IN BRIEF

Plastic bags are often dominating environmental headlines. In recent years, a number of political initiatives (national and local) have been taken, involving proposals to impose a levy or ban on plastic shopping bags in Europe.

Within this context of an increased interest on this issue, PRO EUROPE intends through this paper to give its view on this highly sensitive political issue.

Based on various facts and figures as well as the expertise accumulated by its members throughout Europe, PRO EUROPE’s position on carrier plastic bags can be summarised as follows:

• Neither the **imposition of a mandatory levy** or **ban on plastic bags** nor the **promotion of biodegradable plastic bags** constitute adequate tools to reduce the environmental impact of plastic bags used by consumers

• Efforts to achieve environmental improvements should include **initiatives involving the business sector** which can be developed in constructive collaboration with the local authorities and government. They prove to be more effective especially when they are combined with raising awareness and education campaigns as well as the promotion of reusable bags.
About plastic bags

Definition

A plastic shopping bag is a polymer carry bag provided or utilised at the retail point of sale for carrying and transporting retail goods and which is only intended for one way use. This includes all single use plastic retail bags, but excludes produce bags used in-store, dry cleaning bags, garbage bags and other primary product packaging.¹

General Comments

Because of their light weight, plastic bags only constitute a tiny percentage of the overall waste stream but they tend to be in the spotlight because they are an icon of modern convenience culture and lifestyles. For example in the UK plastic bags only relate to 0.01% of the municipal waste stream so any legislative measures in addition to the general obligations from the respective national packaging legislation, appear disproportionate to the environmental benefit that they would bring compared to tackling other, larger waste streams. Often putting in place high profile measures on such a small proportion of the waste stream risks giving the wrong environmental message because consumers may think they are "doing their bit" by reducing or reusing bags and ignore the rest of their environmental impacts, which could be far more significant.

Plastic bags are popular with consumers and retailers because of all the practical advantages they offer; they are light, cheap, strong, and a hygienic way to transport food and products home. Moreover, several studies have shown that consumers use a high percentage of these plastic shopping bags to hold kitchen waste prior to depositing it in their waste bins for collection and recycling. For example, Defra² estimate that 4 out of 5 UK consumers reuse their single use carrier bags in the home, so any taxation system must take account of the impact on purchases of other plastic bags for the home such as refuse sacks.

Views on the environmental impact of plastic bag consumption vary greatly. Whereas some consider that they are just a nuisance, others believe they are a real hazard that should be banned. This is also reflected in the variety of instruments used to tackle the plastic bag issue.

¹ NOLAN iTU, Plastic Shopping Bags – Analysis of levies and Environmental Impacts, 2002,
² Defra is the UK government department responsible for policy and regulations on the environment, food and rural affairs, http://www.defra.gov.uk/index.htm
The main arguments against plastic bags are linked to the littering issue in some countries as well as the persistence in landfill. They are also attacked because they have become the symbol of modern society’s unsustainable lifestyles. And finally the environmental impact linked to the consumption of raw materials and the production process is also pointed at.

Various measures have been taken in order to address the above-mentioned impacts with more or less success. These measures can be categorised as follows:

- Ban on plastic bags
- Market-based instruments (mandatory or agreed on a voluntary basis) such as the use of taxation or charges
- Awareness raising campaigns
- Infrastructure to deal with end of life plastic bags (i.e. producer responsibility schemes)
- Promotion certain types of plastic bags (i.e. biodegradable plastic bags)
  - Offering reusable bags as alternative to the consumer
  - Voluntary agreements between government and industry

**Ban**

A ban is a very powerful tool in environmental policy but is also radical and market intrusive and should therefore only be used as a last resort. It should therefore be deployed only when there are substantial environmental grounds for such a measure based on LCA results, which is not the case for plastic bags.

Before introducing a ban it is important to propose effective and practical alternatives to consumers to carry their shopping home but most importantly to consider the various consequences of the ban. The ban of plastic bags can indeed stimulate the use of other types of bags and nets with greater environmental impacts.

Moreover, a ban on one product in a particular material - such as the plastic carrier bag - cannot reduce the problem of litter. Litter consists of many different fractions of which the plastic carrier bag accounts for only a small proportion. Of the total volume of plastic carrier bags, only a tiny percentage ends up as litter. Solving littering requires other measures such as awareness raising campaigns against littering.
Finally, a ban would be illegal under the EU law (the Packaging and Packaging Waste Directive) as every packaging which fulfils the Essential Requirements is allowed to be used all over the European Union.3

**Taxation**

The power of market-based instruments to change behaviour is undeniable but there must be a clear link between the instrument adopted and the environmental aim being pursued. The suitability of a measure should be carefully evaluated and benchmarked vis-à-vis other available options and the costs of the measures proposed should be proportionate to their environmental benefit. The use of economic instruments such as taxation should not be used for the primary purpose of raising revenue for the state.

