

# Partnership and Packaging:

Working together to optimise environmental performance



Packaging Resources Action Group

This booklet has been produced by the Packaging Resources Action Group (PRAG). PRAG is a multi-stakeholder group that enables constructive dialogue between central and local government, manufacturers and retailers, waste management companies and reprocessors. Members work together to:

- ◆ Improve the environmental, social and economic impacts of packaging and product systems
- ◆ Optimise the amount of packaging on products for net environmental gain
- ◆ Increase the quantity and quality of used household packaging materials collected for recycling
- ◆ Increase recovery of used packaging
- ◆ Develop consistent information about packaging and recycling for opinion formers and the public

**PRAG members:** Alupro, ASDA, B&Q, Ball Packaging Europe, British Beer & Pub Association, BIS - Department of Business Innovation & Skills, Boots, British Plastics Federation, British Retail Consortium, British Glass, Bromley CC, Cherwell DC, Coca-Cola, Confederation of Paper Industries, Co-op, Corus, Cosla - Convention of Scottish Local Authorities, DEFRA - Department of Environment, Food & Rural Affairs, DS Smith, Environment Agency, Food & Drink Federation, Greencore, Halfords, IGD, INCPEN - The Industry Council for Packaging and the Environment, John Lewis, Kellogg's, Kent CC, LARAC - Local Authority Recycling Advisory Committee, LINPAC, Marks & Spencer, Mars, McDonalds, Medway CC, MPMA - Metal Packaging Manufacturers Association, Muller, Nampak, Nestle, Next, The Packaging Federation, Pi3, PAFA - Packaging and Films Association, Procter & Gamble, Sainsbury's, Scottish Government, Sealed Air, Severnside, Shropshire CC, SITA, Suedpack, Tesco, Travis Perkins, Unilever, Valpak, Veolia, Waitrose, Welsh Assembly Government, Wilkinson, WIN - Waste Improvement Network, WLGA, WRAP - Waste & Resources Action Programme, East Riding Council Yorkshire.

This booklet is intended for PRAG members to use as an internal reference point to share with their members and other networks and to use as a basis for their own communications. The aim is to ensure that councils, manufacturers and retailers communicate consistent messages about packaging and recycling.

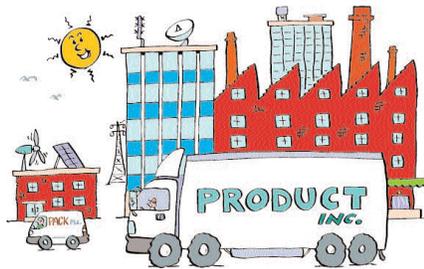
The cartoons indicate how it could be illustrated. However PRAG members may prefer to use their own photographs or those available on the WRAP website.

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## Working together

Everyone, including manufacturers and retailers, wants as little packaging as possible but most of it is essential for our daily lives and overall it prevents ten times more waste than it generates.



Manufacturers and retailers are working to make packaging more resource efficient and, where possible, reduce it and use recycled materials

Councils are working hard to improve their services to make recycling easier for householders



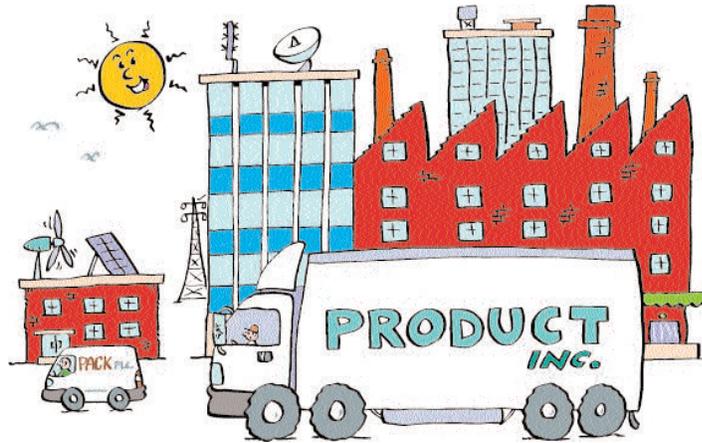
Councils, manufacturers and retailers are working together to ensure even more packaging is recycled

