

Position Paper – Plastic Recycling *March 2018 Corporate Communications - Veolia Deutschland*

Opinion on China's ban of plastic waste imports

The challenges of the plastic waste management market

Scarcity of raw materials, scarcity of water, and scarcity of energy: these are huge challenges facing our world today. Modern man is living on ecological credit, but there is a remedy for this: Circular Economy. Although Circular Economy is expanding, it does it slowly and it is not enough. There are several reasons for this: first, manual sorting of waste is still expensive in developed countries. Second, the price of the converted material is often too high in comparison with the raw material; hence the need for initial financial aid. Finally, industrial companies are often too reluctant to use recycled materials, which they regard as second choice.

These problems also apply to the management of plastics waste. At the end of last year, this branch has been under further pressure after Beijing established strict limits on imports of foreign waste. 24 types of "foreign garbage," including plastic scraps and mixed unsorted paper are now forbidden to enter the Chinese territory. Before the ban, China was the world's dominant importer of plastic waste, accounting for 87% of the EU plastic imports. Following this critical news, Germany, as well as the rest of its European partners, had to adapt to avoid an unmanageable surplus of plastic waste on its soil. These complications exacerbated existing issues in the plastic waste management industry and highlight the urgency for further development in this field.

Chinese import restrictions is already having a negative impact on plastic price, pushing waste management companies towards the option of burning surplus plastic waste, thus producing energy, rather than making new materials through recycling. Some countries are also turning to landfilling, a cheaper option which could yet have a disastrous impact on the environment. Recent trends show a growing activity of exporting plastic scraps to East Asian countries such as Malaysia Vietnam, Thailand and Indonesia. However it is not sustainable solution in the long term as it only postpones the problem.

Germany can turn those challenges into opportunities

Veolia believes that the Chinese restriction is actually an opportunity to boost the pressing development of the recycling sector in Germany and Europe:

- The build-up of plastic waste offers an abundance of material to supply our processing facilities units.
- Some underutilized technologies, being more expensive than export, now have the potential to be developed and financed.
- In addition to developing the recycling sector, the share of energy recovery by incineration will also increase.

Overall, and over time, the plastics recycling market will move towards creating more added value in Europe. However, in order for Veolia to take full advantage of this situation, the Group needs the support of the public authority, the industry as well as the citizens.

What happened? :

Overview

At the end of last year, China established strict limits on imports of foreign waste. Beijing imposed severe limitations on imports of 24 types of "foreign garbage," including plastic scraps and mixed, unsorted paper.

Solutions :

Improve and develop the plastic recycling process to handle the remaining flows of waste within Europe.

Propositions :

- Stimulate the demand for recycled goods
- Better the waste sorting procedure
- Support waste managing companies

The legal shortcomings in supporting waste management companies

The Packaging Act, which has now been approved by the Bundesrat, will come into force on 1 January 2019. Introduced to increase the recycling of waste from private households and encourage manufacturers to use recyclable packaging, the changes include higher recovery targets for packaging materials. The new law will also introduce incentives for packaging producers to incorporate recyclability considerations into their packaging design, and to use recycled or renewable materials. These new regulations are in line with the government's goal to further develop the "successful German model of a circular economy".

At the European level, the Commission's Plastics Strategy aims to make all plastic packaging recyclable or reusable by 2030. Plastic waste management is a pressing matter and Veolia welcomes the quota and targets set at both the German and the European level. Unfortunately these bills do not fully take into consideration the stress recent Chinese restrictions will put on the waste management process in Germany and more broadly in Europe. In order to address the challenges triggered by the Chinese ban, the government needs to support its waste management companies and implement coherent and practicable policies:

- To stimulate the demand for recycled goods

- Setting higher requirements to increase plastic recyclability.

Multiport and MultiPet

Founded in 1991, Multiport GmbH's capacity per year had been increased from **former 2,000 tons to 38,500 tons per year today.** Since 2006, Multiport has been putting the main focus on the **recycling of PE HD and PP packaging waste.**

MultiPet GmbH was founded in 2001 and started its production with a new PET recycling facility. Today, **30,000 tons of PET waste are recycled per year** by state-of-the-art machines.

Thus, the total capacity at the site in Bernburg is almost **70,000 tons per year.**



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With expertise covering more than a hundred years of experience, Veolia can truly position itself as a strong partner to tackle the challenges posed by the growing production of waste.

Veolia Deutschland's assessment of the situation

Veolia is confident the complications caused by Beijing's decision can be seen as an opportunity to improve the German plastic recycling sector but this can only happen with the support of the German government. This point of view is shared by other industry actors; the Federal Association of the German Waste Management Industry (BDE) has criticized the Chinese import ban on waste while establishing the importance of significantly expanding recycling capacities in Germany and Europe with the help from politics. BDE President Peter Kurth called for effective EU regulations, committing manufacturers to use a certain proportion of recycled materials for industrial and consumer good. These demands were also echoed by the German Association for Secondary Raw Materials and Waste Management (BVE).

