



PLASTIC SHOPPING BAGS



From littering to re-use and resource recovery

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Plastic bags make life easier

Plastic shopping bags are among the most omnipresent consumer items on our planet. Their light weight, low cost and water resistance make them so convenient for carrying groceries, clothing and other routine purchases that it is hard to imagine life without them.

In use since the 1960s, plastic bags have endless design possibilities and have been widely used for retail branding and advertising. They can be produced with different levels of thickness and toughness to suit just about everyone's needs.

Thin plastic grocery bags can be re-used around the house as wastebasket liners, as storage, as book and lunch bags when kids go to school, to name but a few possibilities.

Recycled, plastic bags can be made into products such as benches, irrigation pipes and speed bumps.

Moreover, plastic bags are champions of resource efficiency. Plastic bags compare favourably with bags made from other materials, provided they are used properly and recovered at the end of their life cycle rather than just used once and then discarded. Today, the average shopping bag is stronger with only one quarter of the weight it used to have 15 years ago.



Fact

Plastic bags are the most frequently used shopping carriers. They can be re-used, recycled or used for the recovery of energy.



Fact

Today, the average shopping bag only weighs one fourth of what it used to weigh 15 years ago.



Littered plastic bags are part of a larger waste problem



Littering of plastic bags is unacceptable

Neither banning nor taxing the use of plastic bags will solve the litter problem. Only a change in behaviour will. Governments, retailers and industry need to take initiatives to create awareness, adopt prevention measures, and enforce social control and anti-litter legislation.

Plastic bags are a visible part of the litter stream

In some parts of the world, the failure to dispose of plastic bags properly has led to plastic bags joining the litter stream together with chewing gum, wrappers, cigarette ends and thousands of other pieces of rubbish. Although the presence of plastic bags in litter is usually well below 5%, they represent a very visible form of litter.

When thrown away, plastic bags and other littered items can create problems. Litter can get caught in fences and trees. It can end up blocking drains and waterways. Littered plastic bags can trap birds. In the marine environment, plastic bag litter is potentially dangerous to whales, turtles and other sea life.



Fact

Plastic bags are resource-efficient carriers that, when used responsibly, contribute to quality of life without compromising environmental needs. Balanced litter reduction policies will find ways to maintain the beneficial profile of the plastic bag while tackling the causes of litter.

Littered bags are part of an overall litter problem

Doing away with littered plastic bags shifts the focus of attention but does not solve the general problem of litter. In order to do this, the causes for this type of behaviour have to be analysed before an appropriate strategy can be developed.

Litter is mainly the result of inappropriate behaviour and affects many different products and materials; it differs from region to region. Littering is anti-social, thoughtless and careless and creates an unpleasant environment.

The incidence of litter is made worse by a lack of prevention measures, e.g. deficiencies in waste management infrastructure and systems such as well organised household waste collection, transport and landfill sites, and the availability of garbage bins and cleaning programmes in public places.



Is banning the use of all plastic bags the solution to the litter problem?

Banning the use of plastic bags is discriminatory, limits consumer choice and does nothing to change people's attitude towards littering. It just means getting rid of a user-friendly and resource-efficient means of packaging.

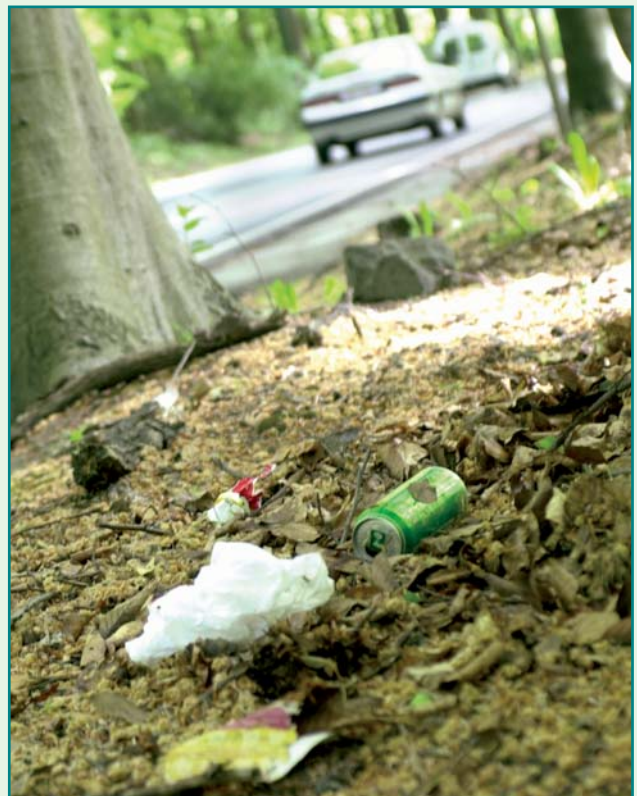
Is taxation the right solution?