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**Everyone, including manufacturers and retailers, wants as little packaging as possible but most of it is essential for our daily lives and overall it prevents ten times more waste than it generates**

- ◆ Councils, manufacturers and retailers are aware that some members of the public are concerned that there is too much packaging and want more of it to be recyclable. We recognise these concerns and are working together to address them.
- ◆ Although packaging has an obvious role in containing products and displaying information, its main purpose is to stop goods being damaged or spoiled eg in-store wastage of grapes<sup>1</sup> packed in bags or sealed trays is 20% less than the waste from those sold loose.
- ◆ The materials and energy used to make a product are typically ten times greater than the resources used to make its packaging<sup>2</sup>.
- ◆ An average household buys 4,000 products per year weighing 3 tonnes. Less than 200kg of packaging prevents these resources from ending up as waste<sup>2</sup>.
- ◆ Households generate far more food and drink waste (8.3 mt pa<sup>3</sup>) than used packaging (4.7 mt<sup>4</sup>). Almost half (44%<sup>5</sup>) of this packaging is collected for recycling.
- ◆ Even greater amounts of food go to waste in countries which don't have the UK's efficient distribution and packaging systems; in Russia over 40% is wasted. In the UK only 2% is wasted between farm and retail depot<sup>1</sup>.
- ◆ On its journey from farm or factory a product may have to survive extreme temperatures and even be dropped. Packaging has to protect it from these hazards.



**Manufacturers and retailers are working to make packaging more resource efficient and, where possible, reduce it and use recycled materials**

◆ Choosing the correct packaging is a carefully considered decision, based on detailed studies of the transport, handling and storage needs of different products. It is also designed to meet consumer needs and those of the waste management infrastructure.

◆ Although people buy more goods than ever, the total weight of packaging used in the UK has stayed roughly the same. In 1998 it was 175 kg per person; in 2007 it was 176 kg<sup>6</sup>.

◆ The UK uses less packaging per person than many other European countries including The Netherlands and Italy (212kg), France (202kg) and Germany (196kg)<sup>6</sup>.

◆ Important progress has been made in reducing packaging. Glass containers today are on average 20% lighter than they were in 1990; the weight of cans has fallen by 30%, yogurt pots 40% and carrier bags 45%<sup>7</sup>. Lighter packaging saves resources both by reducing materials used to make the packaging and in the amount of fuel needed for delivery.

◆ Manufacturers and retailers continue to use recycled material where it is safe and hygienic to do so, and where it makes environmental and economic sense.

◆ New refill and reusable systems are also being trialled.

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### **Councils are working hard to improve their services to make recycling easier for householders**

◆ Councils typically provide collection for glass, metals, plastic bottles, paper and board. These materials account for 85% of all used household packaging<sup>8</sup>. The rest is not usually recycled either because it is too dirty or because it is made from such a small amount of material that spending energy, water and resources on collecting, sorting and cleaning it is not environmentally sensible. However, it can be treated to recover energy.

◆ Energy is recovered from 12% of municipal waste and the government's target for England is 25% by 2020<sup>9</sup>, in Wales it is capped at 30% by 2025<sup>10</sup>.

◆ Councils have worked hard to increase collection of household recyclables. In 2008, 44% of household packaging was collect-

ed for recycling<sup>5</sup> (37% of all household waste was recycled and composted<sup>4</sup>).

◆ UK recycling rates are now equal with many other European countries.

◆ Non-bottle plastics are not often collected because it is difficult to find a market for mixed plastics and it is expensive to sort and clean them. (There needs to be a debate about whether the UK should follow other European countries and recover energy from non-bottle plastics or try to recycle them.)

◆ Councils recognise that there is a variation in the amount of waste recycled in different parts of the country and they are working to share best practice.



