

Economic Conditions for Recycling of Waste

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ABSTRACT

If individuals or establishments make a decision in favor of recycling, it only happens if it is beneficial for them. A strict ban on landfill of organic waste promotes recycling. We need smart regulations for end-of-life products ensuring individual economic benefits.

Keywords: Recovery paths, recycling quotas, economic actions, decision-making autonomy

INTRODUCTION

In the lecture, the economic conditions for the recycling of waste should be worked out. It shows that recycling is an optional choice among various alternatives. A regulatory framework (whether law or ordinance) can indeed limit the possible alternatives, but ultimately not prevent the pursuit of economic benefit. Thus the further development of recycling requires a smart regulation so that increasing opportunities to make a profit with recycling activities can be linked to the general social desire for more recycling.

STATEMENTS AND EMPIRICAL DATA

First of all, the term "Economies" will be presented. Shortage-induced decisions are subject to an economic benefit – for an individual or an establishment) in accordance with the opportunity principle. It appears essential to note that shortage is not equated with lack of or even poverty, but its aim is to think about alternatives when making decisions. Any real action has simultaneously the effect that other possible alternatives will not be implemented. The benefit, (qualitatively or quantitatively), is crucial for the decision made by the economies.

The effective regulation of alternative actions is the market, which coordinates the individual plans of business entities. The benefits of market coordination only unfold if certain requirements are met. These considerations can be summarized by asking the question, whether the market conditions relating to pricing and liability promote or hinder recycling.

The second part shows that recycling is not an objective, but an instrument - so to speak an alternative among several options for action -. This is explained by using linked production as an example. Overall, six possible alternatives are derived and evaluated as to its importance for the individual benefit. The alternatives are derived by deduction (from general to particular) and show all theoretical possibilities.

