes their behaviour to become more sustainable. Sustainable packaging can therefore influence consumer choices and serves as a selling argument. By addressing sustainability issues, companies remain competitive and can boost their growth and performance. Furthermore, the sustainable packaging industry is expected to grow in the future, giving companies an incentive to invest into sustainable packaging.

Moving towards sustainable packaging of course poses challenges to companies, retailers and packaging companies and it takes time to accomplish this shift. Nevertheless, leading brands and institutions have already committed to achieve quite ambitious goals. The European Union



will make all plastic packaging on the EU market recyclable by 2030 as set out under the European Plastic Strategy. Furthermore, Colgate-Palmolive, The Coca-Cola Company, Unilever, L'Oréal and many more work towards using 100% reusable, recyclable or compostable packaging by 2025. Adidas for example, together with the design studio Parley, has recycled marine litter into swimwear, sportswear and shoes. In addition, Nestlé has announced to make 100% of its packaging recyclable or re-usable by 2025 by eliminating non-recyclable plastics, encouraging the use of plastics that allow better recycling rates and by eliminating and changing complex combinations of packaging materials.

Moving to more sustainable packaging is indeed possible and large companies taking the lead in rethinking and redesigning their packaging is a step in the right direction to save our resources and our planet.

Eline Boon, ELLEN MACARTHUR FOUNDATION,
Research Analyst

The New Plastics Economy

Plastics are all around us, we all benefit from them and they are a great material. It is not about doing without plastics but doing things differently.



The global momentum to rethink the plastics system is ever growing.

We welcome the EU highlighting plastics as a focus topic, as it is a material that requires special attention given high growth rates, low recycling rates and high rates of leakage in the environment.

- The strategy is a strong declaration of intent from the EU Commission, and sets direction for a transition to a circular economy for plastics
- It looks at the entire system, including strong focus on “upstream” elements that challenge what’s being put on the market in the first place.

As with any strategy, execution will be key. The strategy gives a strong declaration of intent; now implementation over the coming months and years will be critical to ensure lasting impact.

In this context we welcome the fact that the framework provided by this strategy lays the ground for action and sets a clear direction of travel.

We need a plastics system that works, we need to transform the current take-make-dispose economy into one where plastic packaging never becomes waste, we need a new plastics economy.

What does this New Plastics Economy look like?

It is an effective system for plastics based on the circular economy and it has 3 ambitions:



1) Create An Effective After-Use Plastics Economy: we can achieve this effective after use plastics economy by improving the uptake and economics of reuse and recycle but also by controlled biodegradation for targeted applications.

This first ambition is the cornerstone of our New Plastics Economy and will automatically help achieve ambitions 2 and 3 as well

2) Drastically Reduce the Leakage of Plastics into the environment – amount of plastics entering our oceans

3) Decouple Plastics From Fossil Feedstocks

To achieve the ambitions, we need action so we developed a global action plan building on 3 strategies to transform the global plastic packaging market.

First, for 50% of the global plastic packaging market we should make recycling economically more attractive through efforts on both design and after-use systems. Although recycling alone is not a silver bullet solution. We need to go beyond recycling

Second, at least 20% of the market reuse is an economically attractive solution

Last, 30% of all plastic packaging is either too small or too complex to be collected and recycled. For example, a bag of crisps, a convenient multi material that keeps our food fresh but really hard to recycle, or a sweets wrapper that because of its size will escape collection systems. For these materials we need fundamental redesign and innovation.

Next to recycling and reuse we need fundamental redesign and innovation to close the loop.

Plastics are high on the global agenda and many organizations around the world are taking action. But also at the New Plastics Economy Initiative we continued our action oriented work.

Last year 14 leading brand, retail, and packaging companies announced commitments to work towards 100% reusable, recyclable or compostable packaging by 2025 or earlier

Next to this, the Chilean and UK governments have made commitments to create a circular economy for plastics through setting up plastic pacts.

Lastly together with UN Environment we are setting up a new coalition of businesses and governments united behind a world-leading set of circular economy commitments tackling plastics waste

Underpinned by shared ambitions and definitions, and a high degree of transparency, It will address the root causes of plastics pollution and not just the symptoms.