### **Councils, manufacturers and retailers are working together to ensure even more packaging is recycled**

◆ Recycling is a complex process. Putting recyclables out for collection is only the first step. Materials then need to be sorted, cleaned and re-processed before they can be remanufactured into new products.

◆ Councils need to have a market for the materials they collect. Cleaner materials are more valuable and in greater demand than dirty, low quality ones.

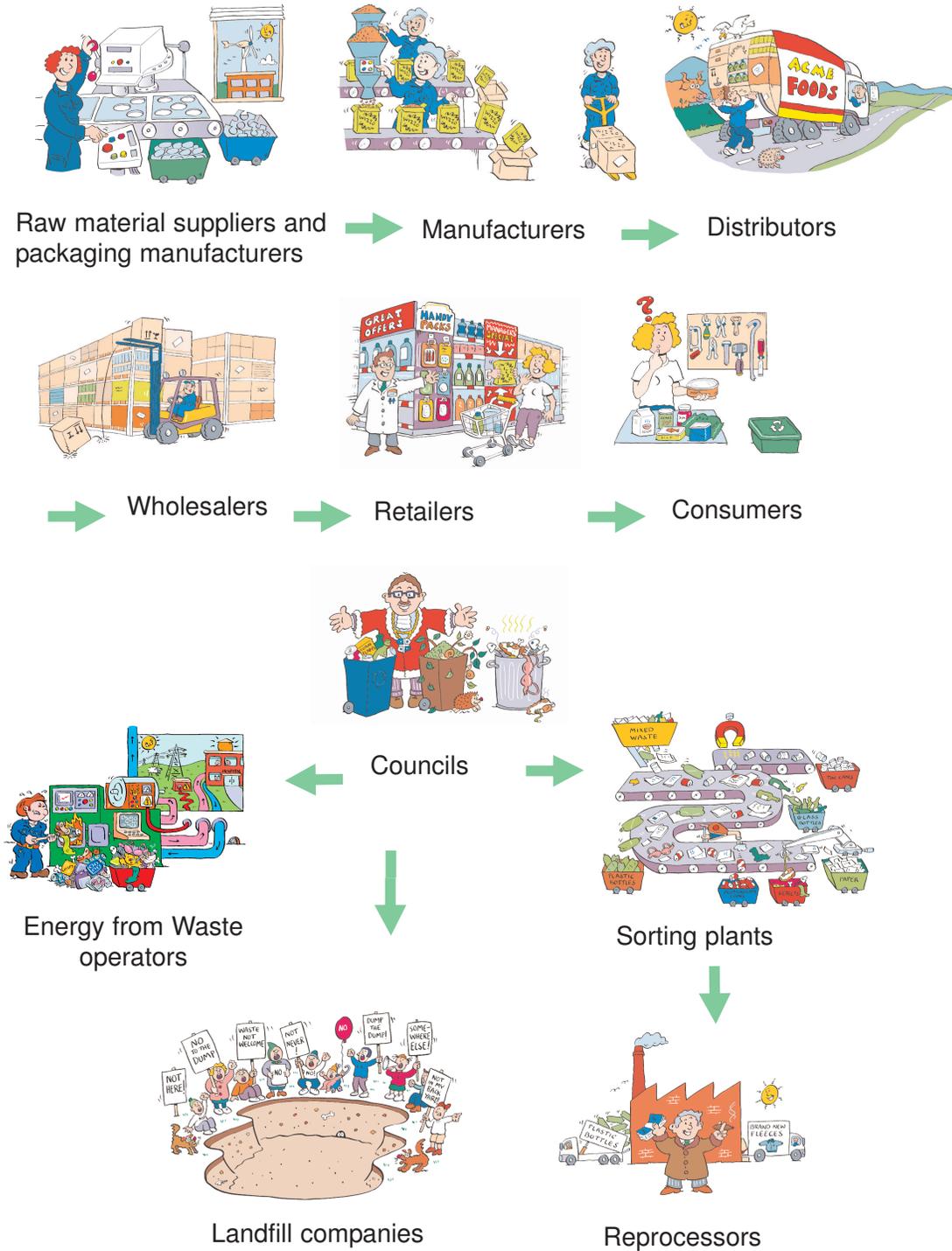
◆ Designers and packaging producers have to find a compromise between a number of often-conflicting requirements. For example, should they choose an easily recyclable pack if it creates other environmental impacts, such as increasing the number of lorries required for distribution?

