

Packaging plays a crucial role in protecting manufactured products and perishable items. However, a significant proportion of packaging in use in the UK is over-specified and can only be used once.

We live in a very wasteful society and much more can be done to avoid unnecessary waste which would reduce demand for raw materials and ultimately reduce carbon emissions and lead to significant cost savings.

These guidelines are intended to provide supplemental advice to suppliers and licensees regarding the provisions of the Sustainable Sourcing Code that relate to packaging design and materials selection. They are not meant to provide detailed technical guidance, constitute legal opinion, or cover every possible option or product.

What is packaging?

All products made of any materials of any nature to be used for the containment, protection, handling, delivery and presentation of items, from raw materials to processed products from the producer to the user or the consumer, including non-returnable items used for the same purposes, and is categorised as:

- Primary packaging – is the wrapping or containers handled by the consumer, eg: boxes for consumable toys, food cartons and drinks bottles, paper or plastic carrier bags, etc;
- Secondary packaging – term used to describe larger cases or boxes that are used to group quantities of primary packaged products for distribution and for display in shops, eg: corrugated boxes and shrink wrap, or a box containing many soft drinks; and
- Tertiary packaging – refers to materials that are used to collate products into larger loads for transport, which facilitates loading and unloading, e.g. pallet stretch wrap, metal strapping, pallets, etc.

Packaging design

The waste hierarchy provides a broad framework to help determine the approach to packaging, in order of preference as follows:

- Eliminate/avoid – strive to get rid of some or all of the packaging, eg: removing unnecessary layers, or changing handling practices;
- Reduce – understand the opportunity to use less material in the first instance through size, thickness and weight of material;
- Re-use – design packaging to serve its purpose over virtually any number of 'trips', for example use of refills;
- Recycle – design packaging to make it less costly and/or environmentally damaging to recycle even if it has been re-used;
- Recovery – through composting or energy from waste; and
- Dispose – design can still play a part, eg: by maximising energy recovery while minimising any residual waste. Disposal to landfill or by mass-burn incineration should be the last resort.

Recycled content

Suppliers and licensees should maximise opportunities for using packaging with recycled content.

Packaging materials that include recycled content (especially glass, plastics and certain carton board) reduce the amount of raw materials and energy used to manufacture packaging. It also creates markets for what would otherwise be waste products and reduces disposal costs.

Materials selection

Choosing the materials from which packaging is to be manufactured is a vital part of making packaging more efficient. Each type of material has its advantages and disadvantages.

Careful consideration must be given to the function of the packaging and its potential for reduce, reuse and recycle.

Where packaging is required it should be manufactured using materials that can be reused, recycled or composted by commonly available methods in the UK.

The following materials matrix provides a list of standardised reference names for packaging components and materials types. It also shows the appropriate recycling status of each combination.

Using the packaging materials matrix

The packaging materials matrix is not aimed at providing a definitive list of every element of packaging that technically can be recycled.

Suppliers and licensees should note the following:

- Suppliers and licensees shall seek to maximise the use of packaging materials identified as widely recycled;
- Where materials of limited recyclability cannot be avoided, suppliers and licensees shall identify how such items can be recycled;
- Suppliers and licensees shall avoid using materials that cannot currently be recycled unless an overall net environmental benefit can be demonstrated; and
- If the supplier or licensee proposes to use a material type not listed in the matrix they should ensure that it is not a LOCOG restricted substance or material (refer to Appendix A of the Sustainable Sourcing Code) and should identify how such items can be reused, recycled, or composted (see below).

LOCOG acknowledges that several materials may ultimately not be able to be recycled due to contamination from the product it is protecting. For example, direct food contact packs that are in direct contact with greasy foods that leave a significant food residue.

The matrix is under continual review and therefore may be subject to change.

Windowed packs

The use of windowed packs should be avoided unless the window is easily separable.

Carrier bags

Carrier bags are rarely collected as part of local authority kerbside collections and most local recycling centres will not accept them either. However, many retailers have in-store facilities for collecting carrier bags. Most carrier bags are still made from polyethylene which is non-degradable.

Carrier bags should only be produced if they are intended to be re-useable (ie: can last at least 10 trips) or if they are to be made out of materials which can be widely recycled.

Compostable packaging

Compostable packaging has considerable potential benefits, but only if used in the right applications and subjected to the right processing after use.

Compostable packaging should only be used where there is not an established recycling stream for the existing dominant choice of packaging for the product. For further information and guidance, WRAP has produced a **statement on biopolymers and compostable packaging**.