Signatories and the detailed commitments will be unveiled later this month at the Our Ocean Conference.

(<https://newplasticseconomy.org/>)



INNOVATIVE WASTE TREATMENT TECHNOLOGIES

Dr Christoph Sievering, COVESTRO, Vice President, Head, Global Positioning & Advocacy for Energy, Climate & Circular Economy

- Covestro is a worldwide leader in the production of high performance polymers.
- Our materials help master global challenges such as resource depletion, climate change, increasing mobility and growth of cities. We produce them trying to preserve natural resources insofar as possible.
- Our products are integrated in a very large amount of products of our daily life: from buildings to cars, sport and leisure items, electronics and furniture, fostering energy efficiency, comfort and better mobility.



Successfully Implementing the Plastics Strategy to Achieve an Effective Sustainable Economy

The European Commission has already made many new proposals in this field (<https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1516265440535&uri=COM:2018:28:FIN> and <http://www.europarl.europa.eu/sides/getDoc.do?type=REPORT&reference=A8-2018-0262&language=EN>), and the Plastics Strategy Communication <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1516265440535&uri=COM:2018:28:FIN>), as well as the recent EP resolution (<http://www.europarl.europa.eu/sides/getDoc.do?type=REPORT&reference=A8-2018-0262&language=EN>), is addressing the problems posed by this material in a comprehensive manner:

1. Plastics pollution, marine litter, and end of life solutions
2. Plastics footprint and eco-design for recycling
3. “Non-toxic environment” and the presence of substances in plastics products

We need to take one step back, and the 5 main questions we should ask ourselves are rather the following:

- Why has plastics spread so widely in the market and replaced other materials over time?
- Is the environmental footprint of this material better or worse than others?
- Is our objective cutting greenhouse gas emission, to achieve the Paris agreement objective, or do we just want to increase recycling rates to create a “recycling economy”?
- Should we push “ECO-design for mechanical recycling” and therefore phasing out all substances which may pose problems in the recycling process?
- How do we solve the problem of “Waste” and close the loop?



1. Plastics: the material of 21st century

Why would you replace a material which is so versatile and useful as plastics? The plastics industry is worldwide one of the most innovative sectors. Population growth, increased energy demands, scarcity of resources, climate change – mankind faces challenges of previously unknown dimensions. Polymers contribute greatly to fulfilling existing and future demands. A world without plastics is not desirable for the simple fact that those materials allow to turn ideas into real, tangible innovations. The applications and possibilities are numerous and varied: from lightweight materials for electric cars, to food packaging, to buildings insulation, household appliances, electronics, water treatments etc. The diversity of plastics and their applications is evident in our everyday life (https://www.plasticseurope.org/application/files/5715/1717/4180/Plastics_the_facts_2017_FINAL_for_website_one_page.pdf).

2. In comparison with other materials plastics is by far the most sustainable choice

The environmental cost of using plastics in consumer goods and packaging is nearly four times less than it would be if plastics were replaced with alternative materials. This is the conclusion of a recent study prepared for the American Chemistry Council by Trucost, an S&P Global financial research firm, taking into account the consumption of natural water and emissions to air, land and water. The study argues that lightweight plastics have environmental benefits because they do more with much less (<https://plastics.americanchemistry.com/Study-from-Trucost-Finds-Plastics-Reduce-Environmental-Costs/>).

3. Holistic approach means closed loop for carbon

Covestro supports the general objective to close the loop for carbon. When we refer to climate change and to the COP21 Paris Agreement, we must keep in mind that, in a holistic approach, plastic remains essential to keep temperature increase to well below 2°C. How?

- Through weight reduction as well as increase of the durability of vehicles, for example
- By improving energy performance in buildings, which account for approximately 40% of energy consumption and 36% of CO₂ emissions in the EU (according to Commission figures). (<https://ec.europa.eu/energy/en/topics/energy-efficiency/buildings>)
- With the use in refrigeration equipment which is essential for preserving food. Food waste alone generates about 8% of Global Greenhouse Gas Emissions (according to Commission figures). (https://ec.europa.eu/food/safety/food_waste_en)

As a consequence, we understand CE as a model that creates products which positively contribute to resource efficiency over the full life cycle - from feedstock, to production, throughout the products' use phase, up to and including their end of life.

