

Business Resource Efficiency Checklist - Packaging optimisation 1 of 6

Packaging optimisation by minimisation

	Investigate further	Implement now	Comments
Reducing production losses			
Has the pack shape been designed to minimise wastage in production?			
Can computer-aided design (CAD)/computer-aided manufacture (CAM) be used to increase the number of packs cut from one sheet of material?			
Does the customer/consumer allow more products to be packed in a single container?			
Eliminating packaging			
Does the product need any packaging (e.g. would a simple label suffice) – bearing in mind that eliminating packaging might reduce shelf life of some food produce?			
Can some layers of packaging be removed (e.g. remove inner bag from cardboard box)?			
Could adhesives or tapes be replaced with interlocking tabs?			
Can separate labels be avoided by using direct printing or embossing?			
Can information be printed on the pack (e.g. inside the carton) rather than on a separate leaflet?			
Reducing void space and fillers			
Can void space be reduced (e.g. between cartonboard and plastic inner packaging)?			
Could the use of fillers and padding be reduced by designing a smaller container?			
Can air pressure be used to protect the product (as in a crisp packet)?			
Lightweighting and downsizing			
Can a blister pack be replaced by a smaller cardboard container with a product picture or a cut-out window?			
Could the use of a scaled product photo replace a plastic film window or cut-out window in a package?			
Is a double or hollow-walled container specifically needed for strength/insulation?			
Could a double-walled corrugated container be used instead of a triple-walled container?			
Could localised strengthening of a container lead to an overall reduction in material use?			
Can the gauge thickness of any part of the packaging be reduced?			
Can CAD, CAM, stress analysis or mould flow analysis tools help reduce packaging weight?			

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Could product/primary packaging strength be used to reduce or eliminate the need for secondary packaging or vice versa?			
For card packaging, can cut-outs reduce material use and folds/tabs provide stiffness?			
Can adhesives be used to allow a reduction in the use of the main packaging material?			
Can the use of adhesives, non-water-based inks and tapes be reduced? Are they being used in the most effective way?			
Have label sizes been minimised?			
Would a fold-out leaflet/label reduce the size of the pack?			

Reducing energy use

Can adhesives with a low melting point be used?			
Does the use of alternative (water-based) inks, coatings or adhesives have any impact on energy use or drying times?			
Could any of the plastic components be replaced by card?			
Can plastic film be eliminated or film with a lower sealing temperature be used?			

Name	
Date	
Signature	

We hope that you have found this checklist helpful on your route to greater resource efficiency. Don't forget that WRAP is here to help you to improve resource efficiency and save you money. Visit the website at www.wrap.org.uk or contact the WRAP Resource Efficiency Helpline on 0808 100 2040 for further information.

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