In Ireland, where a 15 cent levy has been imposed on previously free plastic shopping bags, consumption has decreased by 90% since its introduction in March 2002 but, on the other hand, sales of kitchen bin liners have increased by 77%.

In any event, litter remains a serious issue. It is thus rather questionable whether this initiative is helping to resolve the litter issue and whether any environmental benefit has been achieved.

Are degradable plastic bags a solution to the litter problem?

Degradable plastic bags may add to the problem due to the general consumer belief that this type of plastic bag will disappear quickly in the environment. This only supports the throw-away mentality and does nothing to encourage responsible use.



Getting rid of litter

Littering is anti-social, thoughtless and careless

Littering is a social behaviour issue, which (to varying degrees) affects all regions, materials and sectors. In order to effectively address litter, a range of public awareness initiatives and enforcement strategies as well as focused waste management solutions will be required. Initiatives merely addressing the symptoms of littering, such as reactionary bans or the disproportionate application of economic instruments (levies, environmental taxes) do nothing

to solve the problem as they focus on the effect rather than on the root cause of the issue. Tackling the litter problem involves action in three areas:

- **education, communication and partnership**
- **law and enforcement**
- **waste management and street cleaning**





France

Promoting litter-free holidays

Back in 1971, executives from the consumer goods and packaging industries, including raw material manufacturers, were eager to improve the collection and recovery of litter in holiday resorts in France. They combined their efforts in the "Progrès et Environnement - Vacances propres" initiative.

Today, the association is funded by 18 companies involved in the retailing business or the packaging chain. Its mission is to provide logistic support to local authorities in terms of litter collection and to organise advertising and communication campaigns to increase the ecological awareness of citizens and tourists.

Two types of bags are used to improve waste selection: the red-striped bags for collecting non-recyclable waste and the yellow-striped ones for

recyclable packaging waste.

In 2002, 1,300 partners and municipalities participated in the project, and 60,000 collection points were established. Through this concept, more than 100,000 tonnes of litter were collected in 3.5 million "Vacances Propres" bags all over the country (countryside, seaside and mountain resorts).

www.vacancespropres.com



Germany

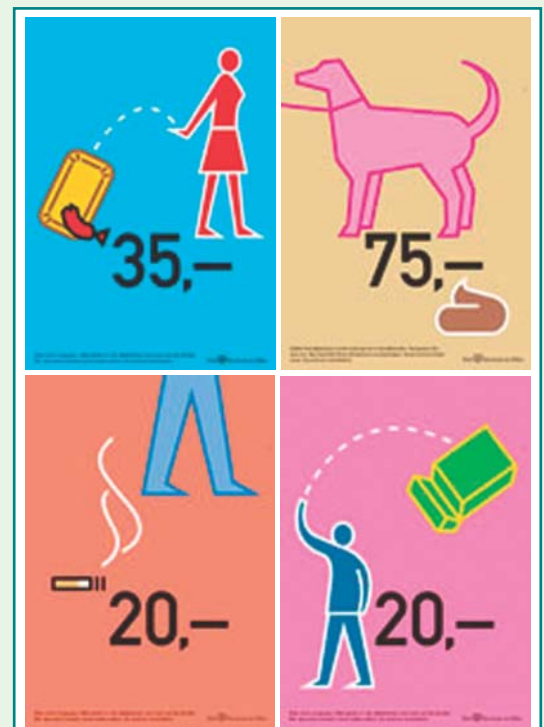
Patrolling for the environment

In addition to awareness campaigns, educational efforts, improved waste management and cleaning infrastructure, a number of German local governments have established a system of fines for environmental violations.