An increased durability of products is crucial: prevention of waste is at the top of the waste hierarchy, as the Parliament recently confirmed. The longer a product is useable, the less often it needs to be replaced. This, in the end, results in total savings of resources and waste.

The optimisation of production process for plastics is also very important: technologies allowing to save energy and waste during production contribute to a resource efficiency economy and society.



Finally, the energy recovery of products helps to reduce the burning of fossil raw materials. Waste to energy should become part of energy mix for Europe to ensure less landfill and less consumption of fossil fuels. Also other end of life options help to increase feedstock diversification (bio-based, CO₂, waste gases) and help to reduce the dependency on fossil feedstock to close the carbon loop.

4. Look at entire Life Cycle, not exclusively “end of life”

The EU is calling for revising its product policy implementing “design for recycling” and “mandatory incorporation of recyclates in new products”.

We do not believe that promoting the use of products, for example through their labelling and eco-design criteria, based merely on their recyclability, is the solution.

To find the most sustainable and resource efficient pathway for a product it is important to evaluate its environmental impacts over the whole life cycle. For long term applications the use phase is of importance to take a look at: during the use phase some of those application actually help save other resources like building insulation helps reduce CO₂ from heating. All this needs to be part of the calculation. This can be done with scientific approaches like Life Cycle Assessments (LCA) complemented by Carbon Productivity calculations (www.carbonproductivity.com)

We also do not believe that phasing out chemical substances which are safely managed within REACH is a sustainable solution, as those substances ensure durability, performances and resource efficiency. In fact, although it is clear that the health of citizens cannot be compromised, the EU framework already ensures the regulations on chemicals are applied following a risk-based approach, so that chemicals can still be used to improve the performances and sustainability of products.

To solve the issue of handling products containing legacy chemicals or substances beyond a safe concentration threshold, and for which dilution cannot guarantee safe recycling, chemical recycling and incineration with energy recovery are effective solutions.

5. Effective implementation of waste legislation is necessary, and for recycling there are many possible solutions

It is of utmost importance that Member States implement waste legislation that is today already applicable in Europe, optimizing separate collection and the waste hierarchy.

Then, to address circularity it is crucial to differentiate between short lived products, such as packaging which make up almost 40 percent of Europe's plastic demand, and long lived products like cars and insulation. For packaging a design for recycling approach may be reasonable whereas for long lasting products the emphasis needs to be on design for durability, upgrade or reuse.

Hence, although mechanical recycling is the end-of-life solution currently promoted within legislation, other end of life options are available for long lasting applications.

Energy recovery, feedstock and/or CO₂ recycling are better solutions, that Covestro has already



developed, and have now products on the market integrating CO₂ as raw material for such applications.

Chemical and thermal recycling should be looked at with great attention by the policy makers: some pilot projects have been carried out on the feedstock recycling of end-of-life polymers and many other studies addressing the same issue are ongoing. Pyrolysis, Gasification and Solvolysis are options under development, but the objective should be to increase their conversion rate as well as their economic viability to transform them into sustainable solutions, thought appropriate funding within Horizon Europe.



Leonor Garcia, PLASTICSEUROPE, Public Affairs Director

Plastics 2030 - PlasticsEurope's Voluntary Commitment to Increasing Circularity and Resource Efficiency

Increasing Plastics Packaging Recycling and Re-use

PlasticsEurope will aim to achieve the goal of 100% re-use, recycling and or recovery of all plastics packaging in the EU-28, Norway and Switzerland by 2040. The overriding focus of this commitment is to ensure high rates of re-use and recycling with the ambition to reach 60% re-use and recycling of plastics packaging by 2030.

