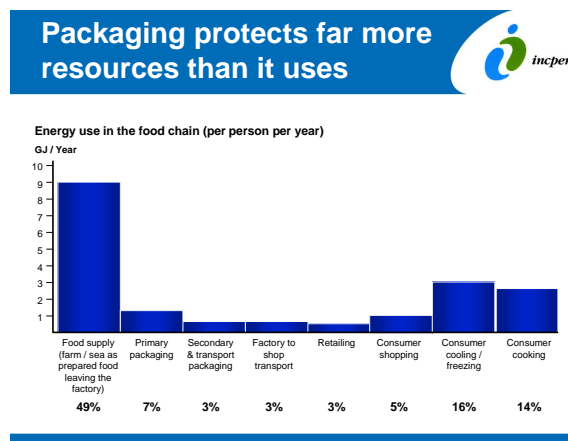


FACTS AND FIGURES

PACKAGING IN THE SUPPLY CHAIN

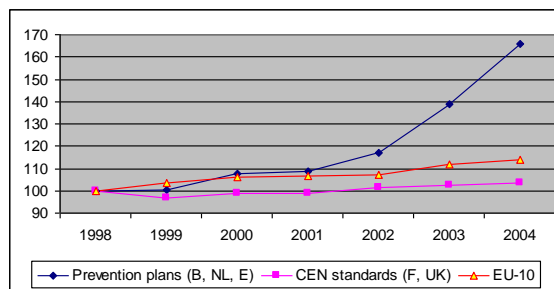
- Of the total energy used in the food chain, 50% is used in food production, 10% on transport to the shops and retailing, 10% to make the packaging and the remaining 30% used by shoppers to drive to the shops and store and cook food. Source: Dr J M Kooijman)



- The energy used in the production of packaging is only 3% of the total energy used in providing all the goods and services used by households.
- Most supermarkets offer a choice of pre-packed and loose fruit and vegetables – consumers can choose what suits their needs and preferences. In the UK packaging used for fresh produce accounts for less than 0.9% of total sales packaging, equivalent to 0.1% of household waste.
- Eliminating packaging from fresh fruit and vegetables can lead to increased product waste. A study that compared apples sold loose with those in shrink-wrapped trays of four showed that there was **27% more waste (bruised apple and used packaging) from orchard to home from those sold loose**. (Source: ERM)
- Cucumber Growers' Association tests show that unwrapped cucumbers are unsaleable after 3 days; just 1.5 grams of plastic wrapping (and 0.4 grams of paper label) keeps them fresh for 14 days and untouched by dirty hands.
- The amount of packaging used in the UK has increased by 3% since 1998 (8.7 to 9.0 million tonnes, in 2005 – excluding wood). This increase is more than accounted for by factors outside industry's control such as the increase in population and demographic shift to more people living alone. In the same period, GDP has grown by 17% and household expenditure by 20%.
- Across their full lifecycle, the environmental difference between glass, metal, paper and plastics packaging is tiny compared with the environmental savings they provide by protecting goods and food.

- **There are some examples of excessive use of packaging** and these need to be removed. However **there are a number of drivers in place already that stimulate improvement to all packaging**, notably 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. A proven way to remove excessive packaging is to **establish a multi-stakeholder group to act as forum for consumers' complaints about packaging and provide companies with technical advice.**
- **Over 35% of packaging used in the UK is produced abroad.** Much of it is used on products made for the global market and UK industry has little control over its design.
- **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 use. 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.
- **If a household turned down its room heating thermostat by 2 degrees or drove one and a quarter miles less 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)**
- **An important part of packaging's role is to make sure the energy invested in producing goods and transporting them from farm or factory through the supply chain to the shops and home is not wasted.**
- **DEFRA research shows that over 85% of people currently re-use thin plastic carrier bags at home for many uses, including bin liners. If they were not available people would instead have to buy additional bags for these purposes, which would increase resources used and generate more waste.**
- **The UK uses less packaging per person than most EU countries – 147 kg per capita in 2005 compared with 158 kg for Germany, 172 kg for the Netherlands and 162 kg for France. (Source: EU Commission).**
- **Packaging has grown *less* in the only 2 member states (UK, France) that enforce the Essential Requirements Regulations than in the rest of 15 EU countries (excluding the new EU countries) (Source: EU Commission)**

Growth in packaging placed on market – slowest in France and UK (where Essential Requirements are enforced)