Claims and declarations

Any claims and declarations on packaging which specifically relate to packaging (e.g. recycled content or recyclability) should be in accordance with the relevant provisions of the LOCOG Sustainable Sourcing Code. Further advice is also available on the **Recycle Now** website, or via WRAP's Helpline (0808 100 2040).

Legislation

Packaging legislation is driven by the Packaging and Packaging Waste Directive (94/62/EC) - 'The Packaging Directive' – which is concerned with minimising the creation of packaging waste material and promotes energy recovery, re-use and recycling of packaging. In the UK this is implemented through the Producer Responsibility Obligations (Packaging Waste) Regulations 2007 (as amended) and the Packaging (Essential Requirements) Regulations 2003 (as amended).

Packaging waste regulations

Originally introduced in the UK in 1997, the Producer Responsibility Obligations (Packaging Waste) Regulations 2007 (as amended) place obligations on certain businesses to register with the relevant UK environment agency (eg: Environment Agency in England and Wales) or via a 'compliance scheme', to recover and recycle specified tonnages of packaging waste each year and to certify that this recovery and recycling has been achieved.

'Producers' are businesses who are involved in the import or production and supply of packaging or packaged items and who individually or as part of a group of companies exceed two thresholds:

1. If they handle more than 50 tonnes of packaging per year; and
2. Have a turnover of more than £2 million per year

Each packaging related activity (eg: filling packaging, selling packaged products, etc) has a percentage obligation associated with it based on the amount of packaging and packaging material handled, the activity performed on each material, and associated business targets for those materials.

Businesses that have obligations need to ensure they have systems in place to record the amount of packaging placed on the UK market. Obligations are based on what they did in the previous year (ie: how much packaging they handled) rather than what they are doing this year. Imports should not be overlooked (they carry a rolled-up obligation in respect of the activities that took place overseas) and must be aware that the regulations do not just apply to consumer packaging – cans, packets, bottles, etc – but also to secondary and transit packaging eg: shrink-wrap, drums, pallets and boxes.

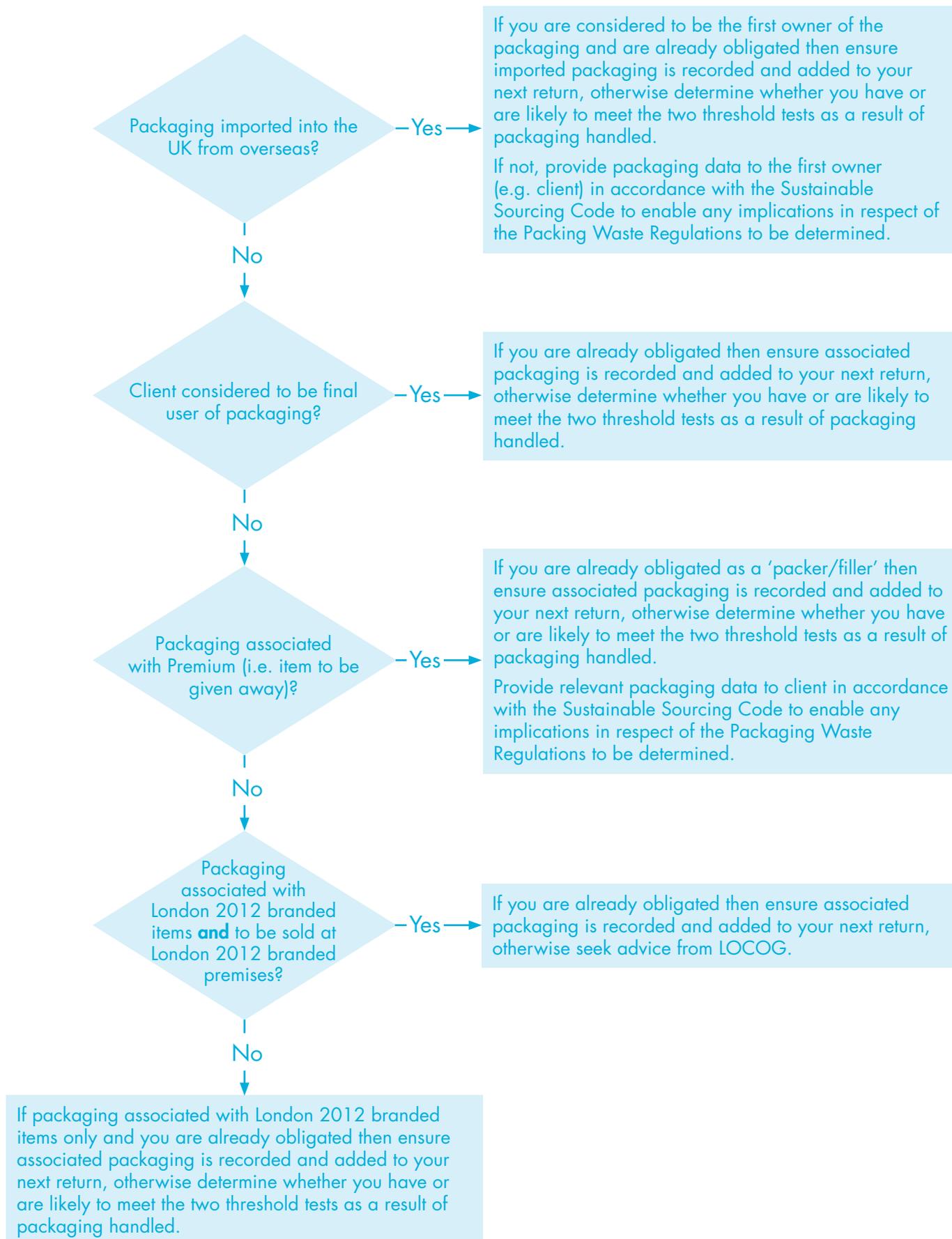
Producers must register annually with one of the UK environment agencies or a producer compliance scheme. Around 5,000 businesses are currently registered of which around 90 per cent are registered with the 20 or so compliance schemes. Each producer must finance the recovery of a proportion of the UK's packaging waste.