In view of this commitment, PlasticsEurope has established a number of European platforms to bring forward specific commitments. These commitments will serve as the basis for developing feasible approaches and innovative solutions to stimulate increased recycling across different plastic types and sectors. This will also entail a strengthened multi-stakeholder engagement and collaboration along the value chain.

We will provide a significant share of the required resources (expertise and funding) to achieve the platforms' objectives.

a) Polyolefins Circular Economy Platform (PCEP)

As a multi-stakeholder platform, PCEP seeks to identify the barriers and opportunities to increase Europe's polyolefins recycling and work towards ensuring the supply of high-quality recycled polyolefins into the European market. The platform will:

- announce in 2018 an ambitious industry-wide 2030 roadmap to reach 60% recycling and reuse of collected Polyolefin (PO) packaging
- work collaboratively with all relevant stakeholders in Europe to have more than 75% of all PO packaging readily designed-for-recycling by 2030
- work collaboratively with all relevant stakeholders of the waste management value chain in Europe, including municipalities and collection schemes, with the aim to collect all PO packaging, to sort them to produce a high quality/value feedstock for the PO value chain



- prepare an annual reporting system and invite the EU legislators to challenge and scrutinise PCEP progress on a yearly basis

Innovation is at the heart of this initiative and will require both public and private support to be successful.

For PCEP the following priority areas of work have been identified:

- Development of packaging design guidelines and assessment protocols according to the principles of the Circular Economy. Innovation and standardisation to increase the recyclability of polyolefin packaging.
- EU wide quality standards for pre-sorted plastic waste, harmonisation of test methods for recycled plastic materials and certification of plastic recycling operations.
- Innovation & development of end-use markets to stipulate reuse and encourage demand for recycled plastics.
- Stimulating innovation to improve recycling, conversion technologies and reuse.

b) Styrenics Circular Solutions

The Polystyrene (PS) and Expandable Polystyrene (EPS) producers are actively supporting the development of technologies that enable the recycling of Polystyrene-based products back into their original applications. With a strong focus on innovation, these new technologies will enable the incorporation of post-consumer waste back into production processes, meeting most-demanding standards. By the end of 2018, the most promising technologies and the path forward will be assessed.

The PS/EPS producers will actively collaborate with the complete value chains to further improve the collection and sorting systems for packaging waste. The objective is to considerably expand the accessible market of post-consumer PS and EPS waste.

An independent legal structure with dedicated funding will be set up, and business cases will be developed for the industrial scale-up of the most promising technologies. An example of such business case is the PSLoop cooperative that was established to build a pilot plant which will recycle PS/EPS construction materials.

The EU is invited to monitor and review the progress made.

c) Vinyl Circular Solutions (VCS)

Vinyl Circular Solutions (VCS) is the PVC Packaging Platform of the European Council of Vinyl Manufacturers (ECVM). VCS actively develops and promotes the use of eco-efficient, cost-effective and safe PVC packaging materials which ensure that packed articles have a considerably increased shelf-life. At the end of their life PVC packaging can be mechanically recycled.

The European Council of Vinyl Manufacturers is a founding member of VinylPlus® (www.vinyl-plus.eu), the long established Voluntary Commitment to sustainable development by the entire European PVC value chain (resin manufacturers, additives producers and converters), and a benchmark for other industry initiatives.



Launched in 2000, VinylPlus® aims at strengthening the sustainability of PVC products and of the entire industry through a holistic approach including increasing safe and quality PVC recycling (annual progress report). The VinylPlus® commitment includes, amongst others, a target to recycle 800,000 tonnes of PVC per year by 2020. To continue the journey started in 2000, the European PVC value chain will review in 2018 VinylPlus®' achievements with a view to defining, in consultation with the stakeholders, new ambitious recycling targets alongside a set of other concrete objectives for the next phase of its Voluntary Commitment towards 2030. Other sectors and plastic types not covered by this commitment, are addressed by the “Voluntary Commitments towards a circular economy” by EuPC and others.

