

## Wrigley

**Product:** Chewing gum

**Overview:** After more than 100 years of selling chewing gum, Wrigley changed the traditional design of its stick chewing gum sales packs to eliminate a layer of packaging. The change affected 5- and 7-stick packs (sold singly and in multi-packs).

**Before:** Wrigley's stick gums were packed in 3 layers of sales packaging: The pack holding 5 or 7 sticks was constituted by the counterband (see item A in graphic, right), made of a composite of paper, polyethylene, and aluminum (some variants of this composite also contain wax). Each stick was wrapped in an inner wrapper, made of aluminum, paper, and wax (item B) and a sleeve-like single-stick label made of printed paper (item C).

For the 5-stick packs, the ratio of sales packaging to product was 0.463 g/stick gum<sup>1</sup>.

**After:** Wrigley eliminated the single-stick label (C). The new package consists of the counterband and the foil stick wrapper. The material compositions of these two components were not changed during the redesign.

The ratio of sales packaging to product for the modified 5-stick pack is 0.291 g/stick gum.

**Environmental Attributes:** This case study highlights the value of small changes on high-volume products. Though each single stick label weighs only 0.1725 grams, eliminating it reduced the total weight of the sales package for a basic 5-stick pack by approximately 37%. This translates to 34.5 metric tons of paper use avoided for every 100,000 cases that Wrigley sells<sup>2</sup>.

In addition, during the planning stages for the design change, Wrigley anticipated that it would be able to reduce the size and weight of the counterband as a result of the elimination of the single stick wrapper. The reductions in sales packaging were also expected to allow reductions to the secondary packaging (e.g. shelf trays) and transport packaging (e.g. shippers) to be reduced. No figures on further reductions were available.

**Fee Impacts:** By eliminating the single-stick label, Wrigley was able to reduce the packaging fees on its stick gums accordingly. Calculations by Environmental Packaging International, a consultant to Wrigley, indicate that the modification lowered the fees incurred by the sales packaging in 2004 for the 5-stick pack in Belgium and France by 37.22% (from 0.110 cents to 0.069 cents in Belgium and from 0.080 cents to 0.054 cents in France) and in Germany by 8.26%, from 0.268 cents to 0.246 cents<sup>3</sup>. The relatively small fee reduction achieved in Germany is due to the high fee differential between paper (such as the single stick wrapper) and composites (e.g. the counterband and inner wrapper), the fees for which are an order of magnitude higher than those for paper. It should be noted that the 2004 fees in France and Germany were a function of both weight-based material fees and per-piece packaging fees; however the label was subject only to the weight-based fee (and not to the per-piece fee) under the German rules. As of 2005, Germany has simplified its fee structure to eliminate the



Original package



Redesigned package

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Updated: 07/14/05  
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09-LQ-035

<sup>1</sup> Precise data on packaging affected by this change in the US market were not available. All "before" figures in this case study are based on actual packaging composition and weight data from the Biesheim factory from 2000; "after" figures result from eliminating the single stick label from those data.

<sup>2</sup> This calculation, for illustrative purposes, is based on the packaging configuration for 5-stick packs sold individually, which are shipped in cases of 20 shelf trays, each containing 20 5-stick packs. Wrigley also sells 5-stick packs in multi-packs and in other case configurations.

<sup>3</sup> These comparisons are based on calculations using 2004 fee rates and exchange rates as of January 1, 2004.

per-piece component of the fee formula and has reduced the differential between paper and composite fees. Under the current structure of weight-based material fees, the same design change would reduce the fees in Germany by 5.92%.

For more information on international packaging fees, [click here](#).

Cost savings data related to material costs were not available.

Credits: *Catherine Goodall, Environmental Packaging International. Thanks to Andy Holynskyj, ESH&S Director, The Wm. Wrigley Jr. Company.*

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