



Creating Alluring Brand Value From Waste

EMERGING PACKAGE INNOVATION TRENDS POINT TO THE USE OF BIO-WASTE DERIVED MATERIALS

As businesses continue to examine their long term sustainability practices, we see more development and research activity focused on exploring how to continue to extract as much value from waste streams that come from our modern day food processes. One **such activity is the utilization of these bio-waste streams to create materials for packaging**. While some of these efforts are in their infancy, it does indicate a renewed energy to make better use of the waste we generate.

So, the question is *"How can we use the shells, husks, skins, pods, hulls, peel, fibers, pulps, stems, straws and seeds left over from our food processes to create something of value? Are there elements of these plentiful resources we can upcycle into the packaging in a sustainable way?"*

It's probably way too early to pass judgement on the merits of this upcycling approach from a life cycle assessment perspective. Scaling and learning how to commercialize these new materials has to happen before that becomes understandable, and the incumbent dinosauric technologies will try to smother change but the analysis will come as the trend gains traction.

At the heart of this trend however there is something **very alluring and "whole"** for the consumer in me thinking about a coffee cup made of coffee husk and pulp; or chocolates wrapped in cocoa husk; or a juice packaged in fruit peel; or a can of nuts made from nut shells. Understanding the allure perhaps is the key to unlocking the future of these new materials.

This is a different trend from the huge amount of activity focused on replacing fossil fuel derived plastics with biomass derived plastics (sugarcane ethanol for instance) or the use of highly

renewable materials like bamboo and mushrooms for packaging. There are numerous brands taking advantage of sustainable biomass derived materials ; [Coca-Cola's](#) pioneering efforts on PlantBottle™ packaging and [Dell's](#) leadership in bamboo and mushroom derived packaging are fine examples of this work.

INSPIRING NEW DISCOVERY & RESEARCH

So in the spirit of inspiring new discovery here are some interesting recent examples where food wastes are being reportedly explored for upcycling into packaging materials (*and by no means a complete list*):

- Ferrero, the Italian confectioner, has partnered with Stora Enso on a Euro funded innovation project to explore using hazelnut shells and cocoa bean skins in paper packaging [Ecopaper](#).
- Heinz & Ford are working together to use tomato waste skins and stems in the production of filled plastic car parts reported by the [Pittsburgh Post Gazette](#) .
- [James Cropper](#), a specialty paper firm in the UK, have created a range of papers derived in part from cocoa husk waste.
- Coca-Cola plans on making drink boxes, cartons and packaging containing citrus waste and juices, as reported by the [Atlanta Business Journal](#) .
- [Dell](#) is working on the use of waste wheat straw to in part make new cardboard packaging and shippers for their products.
- Scientists at the Italian Institute of Technology believe they can create new bio plastics derived from spinach, parsley, rice, and cocoa wastes as reported by the [American Chemical Society](#) ACS

This is food for thought, and possibly a prompt for you to ask yourself whether there is an **alluring brand value** you could capture by rethinking your packaging and waste streams.

It might not be an easy road to travel, but the lasting effects could bring long term brand, consumer, customer, and business value that is hard to truly quantify today.

*Simon Gainey, founder of Hardworking Packaging (HWP) LLC, a firm dedicated to making your **packaging work harder** for your consumers, customers, and business.*