Linnaeus ECO-TECH 2018 Kalmar, Sweden, November 19-21, 2018

REDUCING BEFORE RECYCLING: TACKLING FOOD WASTE AND LITTERING

Astrid von Blumenthal Anja Bartsch

Biomass Institute, University of Applied Sciences Ansbach, Germany

Abstract

The reason for the increasing amount of plastic packaging waste, which tends to litter the oceans, is mainly seen in the consumer's behavior. Consumers tend to buy more, but smaller packets, which cause more material in total than big ones, and also seem to prefer plastic over paper, glass or metal. The demand for convenience food, portion packs and take-away options is also growing. These developments in turn may be caused by an increasing number of single or two-person households.

Another societal problem are the 1.3 billion tons of food waste by year worldwide, whose main percentage is also caused by private households. One reason for this phenomenon seems to be bad planning of the consumer, again mainly in small households, who buys more than he will eat – encouraged by special offers of big packages or multipacks.

As a consequence, the preference of larger entities of food, which on the first sight seems to be one of the means to decrease the amount of packaging waste, turns out to lead into the wrong direction in modern societies – it may finally increase both packaging *and* food waste: The more packed goods are bought and littered because they have gone bad, the more replacement purchases take place. In case the replacement products are packed as well, the consumer litters more packaging in the end. In addition, the packaging of adulterated food usually doesn't end up in material but in thermal recycling because it is dumped into the general waste together with the rotten contents of the packaging.

The last mentioned aspect conflicts with the clearly emphasized increase of recycling rates and closure of material cycles as contained in actual EU and German national legislation, such as the European Plastics Strategy or the new German Packaging Act for 2019. However, encouraging material recycling alone will not accomplish the outstanding challenge of protecting the oceans, the fauna and in the end humans against piles of garbage and the waste of raw materials and energy: This can only be achieved by materially decreasing the amount of packaging waste from the beginning, i.e. by reducing packaging generally. So could the reduction of packaging and an increasing offer of unpacked goods, supported by legislation as well as appropriate education, solve both problems in the end – plastic and food waste?

Keywords: Packaging Waste, Food Waste, Sustainable Consumption, Zero Waste

ISBN: 978-91-88898-28-9