

Cost effective labels that are compatible with rPET thermoform recycling systems

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In 2009, the grocery members of the Retail Council of Canada, (including Loblaw Companies, Sobeys, Walmart Canada, and Metro), began working with the Association of Plastic Recyclers (APR), the National Association for PET Container Resources (NAPCOR), Waste Diversion Ontario, and Stewardship Ontario to identify and remove the obstacles that prevented PET thermoforms from being recycled. The goal was to increase the amount of rPET available to be used in packaging. The obstacles they identified were:

- Look alike resins (OPS, PVC, PLA, PETG, and others) made sorting difficult, resulting in contamination of the bales at the MRF
- Labels that were difficult to remove in the wash systems at the recycling facilities. Residual adhesives, inks, and paper fibers contaminated the system, resulting in discolouration of the rPET flakes.

By January 2012 suppliers had eliminated PVC clamshells and switched to PET only, increasing the volumes of post-consumer PET thermoforms available to the recycling sector.

However, the label program stalled. While the APR developed a test protocol that would determine if a label's construction was compatible and efficient in the PET recyclers' systems [Thermoform Label Test](#). The label manufacturers were able to develop products that would pass the protocol BUT at higher costs compared to their non-conforming counterparts.

That is until now!!

In the summer of 2015, Artcraft Label, located in Burlington Ontario, teamed with Avery Dennison, and developed four labels (two paper-based and two film-based) that have passed the APR Thermoform

Label Tests as verified by being [published on the APR website](#). These products are cost-competitive to the non-compliant labels still in use today and are commercially available now. Artcraft Label is the only Canadian label manufacturer to have achieved this breakthrough, thus far.

With this development, the Canadian Grocery members can complete the thermoform packaging conversion project they began over five years ago and realize the results of the business decision they made:

- Recycling all thermoform containers in North America, creates a potential \$1.6 billion market for recovered materials (about \$160 million, in Canada) that were at one time going to landfill.
- Greenhouse gases could be reduced by 3.8 million metric tons. Good for climate change and could have significant economic value in carbon credits for the future.
- In addition, rPET today is priced 40% to 50% less than virgin PET resins, as reported by [Plastic News](#). With a greater supply of uncontaminated recycled resins, rPET could be used to produce thermoform packaging for Produce, Bakery, and Nut Products categories, resulting in tremendous cost savings.

This looks like an impactful sustainability project in grocery packaging whose time has come.