

Robert Bosch (Australia)

A packaging assessment case study



Australian Packaging Covenant



Achieving change within a global company

As part of a large, global company Robert Bosch Australia has limited influence on product design, but they have identified some parts of the business where packaging decisions are made locally. In these areas implementation of the Sustainable Packaging Guidelines could deliver real benefits. There are also existing business processes that provide an opportunity for local staff to influence global packaging decisions by feeding the results of packaging assessments back to head office.

This case study highlights

- The importance of understanding existing processes in the supply chain when integrating the SPG, to avoid duplication
- Opportunities for global organisations to review existing packaging locally to achieve improved packaging solutions
- The potential to prioritise the assessment process and focus on areas of greatest influence

About the company

Robert Bosch (Australia) Pty Ltd is a regional subsidiary of the global Bosch Group, one of the world's largest private industrial corporations.

As a subsidiary of a large global company, Robert Bosch faces particular challenges in utilising the Sustainable Packaging Guidelines (SPG) for packaging design. Like other signatories to the Australian Packaging Covenant (APC) that are the local arm of a global organisation, Bosch's Australian trade sales divisions (power tools, thermo-technology and automotive aftermarket) account for a small fraction of global sales. All products are designed and manufactured overseas, although some repacking takes place in Australia with locally sourced and produced packaging.

The case study

In November 2013, a three-hour workshop was held at Robert Bosch Australia with representatives from each trade sales division, the HSE team leader, and representatives from the APC. The objectives of the workshop were to:

- evaluate the **business case** for packaging sustainability within Robert Bosch Australia, in order to link the SPG to core business strategies and priorities;
- undertake a **gap analysis** of APC compliance to reinvigorate the process internally;
- decide on an **assessment process** to integrate the SPG into design and procurement; and
- undertake a trial **packaging assessment**.

This case study documents the preliminary decisions from that workshop on how packaging assessments will be undertaken in future within Robert Bosch.





The business case for packaging sustainability

Packaging assessments undertaken for the APC provide Robert Bosch Australia with an opportunity to address other business objectives and priorities. These include:

- *Comply with global Bosch environmental requirements.* Local divisions must comply with the company's Design for Environment (DfE) 'Norm' or standard.
- *Reduce product damage.* Packaging can be damaged during transport from China and this can reduce sale value or, commonly, see the product scrapped entirely.
- *Improve productivity.* A number of products are imported and then repacked into kits in Melbourne. This is a labour intensive and costly process.
- *Improve product quality.* Occasionally replacement kits/parts have to be sent to customers if the original kit has a missing component.
- *Meet 'green' market expectations.* Bosch gas hot water systems are marketed for their environmental performance, and customers expect minimal and recyclable packaging.

It was agreed that there are real opportunities to improve cost efficiencies, particularly for locally developed kits. In terms of timing, there is an immediate opportunity to review the packaging of some automotive components and spare parts because a rebranding exercise is currently underway.

Gap analysis

Robert Bosch became a signatory to the APC in July 2010 and submitted a 5-year action plan. With a number of new staff and other business changes underway 2014 is an opportune time to revisit the company's commitments and strategies. Some actions have been implemented but many of these were done as 'one-off' activities. The HSE team leader would like to put in place a gateway process to ensure that all packaging is assessed in future.

Despite the fact that most products are designed and manufactured off-shore, the team identified some good opportunities to directly influence packaging. These include:

- Automotive product and promotional packs, which are packed in Dandenong, Melbourne;
- Power tool kits, which are packed at an off-site third-party repacking centre in Melbourne;
- Labels and stickers that are printed locally;
- Point of sale (POS) displays; and
- Transport packaging for distribution within Australia.





The team will develop an updated schedule for the assessment of existing packaging, with the highest priority given to the categories listed above.

Integrating the SPG and broader APC requirements into business processes

Bosch has a DfE (Design for Environment) Norm (standard) that must be followed by all of its business divisions and regional subsidiaries. An initial assessment for the APC action plan determined that the DfE Norm is 'equivalent' to the Sustainable Packaging Guidelines, but this was not formally documented. To demonstrate compliance with the APC, the HSE team leader will formally evaluate and document the Norm against the SPG to identify any synergies and gaps.

There is also an existing 'Checklist for sustainable product development at Bosch', based on the DfE Norm. It was agreed that this should be used for all packaging assessments. The APC encourages signatories to utilise existing business systems wherever possible, to avoid duplication of effort.

While the focus will be on local packaging activities, there are also opportunities to influence imported packaging by feeding the results of packaging assessments back to Bosch's corporate head office. The procedures for this need to be better understood and communicated internally. The HSE team leader will, in collaboration with staff in each division, develop documented processes for packaging sustainability assessments. These will include:

- a flow chart that illustrates the workflow for new product development at a corporate level, showing where/by whom packaging decisions are made, the process for feeding suggestions back to head office, and how the response from head office is documented;
- a similar flow chart for local procurement processes in each division, showing at which point the packaging assessment will be undertaken and by whom, how the assessment will be documented, and where the documents will be stored for future reference.

The figure below illustrates the generic product development process and the use of the Bosch DfE Norm.



