"THE NEXT DECADE IS ABOUT COMBINING MATERIAL SAVINGS AND MATERIAL CHANGE"

Dr. Fritz Flanderka, Managing Director of Reclay Holding GmbH, on trends and drivers for sustainable waste management

DIALOG: Mr. Flanderka, the circular economy represents an important sector of the German economy, with significantly rising sales and employment figures. Does the model have potential for global success?

FF: In general, I think there is no alternative to the change from a linear to a circular economy in order to solve two of the greatest challenges of our time: One is global CO_2 reduction in the context of climate change. The other is that waste management must evolve, especially on the issue of plastics, in order to finally make significant progress in the fight against marine pollution.

Our circular economy model is certainly not transferable 1:1 to other countries. The starting conditions are very different; moreover, we are talking about a complex process that is constantly evolving with many players and high dynamics. But our experience is certainly valuable in a transformation toward sustainability - especially in waste management and recycling, because we have been building up expertise in these areas for a good three decades.

DIALOG: How interested are other countries in this know-how? Especially populous and economically strong nations like the USA or China have so far simply rejected sustainable waste management?

FF: Right - until now! That is changing seriously at the moment. For example, we are observing a trend reversal worldwide toward differentiated waste collection systems. This is where value can subsequently be added - or operators can at least reduce the amount of waste going to landfills. In addition, there is a change in awareness with regard to the separate collection of waste: The principle or idea that we developed in Germany with the "Green Dot" is being perceived, discussed and taken up by society in the EU, but also in many U.S. states or in Asia - with a corresponding impact on the actions of companies.

DIALOG: So more is being done than just giving the corporate image a "green" coat of paint?

FF: I think most companies know the risk of such a strategy. In addition, legal requirements in the EU now set a few clear guidelines for sustainable business. And that is also being taken up with motivation.

If we look at the way we deal with packaging, for example, there are three main trends in this country: First, a strong interest in reducing their production in general. Second, to achieve significant material savings through product design, especially for consumer goods such as beverage cans or yogurt pots. There has been enormous progress in this area over the past ten years, but the potential is far from exhausted. In the next decade, the aim will be to combine material savings and material changes in areas where this has not been possible so far, for example for hygienic reasons. And in other areas, even more plastic packaging will be replaced by materials that are easier to recycle.

The third trend is to further improve the recycling of plastics. Here, however, the game has only just begun due to the new recycling requirements in Germany. Polyethylene (PE) and polypropylene (PP), for example, are relatively easy to recycle if you get them unpolluted. This is much more difficult with so-called plastic compounds. These are mostly technical plastics that are used, for example, in minced meat or other fresh products. At present, this material is either very difficult to recycle or cannot be recycled at all. One solution is to replace these plastic compounds with pure plastics, which are then applied at different densities.

Linear economy: A large proportion of the raw materials used are landfilled or incinerated after the products have been used, and only a small proportion are reused.

Circular economy: In this regenerative system, resource use and waste production, emissions and energy waste are minimized. To this end, energy and material cycles are reduced, slowed down and closed.

DIALOG: What potential do you see in the industry for returning a higher proportion of packaging material to the cycle through reuse or recycling in the future?

FF: That depends on the goods being manufactured and the transport conditions. If we're talking about high-value technical goods, for example, as in mechanical and plant engineering, their protection during transport is a priority. In terms of the type and quantity of packaging materials required, the scope for change is therefore quickly exhausted. In the long term, however, the transparency of the material flow, for example in the case of a deposit system, will also lead to improvements.

I see considerably more options in all areas where goods are consolidated for shipment in B2B trade. Anyone who wants to act more sustainably here should answer two questions in particular: First, which material is used for which purpose? Second, where can material be eliminated without replacement? The Euro pallet is a prime example of how established things are being rethought: The classic wooden pallet splinters quickly, deforms, absorbs moisture and therefore needs to be repaired or replaced after two to three years on average. A plastic pallet does not have any of these disadvantages and usually remains in circulation for over ten years - after which the plastic can be used again for new pallets.

DIALOG: So this calls for creativity on the part of packaging manufacturers and companies to find new solutions together ...

FF: That's how it is. However, this is not only based on voluntariness. Recently, not only the manufacturers but also the users of the packaging have had to fulfill new legal obligations. For example, anyone who sends their products to other buyers must point out that they are also obliged to take back this packaging. In addition to this information obligation, documentation must be kept on how this obligation has been met and in what form the materials have been recycled. This is not a world revolution, but it sets the guidelines for the direction of the necessary change.

DIALOG: Apart from regulatory requirements, what else is driving this transformation?

FF: Two effective forces are particularly important: firstly, cost savings, and secondly, customer demand. Cost savings constantly motivate people to rethink and reevaluate processes anyway. In case of doubt, superfluous packaging materials are dispensed with or the design is redesigned so that the same result can be achieved with simpler materials.

In addition, in our experience, customer requirements have a high priority, particularly in the German retail sector and there again very pronouncedly in the discounters - where large programs are already underway to optimize the use of packaging. And these specifications are passed on to the suppliers. For example, almost all discount grocery stores have their own guidelines on how and with what materials products are to be packaged.

The Reclay Group is an internationally active service provider in the field of recycling and materials management. With more than 170 employees at twelve locations worldwide, the group of companies supports over 1,750 contract customers from industry, trade and commerce in achieving their environmental targets and fulfilling their product responsibility.

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