◆ So all of us - consumers, councils, manufacturers and re-processors - need to work together to understand one another's challenges and find the best solutions.

This is what PRAG aims to achieve.

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### Packaging and product life cycle



## Questions about packaging and recycling

### **Why do retailers and manufacturers use so much packaging?**

Packaging is part of the delivery system for products to ensure that they survive the journey from farm or factory to people's homes.

It costs money so there is a financial incentive to use as little as possible. Most businesses that handle packaging are also obliged by law to pay towards recycling used packaging.

But there is always room for improvement and businesses have set themselves challenging reduction targets, as well as improving the overall resource-efficiency of the systems that provide people with food and other goods.

Packaging also helps to sell a product by making it stand out from competing brands.

The amount of packaging that is needed for an individual product varies a great deal.

Foods grown or manufactured overseas need to be protected from physical harm on the journey, when they may be stacked with other containers on top. They may also need to be protected from extreme temperature changes such as those experienced during a sea or air journey.

By contrast, a cabbage grown in Lincolnshire needs only enough packaging to enable it to be handled and transported to shops across the country, so 100 cabbages might be packed in a cardboard box or a plastic crate for the journey

### **I understand that packaging is needed to protect products - but it is excessive packaging that I think is wrong**

There are some products that are excessively packaged. Many of us have received a small item delivered in a box that could have contained a much bigger one. This is irritating and affects people's view of all packaging.

However, there is a law that requires manufacturers and retailers to use only the minimum amount of packaging to perform all its functions.

Trading Standards enforce this law and people can report any concerns to them at [www.trading-standards.gov.uk](http://www.trading-standards.gov.uk)

Most packaging, as well as protecting the product, has to perform other functions eg:

- \* carry a lot of clear, legible information, some required by law
- \* be easy to open, especially by

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people who may have weak hands

\* be difficult to open on products that are likely to be dangerous to children

\* be easy to consume on-the-go

\* dispense the product, such as asthma inhaler or deodorant

\* attract attention in order to sell the product - this is particularly the case with gifts.

Some of these functions require the use of more than the minimum amount of packaging needed just for protection but manufacturers still seek ways to reduce it.

For example Easter egg packaging has been reduced, even though the packaging is an integral part of the gift.

Complaints about excessive packaging tend to relate to gifts and a small range of items.

An Ipsos MORI public attitude survey in 2008<sup>11</sup> showed that perception of excessive packaging focused on specific products, not across the board - Easter eggs topped the list (59%) followed by electronic equipment (57%), prepacked fruit and vegetables (41%) and ready meals (36%).

However, even if all items in these product ranges were excessively packaged, their packaging

accounts for less than 3% of used household packaging<sup>1</sup>.

**But why do we need packaging at all? - can't goods be left 'loose'?**

Some goods - such as fruit and vegetables - may be sold loose (though packaging will have been used to transport them from the farm to the shop). Many retailers offer a choice of loose or packaged fruit and vegetables.

Pre-packed fruit and vegetables are often more expensive than those sold loose because of the cost of someone selecting them and the packaging. However there is less overall waste from pre-packed ones. For example, the overall waste from apples sold loose is over 25% more than those sold in a wrapped tray<sup>14</sup>.

**Why does my council collect different materials from those collected in the next county?**

Every council or its contractor negotiates its own contracts for selling recyclable material to the reprocessing industry eg paper mills and metals recyclers.

There are only a limited number of UK reprocessing facilities.

Councils only collect recyclable materials for which there is a market. The materials councils collect depend on what sorting facilities

exist within sensible delivery distance.