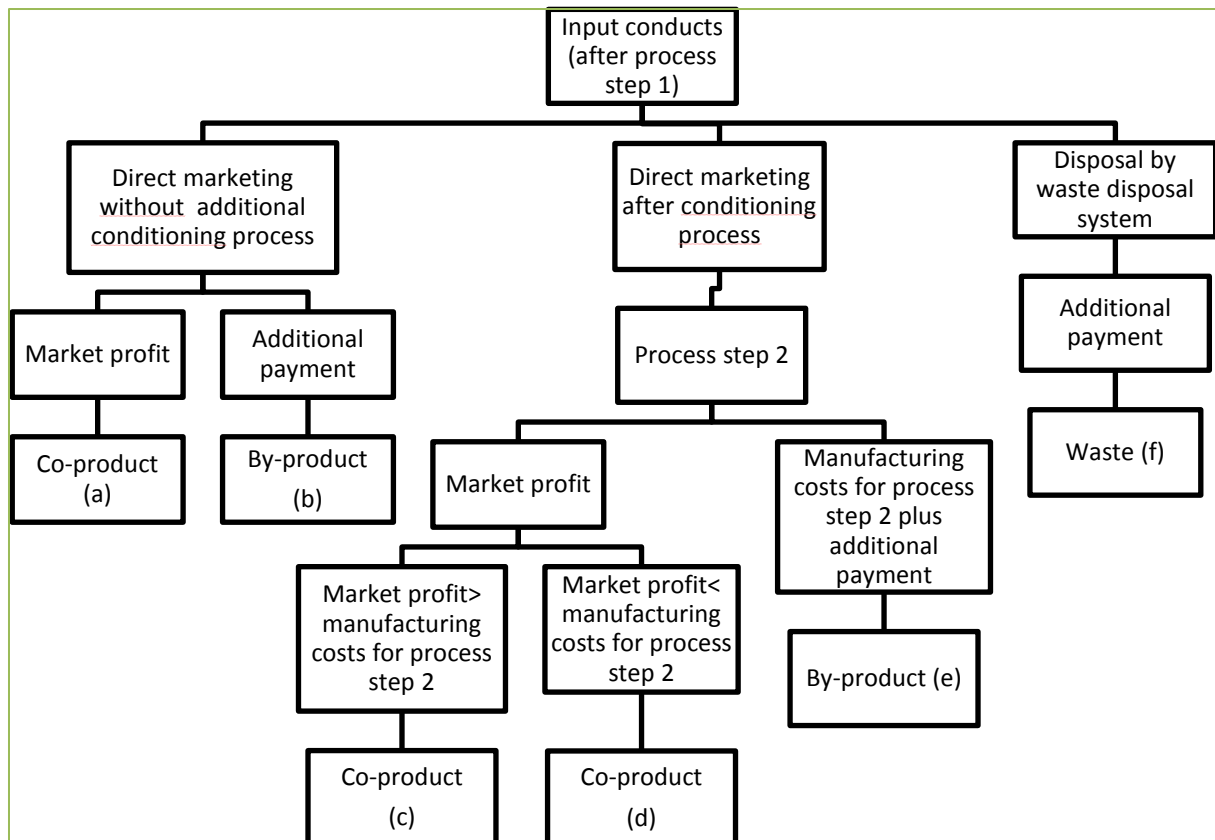


Figure 1 Possibilities for use of residues of a linked production

The results obtained are confronted with the real waste disposal practices in the EU countries. As a result, there is the empirical confirmation of the theoretically derived relationship. Thus, just about all those EU countries with a high proportion of dumping their waste show the lowest recycling rates.

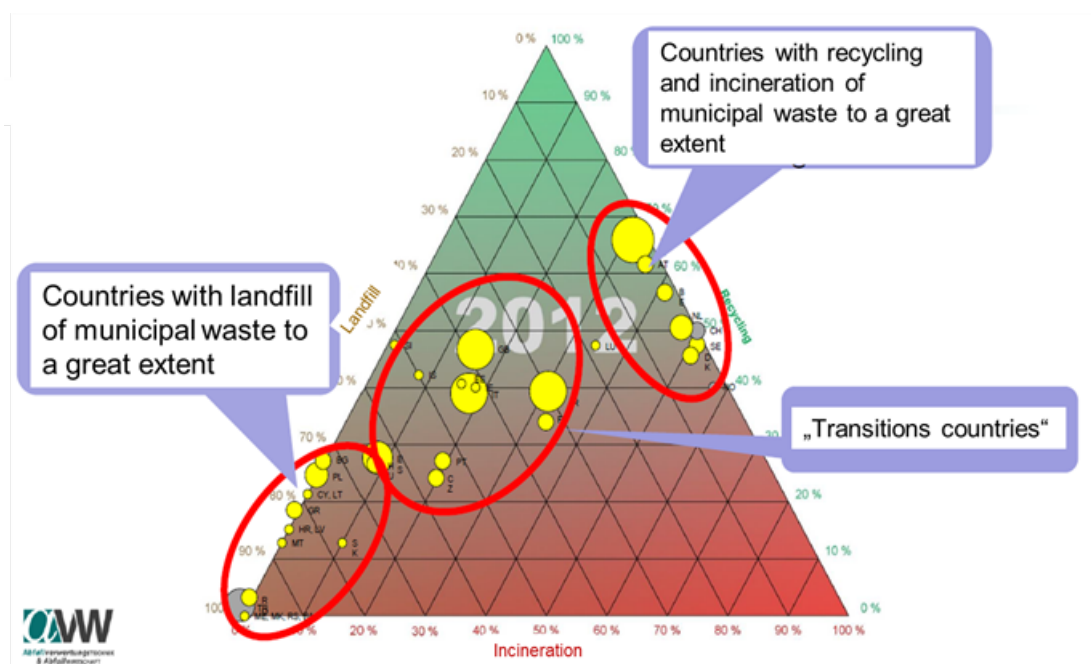


Figure 2 Triangle of Incineration, Landfill and Recycling in EU-Countries (Pomberger, 2014)

In this respect the planned EU recycling management package must work towards a mandatory landfill ban.