The city of Fürth pioneered this approach in the mid-1990s with its "environment patrol".

In 2002, Frankfurt followed suit with 125 municipal agents empowered to collect the fines. So far, more than 2,000 cases have been registered and more than 1,300 individuals fined. Other European cities in Switzerland and Belgium have started similar programmes.

www.littering.de





The Netherlands

A clean country through collaboration

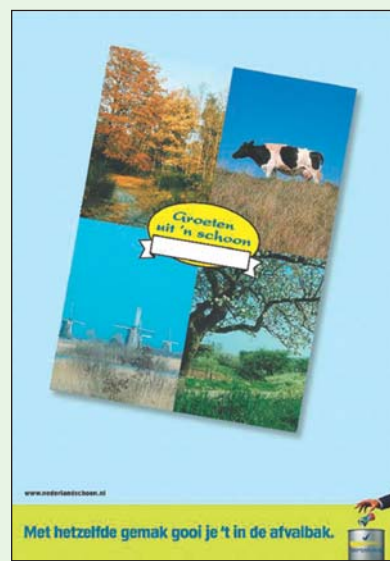
Stichting Nederland Schoon (Tidy Netherlands) is an independent foundation set up in 1991 and is supported by businesses, government and the national tourist organisation.

Nederland Schoon is responsible for implementing a 2002 voluntary agreement signed by the Dutch business sector and the government to reduce the amount of street litter over the course of four years. This initiative covers the three dimensions of litter prevention: education / communication, law & enforcement, effective waste management and street cleaning.

The communication campaign focuses on specific target groups such as young people, road users

and tourists. First assessments have shown that by 2003, the amount of street litter had decreased by an average of 30%.

www.nederlandschoon.nl



United Kingdom

Fast food sector to keep litter and waste to a minimum

In 2003, Environmental Campaigns UK (ENCAMS) were commissioned by the UK Department for Environment Food and Rural Affairs (Defra) to develop a Voluntary Code of Best Environmental Practice for the Fast Food Industry.

The code will enable fast food operators, together with local authorities, to reduce litter and waste without significant extra cost to the industry. It gives practical advice to enable operators on how to keep within the law and encourages creative thinking around the issues of litter management.

Businesses that agree to be bound by the Code would be required to clean litter around the premises and ensure litter bins are available, monitor litter levels, comply with Duty of Care on Waste guidelines attached to the 1990

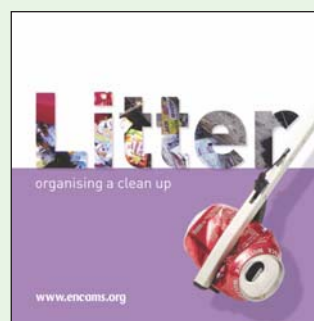
Environmental Protection Act, minimize packaging

used, display anti-littering messages to improve public awareness, work in partnership with local authorities, town centre managers, the "Keep Britain Tidy" campaign and potentially other food operators in the area.

Defra plans to launch the Voluntary Code of Practice for the Fast Food Industry towards the end of 2004. Major fast food operators, local authorities, land owners, enforcement agencies and other interested parties have already indicated their support.

www.encams.org

www.defra.gov.uk



Industry Podium/Platform pack

The European plastics manufacturers have a tradition of developing plastics-related educational literature for teachers. The continuing success of the *Podium/Platform* pack (with more than 53,000 already distributed) is a testimony to its usefulness for teachers, and not only in science classes.

