Plastic: From raw material to recyclable material

Dear ladies and gentlemen,

Whether yogurt cups, shampoo bottles, or showerheads – the many ways plastic can be used in everyday life make it a well-sought-after partner. The popularity of the material has greatly increased demand for plastic products in the past decades, but their durability, in combination with a lack of proper disposal, has led to ecological problems. The European Commission has now responded to this issue with its presentation of the EC Plastics Strategy in January 2018. Its objectives are:

- In 2030, all plastic packaging in Europe will either be reusable, recyclable, or compostable.
- In 2030, more than half of the plastic waste in Europe should be recycled.
- The use of recyclates should be expanded in the coming years.

As the leading packaging specialist, we welcome the European plastic strategy – a topic we have been dealing with for some time now. For example, the recyclability of products as well as the use of recycled materials are ideas that are embedded in our business strategy. In all the sustainability efforts, it is important for us to keep the entire eco-balance of a product in mind and not to neglect the main functions of packaging. We want to create innovative packaging solutions for food and non-food products – for the sake of our environment and the quality of life of everyone across the globe. The following contains a summary of our approaches on the current topics of discussion on plastic and recycling:

**Recyclability of Products**

Every year, 25 million tons of plastic waste accrue in Europe alone. Less than 30 percent of it is collected for recycling. This is a waste of a valuable raw material. We have therefore made it our objective, together with our customers, to pay attention to the recyclability of our packaging as early as during product development. Product design, in particular, is of crucial importance since our guiding motto is, after all: “Designed for Recyclability”. Our developers are therefore intensively involved in developing packaging that is not just recyclable, but that also aims to improve the ecological balance. We can then offer our customers solutions that conform not just to the highest recycling standard but also offer competitive advantages when the product is placed on the market. But aside from implementing new products, we must also continue developing existing packaging solutions. We are therefore currently examining the recyclability of our product portfolio and showing our customers individual possibilities for improvement in the course of joint workshops.

**Use of recyclates**

The operating principle of a successful circular economy is clear: Used plastics are recycled and reused to manufacture new products. The use of recycled plastics (recyclates) is therefore becoming an even more important topic for us in product development. It must be ensured that our solutions with recycling material as well as with new material conform to the highest requirements and quality standards.

In the non-food sector, we were one of the first packaging companies worldwide to market packaging solutions using 100 percent recycled material. We see the greater use of r-PET, but also r-PE and r-PP, as an opportunity to get a sustainable circular economy for plastics underway.” As a company driven by innovation, we have already made an early start in making our technologies fit for the future to allow us to offer our customers all possible solutions.
Even in the food sector, we have already taken measures to take sustainable packaging solutions to the next level. This requires extensive know-how and experience: The rules of the European Food Safety Authority (EFSA) for the use of recyclates in food packaging are strict and specify exactly which materials can be used. Recycled materials can currently be used in the food industry only in a very limited way. Despite the very limited amount of materials and technologies allowed by the EFSA, however, we are in a position to offer new solutions now. Here, we have placed the emphasis on the use of r-PET and are convinced that this is where the future for the food sector lies.

**Disposable products made of plastic**
Following the release of the plastics strategy, the European Committee presented a legislative proposal that provides for a ban on certain disposable plastics. This is the committee’s response to the increasing pollution of the oceans by plastic products. We too support the reduction of the use of plastic where it makes sense and where there are realistic alternatives. For us, this means that the ecological balance of packaging solutions must be given equal consideration as other evaluation criteria. We are convinced that plastic packaging provides added value to product protection and sustainability, and that it gives people appropriate support in their everyday lives.

**Bio-based plastics**
Current discussion, including within the European Commission, often refers to bio-based plastics as the “green” alternative to traditional plastics. We at Greiner Packaging have also tested these materials in the last few years and always include new developments in this sector in our approaches to innovation. However, we would like to state that, for us, bio-based plastics are currently not an alternative to existing materials on an industrial scale. Used in rigid packaging, they are neither compostable, nor are there currently enough appropriate collecting, sorting, or recycling streams. Moreover, it is not in our interest to use land that is available for producing food to produce packaging material."

**We look forward to hearing your questions and ideas:**
Packaging always involves individual solutions: Each one is unique. We therefore also consider each package individually, and are at your disposable for joint workshops, developments, and project management.

Sincerely,

[Signature]

Manfred Stanek
CEO Greiner Packaging International