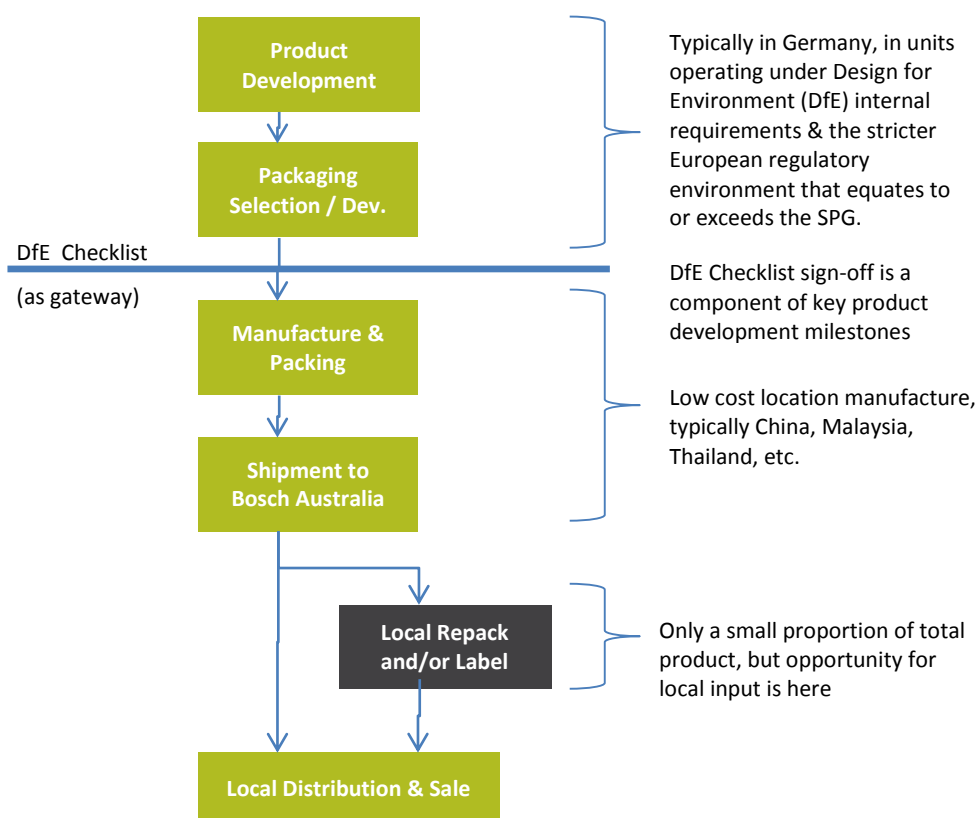


Figure 1: The product development process and DfE Norm usage at Bosch

Trial packaging assessment

A trial packaging assessment was undertaken at the workshop for a high performance brake kit. The packaging comprises two outer boxes (a generic box enclosed in a printed, branded box) and a variety of plastic bags, boxes and dividers for inner packaging.

It was agreed that the packaging could be reduced or altered without impacting functionality. There are opportunities to reduce costs by eliminating unnecessary layers, and by designing the packaging to speed up and improve the packing process to minimise mis-packing. Identified opportunities that will be investigated include:

- replacing the outer box with a sleeve that includes the branding and product information;
- using folded cardboard inserts to replace the current bags, boxes and dividers, and in a way that shows that all components of the kit have been packed;
- using standard packaging for a range of products; and
- adding a recyclability label to inner and outer packaging.





Outer packaging of the automotive brake kit

Lessons for other signatories

1. Don't duplicate existing business processes

Bosch already has good processes to evaluate the sustainability performance of its products and packaging. Robert Bosch Australia will incorporate the SPG into existing processes to meet the APC's requirements and to ensure that they comply with the company's own policies.

This approach could be applicable to other signatories that are the Australian arm of a global organisation or a distributor of imported products. If the parent company or others further up the supply chain are assessing new packaging for its environmental impacts at the point of design, then the APC does not expect them to duplicate this process. It is important, however, that signatories have details of the process and are able to readily access details of any assessments undertaken for APC reporting and audit purposes.

2. Existing packaging should generally be reviewed locally

Robert Bosch Australia is planning to update its schedule for packaging assessments by developing a matrix showing the main forms of packaging used by each trade sales division. These packaging 'groups' will be systematically reviewed over time.

It is important that the results of packaging assessments are provided to packaging decision-makers. If these decisions are made off-shore, as they are for many Robert Bosch products, then signatories should develop a process to communicate their findings. This can be a challenge, however there may be a business case to change packaging for other markets, particularly if it can generate savings in packaging or transport costs.

3. Focus on the areas of greatest influence first

Robert Bosch Australia has identified opportunities to assess and improve packaging and point-of-sale displays that are designed and manufactured locally. Most organisations will undertake some local packaging decisions, often for specific promotions, Australia-specific packaging and/or to meet local retailer requirements.





The APC encourages organisations to focus their efforts on areas where they have the capacity to influence change. In doing so, they are more likely to have some ‘packaging sustainability wins’, which often lead to a more engaged business – particularly if, as in the case of Robert Bosch, they are able to identify economic efficiencies. Once signatories have addressed the packaging they are able to influence directly, they can move on to the more challenging categories.

Next steps

The next step for Robert Bosch Australia is to update their APC action plan to incorporate the actions identified in the workshop. These actions include:

1. Developing a new schedule for assessment of existing packaging, with highest priority given to products that are packed or repacked locally (particularly kits and promotional packs), point-of-sale displays, and distribution packaging;
2. Undertaking a gap analysis that compares the Bosch DfE Norm and Checklist with the SPG;
3. Documenting business processes to show how the SPG will be used to inform local packaging decisions and to feed suggestions back to head office for corporate-level procurement.

Resources to help signatories achieve effective assessments:

[Packaging Assessment Guideline](#)

[Packaging Assessment Templates](#)