Introducing a levy on plastic bags may reduce their consumption in the short term but proves to be unsustainable in the long run. For example, Ireland introduced a levy on plastic bags in 2002 mainly to reduce litter. The levy had the desired effect in the first years with a sharp drop in plastic bags usage (95%) and a shift to reusable bags. However, after some years, plastic bag usage started to increase again slightly, which pushed the Irish government to increase the levy in 2007. Changes in legislation are in the process of being introduced which will allow for an increase in the levy to 44€-c.

One further issue with any taxation or levy fee system is deciding how the revenue raised should be used. Often this income just goes into general taxation rather than for any environmental benefit.

From this perspective, voluntary agreements with retailers including realistic short term reduction targets and long term ambitious goals are more sustainable solutions. For example they appear to be working well in the UK, where leading high street and grocery retailers exceeded their voluntary target (facilitated through WRAP) to reduce the environmental impact of carrier bags by 25% by the end of 2008. Since the commitment in 2006, retailers actually delivered a 40% reduction in the environmental impact of carrier bags. This was achieved through an absolute reduction in the number of carrier bags distributed to customers by 26% and simultaneous efforts to increase the recycled content of single use bags and reductions in their overall weight. Similarly in France, the amount of plastic bags has decreased by 85% between 2000 and 2008 without introducing any taxation or ban.

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3 When France tried to introduce a decree including a general ban on the distribution of non-biodegradable single-use carrier bags to end consumers in 2006, the European Commission considered it was contrary to article 18 of the Directive on Packaging and Packaging Waste which states that Member States shall not impede the placing on the market of their territory of packaging which satisfies the provisions of this Directive. The European Commission added that the measures envisaged in the French decree lacked proportionality.
In general, any measure implemented in relation to plastic bags should therefore be based on voluntary agreements with the industrial sectors.

**Producer responsibility**

Successful alternative economic instruments, such as producer responsibility-based systems should be further taken into consideration when environmental impacts of plastic bags are considered. These systems have indeed proven to be more effective in triggering environmental improvement than taxation, in a cost-effective and flexible way.

The environmental impact linked to the consumption of raw materials and production processes can be best offset by high levels of material recycling and energy recovery. In cases where a collection system for plastic packaging including plastic films is in place plastic bags can be integrated within this system and can therefore be part of the solution. These systems can indeed use several technological solutions that allow the recovery and recycling of plastic bags and therefore reduce the flow of plastic shopping bags into landfill and litter. The environmental impact of plastic bags is lowest when these are recycled or incinerated with energy recovery alongside other plastic waste.

Solutions to the plastic bags issue should therefore involve the improvement of plastics recycling and efforts from the authorities should be geared towards developing a market for reprocessing plastics.

**Consumer communications**

An important part of the solution to the impacts of plastic bags is to produce a permanent change in behaviour by engaging customers through education and encouragement. It is necessary to drive forward local communications and information campaigns to raise consumer awareness of the issue, associated problems like littering and appropriate solutions. In the UK the Government funded a national campaign known as ‘Get a bag habit’ to encourage consumer behaviour change.

In order for any national or local campaign to achieve success it also needs to be complemented by ensuring that alternative reusable bags are readily available to consumers at a reasonable cost. In most of the European countries these alternatives are widely available and commonly used.

Retailers can play an important role in encouraging consumers to change their consumption habits in this regards. They can be involved in the development of communications strategies that would educate and motivate consumers to consume less one-way plastic shopping bags and prefer more sustainable options to carry their goods home.
Also, some retailers have sought to encourage their customers to be greener through the use of additional reward points when using reusable carrier bags in their store. In France, an awareness campaign towards consumers (including training cashiers) has led to the almost complete disappearance of plastic bags in shops.

Any measure implemented in relation to plastic bags should therefore proactively involve consumers.

**Biodegradable bags**

There is an increasing enthusiasm for biodegradable plastic bags due to the growing perception that they are more environmentally friendly. A shift to these types of bags would not reduce the amount of bags discarded as litter. On the contrary, they can potentially add on to the litter problem as the consumer may believe that they just “break down and disappear” after disposal. Moreover, biological degradation without the required condition (micro-organism, temperature and humidity) is very slow and can take several years.

With regards to their sustainability, biodegradable bags are often described as environmentally superior to traditional plastic bags although this assumption is not implicitly correct. Being biodegradable or biomass based is not synonymous with being environmentally friendly or sustainable. Life cycle assessment (LCA) studies have demonstrated that bio-based plastic bags are not more sustainable than fossil-based plastic bags.

Finally, biodegradable bags offer no advantage in terms of waste management over conventional ones. In fact they could damage existing collection and recycling systems for plastic packaging. They need to be sorted separately otherwise they contaminate the other plastic waste and harm the quality of the recycled output.