On the other hand, the waste management tending to sinking prices impedes the recycling option. Possible solutions are presented in order to further promote recycling.

In the last part, the focus will be on "end of life products". Particular emphasis is laid on the disposal of packaging waste. The escalation taking place with this trend is particularly based on the fact that here it is demonstrated in an impressive exemplary manner that a wrong incentive structure due to a legal framework will cause exactly the opposite of what was actually intended.

Contrary to artificially high recycling rates, the material reuse quotas are "manageable".

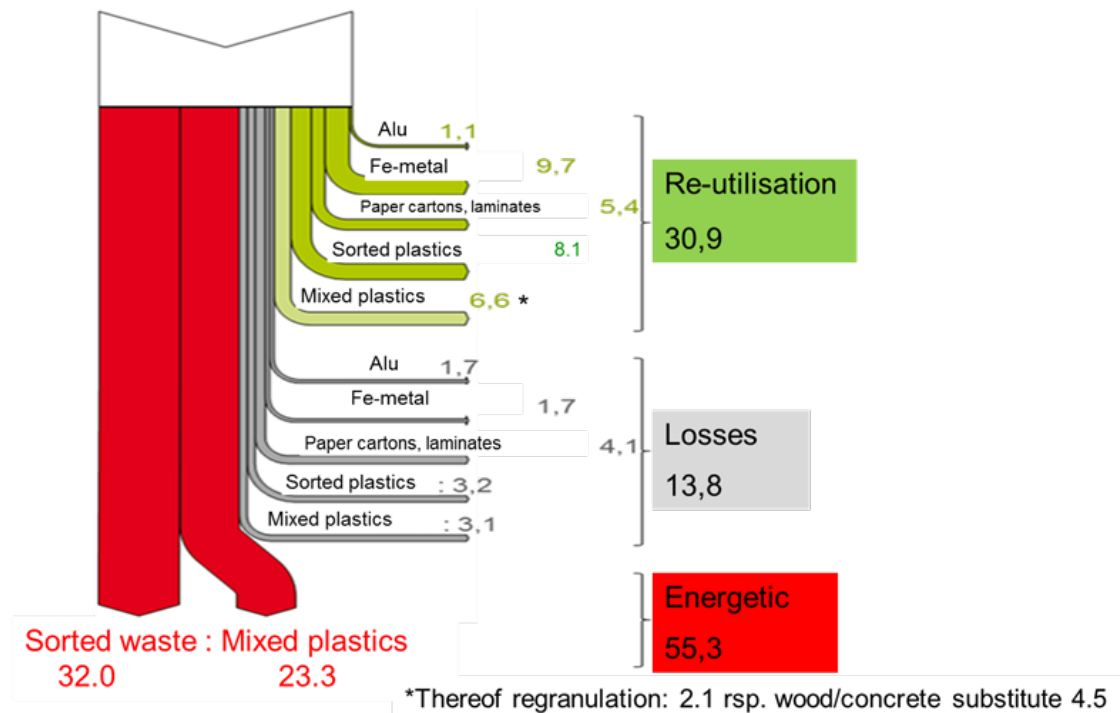


Figure 3 Real re-utilisation rate of light packaging (%) in Germany (Baum et al., 2014)

The fixation of quotas, however, does not consider the necessary qualitative aspects. Reuse options, which cause a demand for a surcharge on behalf of the buyer, are considered as recovered. To set up a sustainable waste management, secondary raw materials must at least partially substitute the primary raw materials. This requires, however, that secondary raw materials must have a positive market value. The empirical data presented reflect the situation in Austria and Germany.

CONCLUSION

Recycling is an option but not an objective. The official recycling quotas of lightweight packaging are quantitatively – especially considering the official determination method - correct, but factually incorrect. The real rate of re-utilisation is by far lower. If you wish to increase the extent of recycling, the social requirement and the economic benefit have to be balanced.

The summary also takes a look at a possible future by mentioning innovative recycling instruments.

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