



23 November 2006

## RESEARCH FACTS

### PACKAGING IN THE SUPPLY CHAIN

- **The amount of packaging used in the UK has increased by less than 4% since 1999 (8.5 to 8.8 million tonnes, in 2004 – excluding wood).** This increase is more than accounted for by the increase in population and demographic shift to more people living alone. This increase would have been more if industry had not continued to reduce the amount of material used per pack. (NB this excludes wooden pallets and crates because the data for wood has been constantly amended over the years and consequently skews the figures). **During the same period GDP rose by 17% and household consumption rose by 20.5%** (Source: National Accounts).
- If products are damaged or spoiled as a result of inadequate packaging, all the energy and materials in those products are lost. There are **ten times more energy and materials in products than in the packaging around them.** (Source: Dr Jan Kooijman)
- Eliminating packaging from fresh fruit and vegetables can lead to increased product waste. A study that compared apples sold loose with four in a shrink-wrapped tray showed that there was **27% more waste (bruised apple and used packaging) from orchard to home from those sold loose.** (Source: ERM)
- **Most supermarkets offer a choice of pre-packed and loose fruit and vegetables –** consumers can choose what suits their needs and preferences. It's environmentally beneficial to use a few grams of packaging to prevent damage to food. In the UK **packaging used for fresh produce accounts for 2.6% of all sales packaging, equivalent to 0.4% of household waste.**
- **There are a few examples of excessive use of packaging** and these need to be tackled. However **there are a number of drivers in place that stimulate improvement to all packaging** – the two laws that implement the European Packaging Directive, best practice guides from Envirowise and INCPEN, the Responsible Packaging Code of Practice and Green Supply chain initiatives. The most efficient and effective way to tackle the excessive examples is to **establish a multi-stakeholder group to act as forum for consumers' complaints about packaging** and take these up with the companies concerned.
- **The UK uses less packaging per person than many other EU countries** – 171 kg per capita in 2004 compared with 188 kg for Germany, 198 kg for the Netherlands and 200 kg for France. (Source: EU Commission).
- **Over 35% of packaging is produced abroad.** Much of it is used on products made for the global market and UK industry has little control over its design.
- If a household turned down its room heating thermostat by 2 degrees or drove one less mile a day, it would save as much energy as is used to make the packaging for its whole year's supply of goods. (Source: Dr Jan Kooijman)
- DEFRA (2004) estimated that 3%-6% of purchased food is discarded and food waste is 10%-20% of the food consumed (source: IEEP). **Portion packs reduce this wastage by enabling consumers to buy appropriate quantities of food and other groceries. We spend as much on food we throw away than on the packaging we buy in the supermarket.** In the vast

majority of cases (liquids, viscous products, prepared meals etc) we couldn't possibly do without the packaging.

## USED PACKAGING

- Quote from DEFRA in June 2006, “**DEFRA statistics show that packaging contributes only 18% of household waste which represents about 3% - by weight and volume – of landfilled waste.**”
- **Almost 60% of used packaging was recycled in 2005** – up from 27% in 1998 (at a cost to industry of £105 million) and this is increasing year on year (Source: DEFRA).
- **The amount of used packaging sent to landfill has fallen by 38% since 1997.**
- **It's not enough to design packaging for recycling alone.** Recycling has the potential to minimise environmental impact but it is more important to **aim for minimum use of materials and energy**. One of the most effective ways to reduce material and energy use is to combine small amounts of 2,3 or more layers of different materials to provide the same level of protection as one thicker, single-material. There may not be any environmental benefit in recycling the multilayer packaging but it can be the most resource-efficient option by reducing material and energy use in production and distribution, reducing the number of lorries needed for transport and value, as energy, can be recovered after use.
- **UK recycling rates are catching up fast with other European countries.** The UK recycled 27% of MSW (municipal solid waste) in 2005. The definition of MSW in the UK is restricted just to the waste handled by local authorities (mainly household and a little commercial); in all other European countries it is a much broader definition and includes commercial and industrial waste of a similar composition to household. This is why their rates look higher than the UK's. However the UK does also recycle significant amounts of commercial and industrial waste – it just does not appear in our data. When Brighton and Hove calculated its recycling rate based on the European definition it leaped from 10% to 40%. So UK recycling performance is usually under-stated.
- **The UK lags behind other European countries on energy recovery.** According to a Parliamentary Answer from Elliot Morley in January 2005, only 8% of waste was sent for energy recovery in the UK, compared with 32% in the Netherlands, 22% in Germany and 58% in Denmark. These countries all have high recycling rates which shows that recycling and energy recovery can co-exist. Policy makers are now turning their attention from recycling to waste prevention.
- **The packaging industry has been designing with waste prevention in mind for years.** Improvements in packaging design and in production techniques have resulted in huge reductions in material usage. A one pint glass milk bottle is 65% lighter than it was in 1940, a one litre plastic detergent bottle is 58% lighter than in 1970, cardboard box outer packs are typically 14% lighter than in 1970, a 400 gram metal food can has been reduced by 39% since 1950, a 275 ml glass beer bottle is 61% lighter since 1970, a 330ml steel drinks can has been reduced by 63% since 1950.

The industry is not complacent. It continuously seeks to improve packaging and INCPEN members are currently identifying how best to make an even more positive contribution to sustainable production, distribution and consumption in a future low fossil-carbon economy.

More information from INCPEN, [info@incpen.org](mailto:info@incpen.org) tel: 0118 255992