National authorities promoting these types of bags and retailers using these new materials therefore have a responsibility for introducing them in a responsible and coordinated manner so that previous education efforts for waste prevention and recycling are not undermined. For further information about biodegradable packaging please read the bioplastic factsheet of PRO EUROPE.4

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4 http://www.pro-e.org/Position_paper1.html
Conclusions

Focusing on plastic bags is in general a very limited approach because they only constitute a tiny part of the overall waste. A more holistic approach is needed than imposing a ban on plastic bags or a levy to address the plastic bags issue.

Consumers need to be given a better understanding of the relative environmental impacts of their lifestyles in order to make effective choices. The imposition of a mandatory levy or ban on plastic bags, or the promotion of biodegradable plastic bags, do not constitute adequate tools to reduce the environmental impact of plastic bags used by consumers.

Efforts to achieve environmental improvements should include voluntary agreements between government and industry. They prove to be more effective especially when they are combined with raising awareness and education campaigns as well as the promotion of reusable bags.
**Case study**

**Plastic shopping bags – example from Luxembourg**

The project is based on an environmental agreement with the Ministry of the Environment and VALORLUX which aims to introduce preventive measures as far as packaging and packaging waste is concerned.

In 2004, after elaborating several projects, VALORLUX finally chose to implement the eco-bag project, a PP woven reusable bag. The table below shows the evolution of this project.

![Graph showing the evolution of eco-bag and one-way bag sales from 2004 to 2008](image)

These data represent the quantities sold by the 6 major supermarket groups in the Grand Duchy of Luxembourg and are therefore representative for the Grand Duchy.

At the launching phase in 2004/2005, the consumer did not really change his habits and was still using one-way plastic bags. VALORLUX then launched an awareness campaign in collaboration with the 6 major supermarket groups and the other members. They decided to support this project because on the one hand it reduced their costs and on the other hand, through VALORLUX they were able to provide consumers with a positive image of them by actively participating in an environmental project.
In 2008 VALORLUX had, and this on consumer demand, produced an eco-bag of a smaller size. This small eco-bag is primarily used for small purchases, and is perceived more like a “town bag” since it can be bent easily to fit in a pocket.

With the introduction of the small eco-bag the major supermarkets also decided to drop the free one-way plastic bags and replace them with payable bags with one single pattern. This bag is produced with 40% recycled material, which again contributes to reduce the usage of raw plastic material.

These two initiatives were so successful that the consumption of one-way plastic bags considerably went down from 90 million to only 10 million payable plastic bags within a year. Since 2004, VALORLUX has distributed 3.12 million eco-bags (2.67 million large eco-bags and 0.45 million small eco-bags) to our partners. This represents approximately 6.4 eco-bags per inhabitant of the Grand Duchy taking year 2008 as a reference.

VALORLUX regular does surveys that aim to measure the influence of its prevention activities on the public. The figures represent a parameter to guide our sensitivity and information actions.

This success is based on two criteria: the neutrality of the eco-bag on the one side and the good collaboration between the partners (the Ministry of the Environment, major supermarket groups and VALORLUX) on the other side.

As this project is not only limited to supermarkets or grocery shops, VALORLUX has also extended this project to businesses such as bakeries, butcher shops and DIY shops. VALORLUX satisfactorily noticed that this project is now widely accepted by consumers and that VALORLUX managed to change consumer behaviour in a time span of almost 5 years..

It is also worth mentioning that other companies have tried in the past to distribute a similar bag, but their results were by far not comparable to those of VALORLUX.

Currently VALORLUX has 85 partners from various sectors and the demand to participate in this innovative project is growing rapidly.
About PRO EUROPE

PRO EUROPE s.p.r.l. (Packaging Recovery Organisation Europe), founded in 1995, is the umbrella organisation for the packaging and packaging waste recovery schemes which use the "Green Dot" trademark. PRO EUROPE acts as the authoritative voice and common policy platform for its members, representing the interests of all packaging recovery and recycling organisations mainly using the "Green Dot".

PRO EUROPE’s members span 33 countries: 26 Member States (Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and United Kingdom), 2 candidate countries (Turkey, Croatia), Serbia, Norway, Iceland, Ukraine and Canada.

The members of PRO EUROPE wish to demonstrate that the recycling of used packaging is an important step on the path towards the sustainable development that is necessary to safeguard our planet for future generations. Their work in Europe and worldwide is both successful and transparent.

PRO EUROPE is headquartered in Brussels. The President is Henri Meiresonne (Fost Plus, Belgium), the General Manager is Joachim Quoden, and Pascal Gislais and Ursula Denison act jointly as Secretary Generals.

For detailed information, please visit www.pro-e.org