Failure to comply with the regulations can result in a criminal prosecution and, in a Crown Court, an unlimited fine. The Environment Agency has taken several hundred prosecutions under the regulations since 1997. In January 2008, the courts imposed the largest penalty to date, a fine and costs totalling £230,000.

The legislation was amended in 2005 to introduce requirements in respect to licensors and licensees. LOCOG has been in discussion with the Environment Agency regarding the impact of these provisions in the context of its own commercial licensing programme. The following flowchart has been produced to provide some supplemental advice on this issue.

Suppliers and licensees should note the core requirements in the Sustainable Sourcing Code and put appropriate mechanisms and systems in place to record any packaging or packaging materials (paper, glass, metals, plastic, wood, other) that are associated with the supply of licensed products (refer to Use of Secondary Materials section of the Sustainable Sourcing Code).

Packaging Waste Regulations Decision Support Assessment for Suppliers and Licensees



Note: Client relates to the organisation placing the order for the item and could include LOCOG, its Key Stakeholders, its Commercial Partners and its other suppliers and licencees.

Essential requirements

The Department for Business, Enterprise and Regulatory Reform (BERR) manage the Packaging (Essential Requirements) Regulations: these regulations place a duty on producers of packaging to ensure that the packaging used around products is kept to the minimum amount necessary without breaching required levels for safety and hygiene and consumer acceptance.

Further guidance and information

Further advice and information on packaging is available from the following resources:

Waste & Resources Action Programme (WRAP)

WRAP helps individuals, businesses and local authorities to reduce waste and recycle more, making better use of resources and helping to tackle climate change. There is an extensive range of online tools and resources available which relate to packaging, waste management, and recycled content.

As previously stated, these guidelines are intended to provide a steer on LOCOG's expectations regarding packaging design and materials selection. It is not meant to be technical guidance, nor is it meant to be comprehensive, covering every possible option or product. For guidance on this, suppliers and licensees are directed to WRAP's '[A Guide to Evolving Packaging Design](#)', in particular the checklists in section 7: tools and techniques to evolve packaging.

Envirowise

Envirowise delivers environmental advice to businesses and has a range of online tools and publications available.

Their publication '[GG360 Packaging design for the environment: Reducing costs and quantities](#)' is intended to help both management and designers/specifiers to take a fresh and systematic look at packaging design with a view to reducing its cost and its impact on the environment. It focuses mainly on primary product packaging, although it also covers secondary (grouped) and tertiary (transit) packaging.

Guidance for plastic packaging

Recoup's guide, '[Plastics Packaging](#), Recyclability by Design – What every designer and specifier should know' is a useful tool for ensuring that the most optimum combinations of plastics are being specified in packaging combinations that are complimentary to the reprocessing system.

Legislation

A list of registered businesses which are already obligated under the Packaging Waste Regulations is available from the [Environment Agency](#).

Further information is available from the Department of Environment, Food and Rural Affairs ([Defra](#)) and the [Environment Agency](#).

Further information in respect to the Packaging ([Essential Requirements](#)) Regulations 2003 is available from [BERR](#).