Aimed at 14-16 year olds, the pack contains a variety of information relating to the plastics industry, including chapters on "dealing with waste" and "dealing with litter".

www.apme.org - see: classroom section



From waste management at school to environmental citizenship

Recently the European plastics manufacturers contributed to an EU-funded project led by the European Teachers Association (AEDE). Titled "*From waste management at school to environmental citizenship*", it gave industry the opportunity to share its knowledge about plastics and plastics packaging with the project partners.

The project ended with the publication of guidelines for the further education of teachers in charge of pupils aged 11 to 14. Basics on life cycle thinking and litter are among the issues addressed in the final report. This is published on the AEDE website.

www.aede.org/gedecite

Plastic bags are eco-efficient – how to make the most of them...

Re-use, recycling and recovery of plastic bags

Various life cycle studies conducted in recent years conclude that plastic shopping bags offer a range of convenient and cost-effective solutions that can favourably compete, on an environmental basis, with any other alternative.

- 1 Thin, single use plastic bags minimise the consumption of raw materials, water and energy, and subsequently reduce emissions into the environment. Their resource efficiency is further extended if they are re-used as bin liners or recycled – e.g. to make benches, irrigation pipes and speed bumps – or recovered as energy.
- 1 Robust re-usable plastic bags have a very favourable environmental profile compared to alternatives, especially when they are re-used several times. Retailers in Belgium, Luxembourg and other countries are promoting "bags for life".
- 1 Re-usable flexible woven plastic bags and foldable plastic crates represent alternative eco-efficient means to carrier bags for transporting shopping. Owing to their extremely high re-use potential, these systems offer a very beneficial environmental profile.



Luxemburg

Identical reusable shopping bags throughout the country

On 26 January 2004, VALORLUX (the national recycling agency), the Luxembourg retailers association (CLC), and the governing bodies responsible for the environment launched a two year national campaign to promote the use of reusable plastic bags made of woven polypropylene.

Participating supermarkets - covering 80% of national supermarket sales - have agreed to distribute an identical reusable bag. Up to 30 April 2004 these bags were distributed free of charge in exchange for a newspaper voucher. The action is considered a success since all 300,000 bags were sold.

Additional bags are now available from participating supermarkets for 1€. When no longer usable, these bags can be exchanged for new ones. VALORLUX will ensure their recovery.

www.valorlux.lu - see news section





Belgium

Bonus points for environmentally conscious shoppers

Recently, major supermarkets in Belgium (e.g. Carrefour, GB, Delhaize) have developed an incentive programme to encourage customers to switch to reusable plastic shopping bags. The price of these robust polyethylene bags ranges from € 0,04 to € 1,00. The customers gain bonus points on their customer card when buying and using these "bags for life".

When used and worn out, customers can return their bags to the supermarket where they will be exchanged. The supermarkets arrange for the returned bags to be forwarded to appropriate recovery operations.

This system meets the needs of both consumers and supermarkets while offering a resource-efficient solution.





Germany

The Green Dot initiative: recycling single use bags

The Green Dot logo on plastic packaging material signals that packers and fillers have paid a license fee for its collection, sorting and recycling. Every year, approximately 600,000 tons of used plastics packaging with the Green Dot are collected and recycled. Half of that amount is mechanically recycled into plastics, whereas the other half goes into feedstock recycling to produce methanol or as a reducing agent in blast furnaces.

Almost all plastics packaging is labelled with the Green Dot. This includes containers and films such as plastic bags.

Recycled plastic pellets made from collected packaging items are used for rain barrels, grass-growing grids, protective tubes for cables, transport pallets, and garbage bags.

www.green-dot.com





From oil to plastics – from plastics to energy

More than 90% of oil consumption is used in the form of energy: as fuel, for electricity generation, and for heating.