Julie GIRLING MEP, (EPP UK), Environment, Public Health & Food Safety Committee

Highlights of her presentation included the following points:

- Plastics have revolutionised the way we live and we must be very careful how we deal with this. Recycling should be carefully thought through. Reuse should be encouraged. Alternatives must not have unintended environmental impacts. We need a metric for assessing the above
- Europe is not the biggest problem. Yes, we use a lot of plastic but we also recognise ways of tackling waste. We need to integrate this principle into our trading relationships
- A good example is POPs, voted on today. We have ELV Directive and WEEE Regulations which have clear targets and guidelines. Yet MEPs have voted against an amendment which would enable this recycling. This is illogical. Not all plastic is the same. A disposable cup is not the same as a TV
- Technology for recycling is expensive. We must have certainty for the investment cycle to work



Clare MOODY MEP, (UK S&D), Industry, Research & Energy Committee

Why the Circular Economy Matters

A circular economy is an alternative to a traditional linear economy of make, use and dispose. Achieving a strong, collaborative, binding and progressive circular economy package matters for our health, for the environment, and for the future of our planet. We have come a long way from inception- circular economies are now being implemented by front-running government ministries, and international organisations and it is now central to many companies' business strategies. Principles of the circular economy can boost competitiveness, drive economic growth and create new jobs.



According to statistics from 2016, 47% of all municipal waste in the EU is recycled or composted. However, waste management practices vary between EU countries and some countries are still landfilling large amounts of municipal waste. The practice of landfilling remains popular in eastern and southern parts of Europe and twelve countries landfill almost half or more of their municipal waste. In Malta, Greece, Cyprus and Romania this is more than 80%.

Clearly, we need to rethink the way that we make policy in this area. We cannot continue to make single use, disposable, obsolete items. This includes looking at redesigning, reusing, and recycling, to bring waste levels down to zero. As policy makers, we must push for the implementation of the UN Sustainable Development Goal on food waste at EU level, as well as promoting investment in research and development.

Maximising the value of raw materials by allowing more materials to remain products or to be classified as by-products is key. While innovative technology allows the development of stronger, better-designed, more durable products, opening up new possibilities through the use of biodegradable materials for example.

Maintaining waste to energy as a waste management option where justified, by life cycle thinking, while focusing on consumer education and changing public attitudes towards waste minimisation is also crucial.

Earlier this summer, Members of the European Parliament adopted the circular economy package which establishes new legally binding targets and fixed deadlines for waste recycling and reduction of landfilling. By 2025, at least 55% of municipal waste (from households and businesses) should be recycled. 65% of packaging materials will have to be recycled by 2025, and 70% by 2030 and a 50% reduction of food waste is expected.

It is clear that the EU has an important role to play here in stepping in to set increasingly ambitious rules and targets to try to reduce our waste production. The Commission must also keep its commitment to better address the problem of waste in our environment, and must bring forward substantive legislation from the plastics strategy that will deal specifically with toxic and damaging plastic waste.

In addition, this week the parliament's ENVI committee approved a Report on single-use plastic. The main goal of this report is to prevent and reduce plastic waste from single-use items, introducing a wide range of measures such as national consumption reduction targets, recycled-content target for bottles, improving citizen's awareness and obliging producers to pay for producing litter. The text approved is more ambitious than the proposal put forward by the European Commission and is more precise over the single-use plastics reduction timeframe, paving the way for much clearer and more detailed info labels.

Managing waste in a more efficient manner is the first step towards a circular economy, where most if not all products and materials are recycled or re-used repeatedly. It is clear that some national governments are making significant progress while recent legislative successes at a European Level are encouraging. We forget that whilst plastics are so new, their consequences are long lasting. As such, the polluter-pays principle must continue to be reaffirmed and strengthened and we need to face up to our responsibility to future generations.



Antony Fell, EUROPEAN FORUM FOR MANUFACTURING,
Secretary General

The next European Forum for Manufacturing Round Table Dinner Debate in the European Parliament will focus on Digitising Construction Machinery on 21 November 2018.

My thanks go to our excellent Chair for this evening, José Inácio Faria MEP, to the Commission, our company and MEP speakers, to FoodDrink Europe, and their staff for their contribution both tonight and in preparation, as well as to the EFM staff.