When it comes to plastics waste management, Germany is very efficient, compared to its European counterparts. But even by recycling its plastic waste or processing it for energy recovery, Germany still faces the same market failure; what to do with its recycled material? Indeed recycled material is still only used to a limited extent in Europe and this issue mainly lies in the high consumer demands. In addition, inherent properties of plastics hinder their potential recyclability. Multiple composites in packaging are solely used to increase the products' shelf life (aroma barriers, reducing the weight of packaging), while they also make it nearly impossible to recycle.

Industry actors have to deal with distinguishing plastics with commercial origins and packaging waste from households, which are not subject to the same requirements. This process is an expensive step for waste management companies, like Veolia Deutschland, and it is all the more important that it directly impacts the potential levels of plastics recyclability. The growing need for improvement in the field of recyclability combined with recent developments in China has pushed every actor to rethink their waste management strategy. Germany could put its current situation forth to make good progress and reach the next step towards circular economy. In recent years, a growing volume of German plastic was being exported to China. With the implementation of the Chinese ban, Germany will now have to find new ways to deal with its plastic waste.

Veolia Deutschland's propositions to solve the plastic waste crisis

Putting the topic of plastic waste management high on the political agenda is primordial to improve the public's awareness and understanding of this issue. The consumers' education will be a key element in improving plastic and packaging recyclability as they play a vital role in the first step of the recycling process: plastic waste sorting. The sorting of plastics waste must be reinforced and more selective, by separating transparent from colored plastic for example. The better the waste sorting procedure, the easier it is to process it. This can be achieved with the implementation of stricter labeling and standards to help consumers better understand the way plastic waste has to be recycled.

The separation of mixed waste streams from households and industrial also has to be improved. This task weighs heavily on waste management companies and can be a hurdle in the process of plastic recycling. This problem stresses the need for further financial investment in improved recycling facilities and processes to separate mixed waste streams, to produce recycled goods of higher quality. As previously mentioned, a lot of recyclable materials from the commercial sector, like inferior quality plastics pose a serious challenge to a sustainable circular process and need to be differentiated from other recyclable materials. Innovation and investments in sorting and recycling facilities are crucial to put more used materials back into the chain of production. To significantly strengthen local plastic recycling, the German government could financially support local waste management companies in their evolution towards a more efficient sorting and recycling process.

Moreover, reducing the share of chemical substances added to plastic should be welcomed as they hinder its recycling capacity. This would be a major step as in the case of packaging these hindering composites are a major obstacle to achieving high recycling rate. Through incentive public policies, the government could push plastic producers to higher the quality of plastic, which would increase the share of recycled plastic waste overall.

As mentioned previously, recycling companies also face a deep market failure. The demand for recyclable goods is still very low due to the industrials' and consumers' reluctance to use recycled materials. The collective imaginary that recycled good are of inferior quality than source material is no longer accurate. This cannot serve as an excuse in favoring raw material over the most eco-friendly option. Here the role of new rules is primordial to encourage industrial to use recycled goods. Supporting citizens and industrials through public policies to foster the acceptance and integration of recycled plastics into the production system is essential to improve the recyclability capacity of plastic waste in Germany.

The Veolia Group is committed to improve its local recyclability capacities

The question of local recyclability has always been a priority for Veolia. Today Veolia is largely positioned on the industrial plastic recycling sector. For this reason, the Group has developed its processing capabilities in Europe and is already working on building circular economies with manufacturers such as Philips. Veolia UK and Ireland has its remaining plastics in the UK or Europe for reprocessing. With the opening of the Degenham Plastics Facility, earlier this year, we are making it a priority to keep plastic recycling within national borders. This is also the case for Veolia Deutschland, which further positioned itself in the German market with the recent takeover of the plastics recyclers Multipet and Multiport (Saxony-Anhalt). Veolia Deutschland and the Veolia Group are willing to offer its services and expertise to German institutions to work on solving the issue of plastic recyclability. The challenges triggered by the Chinese restrictions on plastic import can be an opportunity to boost the development of plastic recycling capacity in Germany and in Europe, but this is only achievable with the support of the German government.

Summary

Since the announcement of the Chinese restrictions on waste import, the recycling sector is in dismay. Even though Veolia recognizes the seriousness of the situation, the group also believes that, with the German authorities' support, this stain could initiate crucial developments in the plastic recycling process in Germany. The improvement of household and industrial waste sorting procedures, through the implementation of new labels and restrictions would enable Veolia to sort a larger proportion of plastic waste. Veolia is committed to finding ways to recover from recent developments but this can only be possible with real changes implemented by the German government.

Veolia group is the global leader in optimized resource management. With over 163,000 employees worldwide, the Group specializes in water and sanitation services, as well as waste management and the optimization of energy services. Veolia designs and deploys integrated solutions that are adapted to its customers' new challenges. Veolia Deutschland is one of the three largest privately owned waste management companies in Germany, processing over 4.2 million tons of waste for further utilization each year and providing services for more than 12 million citizens. www.veolia.de