- **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)**

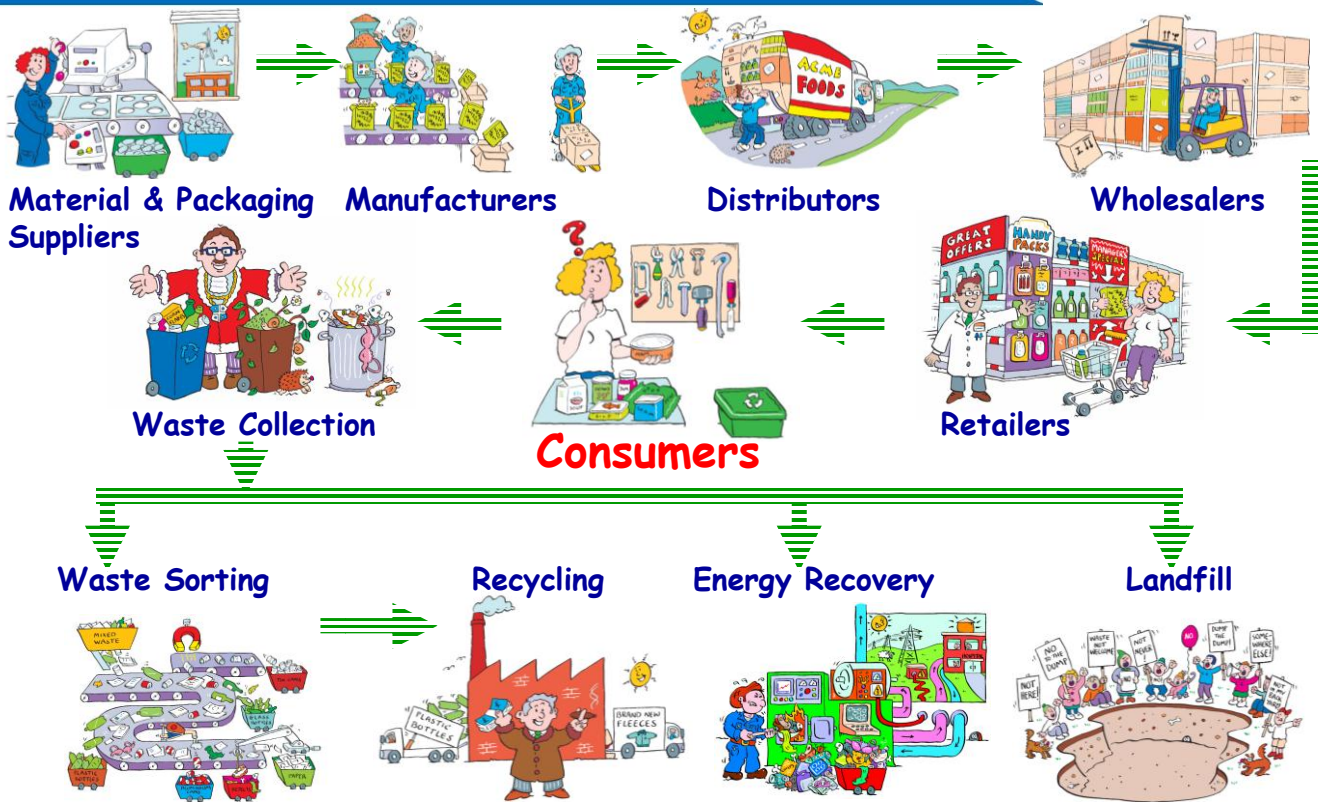
USED PACKAGING

- Quote from DEFRA in June 2006, “**DEFRA statistics show that packaging contributes 18% of household waste which represents about 3% - by weight and volume – of landfilled waste.**”
- **In 2006 supply chain companies contributed £50 million to support recovery and recycling of used packaging.**
- **Almost 60% of used packaging was recycled in 2006** – 5.5 million tonnes - up from 27% in 1998. **Since 1998 companies have spent over £700 million on increasing used packaging.** (Source: DEFRA).
- **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 do this 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 energy can be recovered after use.

MUNICIPAL WASTE

- **UK recycling rates for municipal waste are catching up fast with other European countries.** The UK recycled 30% of MSW (municipal solid waste) in 2006.
- **The UK's recycling performance is usually under-stated compared with other European countries.** This is because the UK definition of municipal waste 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 and includes commercial and industrial waste of a similar composition to household. Significant amounts of commercial and industrial waste are recycled in the UK – but this is not shown in the data. When Brighton and Hove calculated its recycling rate based on the European definition it leaped from 10% to 40%.
- **The UK lags behind other European countries on energy recovery.** Only 11% of waste was sent for energy recovery in the UK, compared with 33% in the Netherlands, 23% in Germany and 54% in Denmark. These countries all have high recycling rates which show that recycling and energy recovery do complement each other. Based on current forecasts, 25% of MSW will be treated to recover energy by 2020.

The packaging sustainability chain



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