The markets depend on the laws of supply and demand in the same way as they do for virgin materials. They also vary across the country as well as in cycles that depend on the global economy and many other factors.

For example, the market dictates the type of waste paper that can be recycled by a particular paper mill depending on what its end product is. A mill that makes cardboard boxes uses mostly old boxes and board. It can use a small amount of old newspaper and magazines but not exclusively because their fibres are shorter.

A mill that makes newsprint uses old newspapers and magazines and can only tolerate a very small amount of cardboard boxes because the brown fibres leave marks in the newsprint.

So a council's collection service depends on many factors.

### **Why can't I recycle all plastics?**

Plastic bottles are readily recyclable. Some councils collect all plastics packaging but many do not because:

\* it is difficult and expensive to collect, sort and clean them, especially if they are dirty and contain residues of food.

\* plastics need to be sorted into their different types to have value - but the sorting facilities are not readily available to Councils.

\* non-bottle plastics tend to be dirtier than bottles and therefore, if collected with bottles, the quality and value of the whole load reduces and it risks being rejected for reprocessing and is sent to landfill.

\* A tonne of plastic bottles can fetch £150 whereas the recent price for a tonne of mixed plastics was minus £40<sup>12</sup>. If bottles are collected with other plastics, it is not economically viable to separate them out. This means there will be less bottle recyclate available, and more material will be exported - if other countries will accept low quality material.

\* There are also concerns that mixed plastics in sorting facilities are contaminating paper, cardboard and other materials. At present, apart from hand sorting, there is no way that a MRF can sort mixed plastics.

### **Should we stop using plastic to make packaging if it's not easily recyclable?**

No. Plastics, like glass, metals and paper have environmental advantages and disadvantages. The heavier materials are more easily recycled but products packed in heavier, bulkier packs

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require more lorries in distribution, so consume more fuel and generate more carbon emissions.

Lightweight plastics and mixed-material packs are difficult to recycle but use less energy in production and allow goods to be transported in fewer lorries. It is also possible to recover energy from them after use.

### **How much packaging is recycled from households and how much from all sources?**

Almost half (44%) of used household packaging is collected for recycling<sup>5</sup>. Over 60% of packaging from all sources (households and businesses) was recycled in 2008<sup>4</sup>.

### **Why aren't we recycling all our waste?**

It is unlikely that we can ever recycle all of our waste but we can do more.

The term 'recycling' is used to describe the combined recycling and composting rates.

The highest recycling rate for a council in England<sup>15</sup> is currently just over 60% (Staffordshire Moorlands - recycling 21% and composting 41%). However councils in urban areas with high levels of deprivation find reaching 30% is a major achievement.

Government figures show that only around half of the potentially recyclable materials in household bins are currently separated for recycling.

We need to convince everyone to recycle as a matter of course, and to support their council.

### **Isn't recovering energy from unrecycled material just wasting it?**

If material is not sent for recycling, getting some value back from it is better in environmental terms than sending it to landfill.

Producing electricity and/or heat from waste helps reduce greenhouse gas emissions by reducing the need for fossil fuels like coal and oil to produce power.

There will always be some materials that are too contaminated or dirty to be recycled (meat wrapping, for example). Energy recovery is a useful complement to waste reduction, re-use and recycling.

### **Is burning waste bad for the environment and human health?**

Every form of waste treatment - including recycling - has some environmental impacts. However, a number of studies, including one in 2004 for DEFRA<sup>13</sup>, have shown that energy recovery

plants do not pose a risk to human health or the environment and tighter regulations since then have reduced impacts still further.

### **What needs to happen to recycle more packaging?**

A major study<sup>5</sup> of packaging and recycling concludes that the best way to increase the amount recycled is to persuade people who don't recycle anything to do so and those that do, to do more.

The quality of collected material will improve if people sort their waste carefully and put only the materials that their council has asked for with the recyclables.

The study calculated that if all households recycled as much as the average household currently does, this would increase the national recycling rate by 3-4%.

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