The use of plastic carrier bags in Europe: Existing situation and challenges

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EXTENDED ABSTRACT

Retailers and consumers have favored plastic carrier bags as long as they have been available in the market. However, due to the numerous environmental disadvantages, lightweight plastic carrier bags have been drawing the attention of the society. Therefore, many EU member-States have taken action to reduce the use of plastic carrier bags. Based on the existing consumption of plastic carrier bags and management of post-consumer plastic carrier bags in the EU member-states (EU MS), the achieved outcomes of the existing legislation and voluntary initiatives regarding the reduction of lightweight plastic carrier bag are discussed.

Key words: lightweight plastic carrier bags

Materials and methods:

The use of plastic carrier bags has become one of the most important issues to be addressed by the European Commission. Therefore many are the studies and assessments provided for the recording of the existing situation which either analyze or assess the environmental, social and economic impacts of the use of plastic carrier bags and the different policies implemented. In order to present an overview of the existing situation regarding the use of plastic carrier bags in the EU MS, three main parameters were used regarding the action taken by the EU MS, the consumption of plastic carrier bags and the existing management practices of the post-consumer lightweight plastic carrier bags.

More specifically, the first parameter regarding the various measures taken for the reduction of the plastic carrier bags consumption includes the overview of the existing
legislation, volunteer initiatives and agreements as well as any type of fee or tax included in the national legislation of the EU MS that directly or indirectly contributes to the reduction of the plastic bag use. The information gathered is based on the overview of the Commission Staff Working Document “Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL amending Directive 94/62/EC on packaging and packaging waste to reduce the consumption of lightweight plastic carrier bags”.

The second parameter refers to the per capita consumption of single-use plastic carrier bags provided by eunomia, 2012 and BIO IS study, 2010. The figures provided were then grouped into three main categories in order to present the lowest and highest figures.

The third parameter includes an overview of the existing management practices of post-consumer plastic carrier bags (i.e. incineration and landfill$^1$) and littering rates of single-use plastic bags according to the BIO IS study, 2010 and eunomia, 2012. The data provided in each sub-parameter were then grouped into three main categories in order to refer to the lowest and highest figures.

**Discussion:**

EU MS which have taken national measures for the reduction of the plastic carrier bags used

Several EU MS such as Spain, Italy, Belgium, Denmark, Estonia, France, Ireland, Latvia, Malta, Romania and the United Kingdom have had voluntary agreements with retailers or have adopted a law banning. Furthermore some EU MS such as Czech Republic and Sweden consider and treat plastic carrier bags as packaging. Amongst the EU member-states, Ireland and Italy are believed to have taken the most drastic measures for the reduction of the use of plastic carrier bags.

EU MS with existing legislation regarding the reduction of the use of plastic carrier bags have shown lower per capita consumption of single-use plastic carrier bags (e.g. Belgium, Denmark, France, Ireland and Netherlands) than the rest EU MS. Nevertheless, Latvia is still considered as a country with high per capita consumption of single-use plastic carrier bags, perhaps due to the first law introduced$^2$.

It has to be noted that EU MS with existing legislation showed lower littering rates of single-use bags (HDPE and LDPE) than other EU MS (Latvia was once more an exception).

EU MS with volunteer initiatives regarding the reduction of lightweight plastic carrier bags used

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$^1$ According to eunomia, 2012 the extent of plastic carrier bags recycling is currently not clear and with current policies there is no clear evidence for any significant increase in recycling until 2020.

$^2$ In Latvia, the law regarding the use of plastic carrier bags was amended in order to prevent the use of plastic carrier bags without handles (SWD(2013) 444).
Most EU MS have had volunteer initiatives or agreements with retailers in order to gradually phase-out the use of plastic carrier bags. However, there are several countries without volunteer initiatives such as Cyprus, Italy, Poland, Portugal, Bulgaria, the Czech Republic, Denmark, Ireland, Malta, the Netherlands, Romania and Slovenia. Some of them have included a law banning in their national legislation (e.g. Ireland) while some others do not have relevant legislation in place.

Volunteer initiatives seem to address the issue of plastic bags effectively in certain EU MS. More specifically, Austria, Germany, Finland, Belgium and France have reached lower per capita consumption of single-use plastic carrier bags and at the same time lower littering rates of single-use HDPE and LDPE bags than other EU MS with no volunteer initiatives.

On the other hand, there are EU MS where some voluntary initiatives have taken place but were rather isolated. As a result, the consumption of plastic carrier bags per capita is still considered high as well as the littering rates from HDPE and LDPE carrier bags. Examples of these cases are Hungary, Lithuania, Slovakia and Latvia.

EU MS which have introduced a fee/tax for the reduction of the plastic carrier bags used

Certain EU MS have already included a fee for the reduction of the plastic bags used. The fee either applies to the use of plastic bags directly and most of the times rests with the customers (e.g. Belgium, Bulgaria, Denmark, Estonia, France, Ireland, Latvia, Malta and Romania) or it is priced indirectly through the disposal charge for every type of packaging (e.g. Belgium, Sweden, Estonia, the Czech Republic and Netherlands).

EU MS with fee or tax on the single-use of plastic carrier bags which have reached lower per capita consumption of single-use plastic carrier bags are Belgium, Denmark, France, Ireland and the Netherlands. On the contrary, there are certain EU MS which are still considered countries of high per capita consumption of single-use plastic carrier bags, such as the Czech Republic, Estonia, Latvia and Slovenia.

EU MS with fee or tax on the single-use of plastic carrier bags which have accomplished to reduce their littering rates of single-use HDPE/LDPE bags are Belgium, Denmark, France, Ireland, the Netherlands, Sweden and the United Kingdom. Nevertheless, there are EU MS (e.g. Latvia, Malta, Romania and Slovenia ) that although they have included a tax on single-use plastic carrier bags, they are still considered countries of higher littering rates of single-use HDPE/LDPE bags compared with the other EU MS.

EU MS of low per capita consumption of single-use plastic carrier bags

Certain EU MS (e.g. Denmark, Finland, Ireland, Luxembourg, Austria, Germany, the Netherlands, France and Belgium) have lower per capita consumption of single-use plastic carrier bags than the rest EU MS. It is surprising that only Belgium, Denmark and France have legislation in place targeting the issue of plastic carrier bags. In addition, these are also the
EU MS with the low per capita consumption of single-use plastic carrier bags which have included a tax for plastic carrier bags in their national legislation.

The incineration split for the fraction of carrier bags from 2010 to 2020 that are not littered has been calculated to be higher than the rest of EU MS for the EU MS with lower than the rest EU MS per capita consumption of single-use plastic carrier bags. In addition, the landfill split for the fraction of carrier bags from 2010 to 2020 that are not littered is lower than the rest EU MS, as expected for the EU MS with low per capita consumption of single-use plastic carrier bags.

The EU MS with lower per capita consumption of single-use plastic carrier bags than the rest of EU MS have reached some of the lowest littering rates regarding the single-use HDPE and LDPE bags littered.

It has to be noted that EU MS with lower per capita consumption of single-use plastic carrier bags than the rest of EU MS are the same EU MS which have high rates of plastic packaging recycling (except Finland, Denmark and France which have some of the lowest rates) as well as high rates of plastic packaging recovery (except Finland).