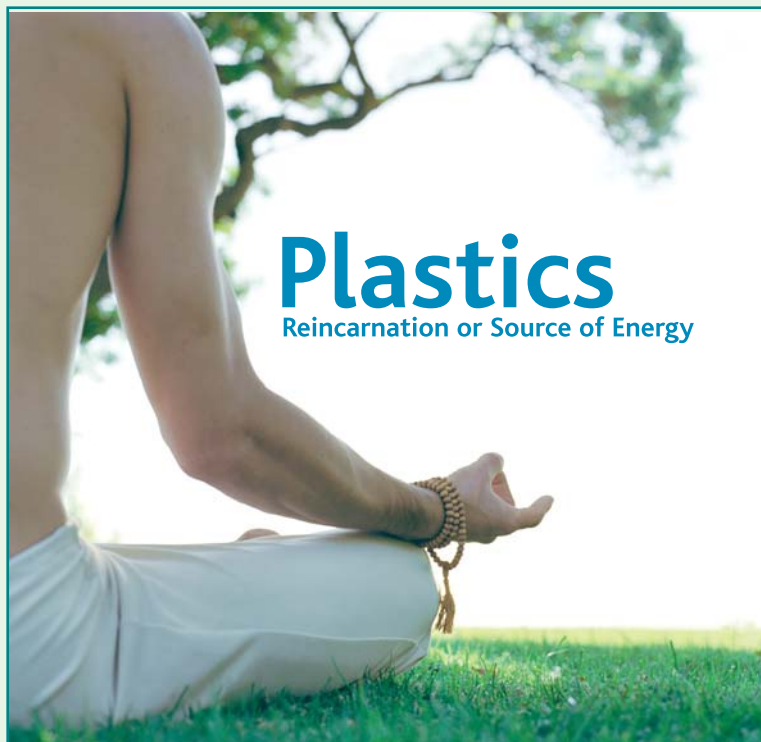
Plastics provide a smart way of extending the life cycle of oil. Moreover, when a plastics article has reached the end of its life, after having been used and re-used many times, the energy stored within the plastic can be recovered.

In most European countries, used plastic bags are collected as part of the municipal solid waste stream. Large amounts of the municipal solid waste are treated in waste incineration plants, which today achieve very low emission values through their use of extensive flue-gas cleansing systems.

These incineration plants make a significant contribution to resource efficiency in that they recover energy from waste which they supply to third parties and thus substitute for fossil fuels.

It is assumed, that approximately 50 million tonnes of waste is treated in waste incineration plants in Europe annually. This results in a substitution of 8 billion cubic metres of natural gas or 7,5 billion litres of oil. This means that 16 million households can be supplied with electricity and 4,7 million households with heat throughout the year, which is the equivalent of the entire population of the Netherlands.

www.plasticseurope.org



When plastics reach the end of their worldly existence, their use does not end there... Many plastic objects are 'reincarnated' into for example flower pots, fleece pullovers, carpets, sleeping bags or toys.

Others can help preserve scarce resources thanks to their unique energy potential. For example, a single plastic bag holds the energy potential to light an entire room with a 60W light bulb for up to 10 minutes!

For more information on plastics recycling or plastics as a source of energy, please visit www.plasticseurope.org



The European plastics manufacturers – your partner in the discussion

1 The European plastics manufacturers proactively support sustainable use patterns for plastic bags and encourage stakeholders to adopt strategies which maximize the advantages of this highly utilitarian carrier.

