



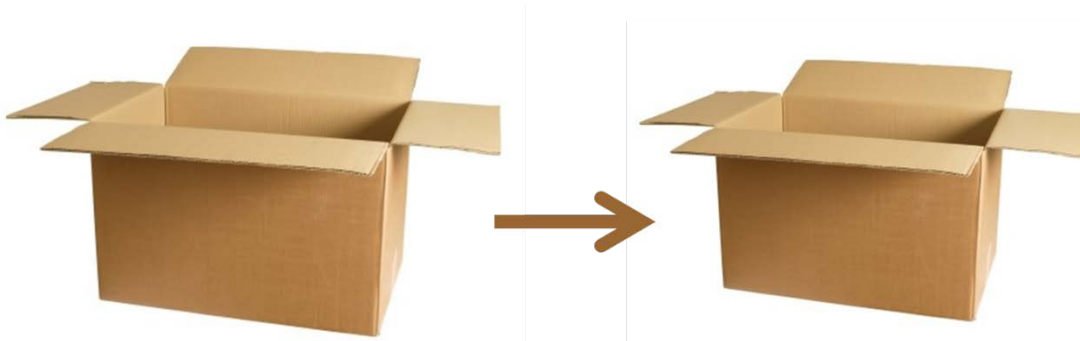
PPEC Factsheet

Reduction: making do with less

At first sight it may seem strange that the paper packaging industry would actively promote the use of less packaging. But in fact paper packaging converters have always operated on the basis of reducing their production costs and persuading their various clients that their particular option will save the client more money.

Many of the actions taken by national brand manufacturers to reduce packaging were in fact suggested by paper packaging converters keen to keep the business, or to snatch it from a competitor. That's life!

Some ways to achieve reduction include eliminating or reducing layers, introducing "high performance" board or kraft paper (making it lighter), reconfiguring box flaps, and removing air space between the product and its packaging.



Shrinking the box by 10% can make a big difference. But the box still has to perform.

These and other design changes have occurred across the industry so it is difficult to single out companies for special attention.

One celebrated example with industry-wide implications was PPEC persuading the Railways Association of Canada to change its rules on corrugated containers shipped by rail. Previously, industry had to make containers stronger than necessary (using more paper fibre) so that the railways would have fewer insurance claims against them for goods damaged in transit.

PPEC proposed amendments to the rules that would protect the contents while at the same time slashing the amount of corrugated needed by between 5 and 10 percent.

The railways endorsed PPEC's initiative, opening the way for industry to achieve potential fibre savings of 100,000 tonnes per year (the equivalent of closing down one mill's total annual production, permanently).



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A more recent design change (this time involving provincial government specifications) was PPEC's success in persuading the Liquor Control Board of Ontario (LCBO) to change its shipping rules for wine and liquor boxes.

For years the LCBO had used a burst test (called Mullen) as a barometer for box failure and/or container breakage. In effect, the Mullen test forced box makers to make their boxes from virgin material or to include some virgin fibre. This in turn discouraged the use of recycled board (the predominant Canadian and global grade).

PPEC set up a technical committee; began outreach to the LCBO; and initiated some pilot laboratory trials where various types

of boxes were shaken, dropped and slammed into hard surfaces to see how they performed. A 4-minute video (*Shake, Rattle and Drop*) was produced and shared with the LCBO.

This led to further trials and the finding that the Mullen test was not a good predictor of actual box performance, regardless of whether the box was made from virgin or recycled material.

The study also concluded that any performance-based testing procedure had to include *all* elements of the package, not just the outer box but also its partitions and the container inside.

In January 2013, the LCBO agreed to the use of an alternate testing method that PPEC had been promoting (the edge crush test or ECT). This allows for the use of recycled fibre, as long as it performs. Read the press release here and click on the video.





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Canadian companies leading the light-weighting charge



Greenpac Mill



Atlantic Packaging – Whitby

Canadian mills have been lightweighting their containerboard for years. Three recent developments are Atlantic Packaging converting its Whitby, Ontario newsprint mill into a new 100% recycled linerboard mill producing low basis weights (lighter paper) with enhanced strength properties. Across the border in Niagara Falls, New York, the new Greenpac mill¹ is also producing a lighter weight 100% recycled high performance linerboard. And Kruger is building a new light-weight board mill in Trois-Rivières, Québec.

¹ The Greenpac mill is owned by Cascades Inc. together with the caisse de dépôt et placement du Québec, Jamestown Container and Containerboard Partners