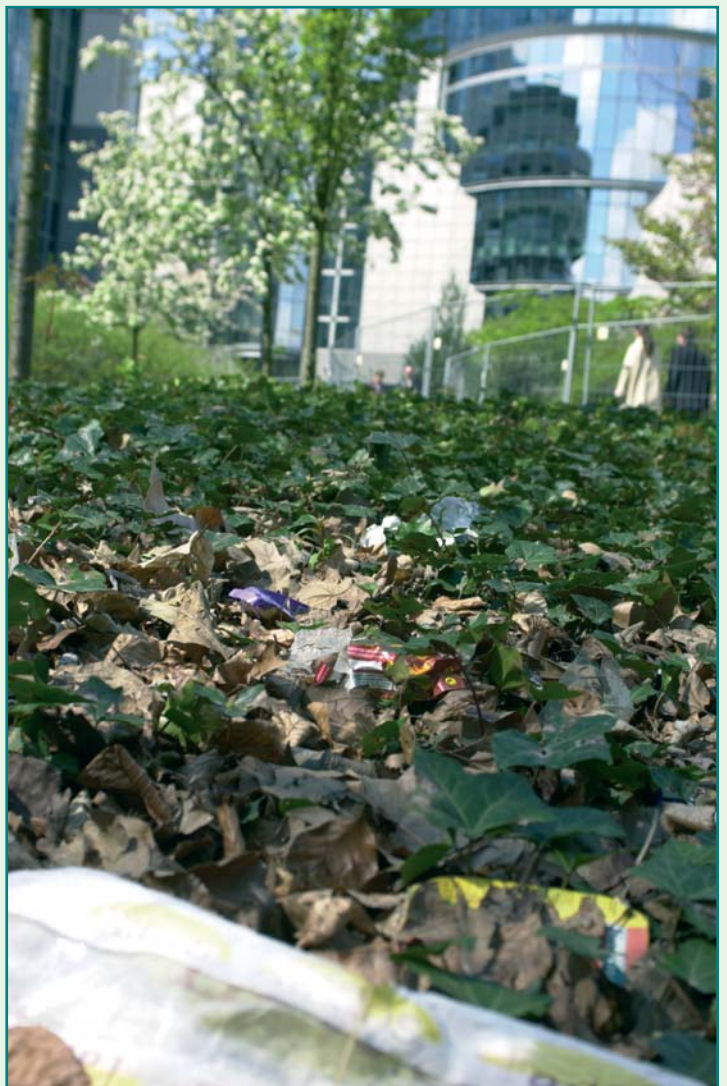
1 Littering is a social behaviour issue, which (to varying degrees) affects all regions, materials and sectors. In order to effectively address litter, a range of public awareness initiatives and enforcement strategies as well as focused waste management solutions are required.

1 Initiatives, which merely address the symptoms of littering, such as reactionary bans or the disproportionate application of economic instruments (levies, environmental taxes), will not solve the litter problem as they focus on the effect rather than the root cause of the issue. Tackling the litter problem involves action in three areas:

- education, communication and partnership
- law and enforcement
- waste management and street cleaning

1 The European plastics manufacturers encourage the establishment of voluntary commitments within the value chain supporting reasonable consumption patterns for plastic bags, which encourage their re-use, while simultaneously educating consumers regarding sustainable bag use.

1 The European plastics manufacturers support proactive schemes and the promotion of best practices, which help to overcome problems associated with the inappropriate use of plastic bags and contribute towards the general alleviation of litter.



Education, communication and partnership

- 1 A range of communication activities should be developed to inform the public about existing litter policies and their enforcement, and to raise general awareness regarding the impact litter has on the environment and quality of life.
- 1 Educational programmes tailored to inform children about the anti-social nature of litter should also be initiated to instil a sense of good citizenship and pride in their local environment.
- 1 Stakeholders within the consumer products value chain should be encouraged to come together to consider proactive approaches (keep my country tidy campaigns) that may contribute towards the objective of litter abatement.

Law and enforcement

- 1 Regulators should introduce anti-litter policies and ensure that they are enforced.
- 1 Locations attracting high levels of litter should be considered as targets for supervision and enforcement.

Waste management and street cleaning

- 1 Establishment of adequate waste management systems covering waste collection, and appropriate transport to waste treatment facilities.
- 1 Locations attracting high levels of litter should be subject to specific clean-up operations.
- 1 The provision of appropriate waste receptacles in sufficient numbers at critical public locations, which are emptied on a regular basis.
- 1 Voluntary commitments involving key stakeholders within the packaging value chain.

- 1 Consumer awareness and education campaigns on sustainable use patterns for plastic bags organized through the retail outlets where they are dispensed.
- 1 Control on the consumption of bags by making them available upon consumer request and/or by attaching a value to the plastic bag by assigning a suitable bag charge.
- 1 Development of systems based on robust re-usable bags with customer incentives to enhance the level of participation.
- 1 The exchange of best practices across the industry and all countries.



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