Globally, there has been increased emphasis on packaging using biodegradable, reusable and environmentally friendly products. Your packaging makes a product visible on the shelves for the consumer. If your packaging fails on sustainability, then you could have a problem on your hands.

**GREEN IS GOOD** As a recent editorial in the trade publication Packaging News noted, every brand, designer and manufacturer is finding their own innovative way to reduce their impact on the environment. And greater sustainability is a preoccupation of the big players. Writing in Packaging News, PepsiCo’s beverage packaging vice-president said the company was seeking ways to reduce the weight of its beverage containers and looking to increase the amount of rPET in its packaging. This year, they announced the development of the world’s first plant-based PET plastic bottle, which will in the future use non-food sources such as orange peel. Coca-Cola and Heinz have also recently launched bioplastic bottles in Europe.

Irish packaging and food companies can take advantage of the trend. Holfeld Plastics is an Irish company promising “Sustainable packaging that won’t cost the Earth,” and it has a strong focus on product innovation. The company takes in ground-up PET, the polymer typically used in soft drink bottles, and turns it into recycled PET (rPET) food-contact approved packaging. It recently completed a project funded under Framework Programme 7 on environmentally friendly food packaging trays using 25 per cent less material and made from 100 per cent recyclable rPET.

The research focused on improving the rPET material characteristics and the efficiency of the thermoforming process that produces the trays, so that the trays could better compete with polypropylene, which is currently the industry standard. “We have several carbon footprint studies carried out on our rPET packaging, showing that our packaging has a lower footprint than our competitors,” Dr Pat Ward, Research & Development Manager, explains. Through collaborations with scientists in University College Dublin, Holfeld can specify how much energy and water it is using to produce a particular product, which is far more detailed than many companies can offer.

Holfeld has around 10,000 tonnes manufacturing capacity, 15 per cent polypropylene and 80 per cent PET, but it is currently adding a further 8,000 tons of rPET capacity. It has also launched a new modified PET material (Holseal) that eliminates the need for an additional polyethylene layer to achieve a good seal in primary poultry or red-meat packages; this mono-material is fully recyclable. The company commits 5 per cent of annual turnover...
Packaging consultant Jonathan Fowle, of Innovati Partners in the UK, gave a talk at a packaging seminar in Dublin in October on behalf of consultancy group PIRA; he outlined some of the main trends in the global market. “There’s a beauty contest going on with the retailers; they are all trying to up their game and say how much better they are in reducing packaging tonnage, and this is why the lighter weight materials are tending to have an impact,” he says. Holdfeld has developed and recently launched a new low density foamed rPET material, which can reduce material usage by up to 20 per cent.

HIGH-PERFORMANCE FOR FOOD Plastics have been growing quite strongly, according to Fowle, but innovation is not all about reducing weight. There has been quite a lot of developments in terms of technology, particularly in improving barrier properties and thereby shelf life of goods. The global food supply chain racks up an estimated 1.3 billion tonnes of wastage each year, and a 2008 survey in the UK found that almost a quarter of edible food by weight is discarded by consumers. New packaging for short shelf-life chilled products can save costs and lessen the environmental impact of food waste. “If retailers on things like fresh meat can achieve 8 days rather than 7 days shelf life, which might not sound like much, that means a lot to them. The cost of disposing of out-of-life foods is very high and getting higher,” Fowle explains. So maybe scientists could throw their lot in with the packaging projects.

CLEVER PACKAGING: OTHER WAYS TO STAND OUT FROM THE CROWD

Forget about smart packaging, clever is the way to go. Much packaging still consists of glass bottles and cans, which are fairly standardised, but Fowle says companies like Heinz have used shrink sleeves to replace cans and move brands into more modern formats. Demand for bespoke designs or materials for specific applications opens up innovation opportunities, notably for manufacturers and retailers who see this as a way of pushing their brands into the limelight. For small Irish food producers, packaging is even more important as they do not have budget for costly ad campaigns. As Julian Smith of Bord Bia explained: “Multinational manufacturers are typically also on television and doing their branding in more ways than a lot of Irish companies, for whom the packaging is what is often called the final salesman on the shelf. An Irish manufacturer is often depending to a greater degree on their pack to convey the brand benefits and the brand personality.”

Packaging is a way of creating a niche and a way for retailers and brand owners to gain some extra margin through differentiation, says Fowle. But a lot of innovation is not necessarily sophisticated, he says: “it can be quite small things which can add value. There are lots of concerns with some packs. People say they are not easy to open, for example, which can be frustrating.” Abilities like easy decanting, the ability to portion control or easily followed instructions can add value.

“As far as innovation is concerned, you have to understand your brand in the market and tweak it. It can be design, it can be functionality, it can be shape, or it can be a simple thing like a combination of a matt and gloss finish,” he says. But you can also lift ideas from other market sectors, he suggests, and not necessarily from adjacent sectors. “Try to take things from non-food into food, for example, from pharma. We see some quite innovative packaging there.”

The packaging manufacturers who are innovating and offering solutions like easy opening, clever packaging and better shelf-life packaging, will carve out a space, predicts Repak’s Colm Munnelly, who has experience as a packaging technologist for a food company.

Bord Bia, Repak, Teagasc and Enterprise Ireland cooperated in a one-day seminar in October under the tagline “Package your way to new markets.” The objective: to facilitate exports, help develop new markets or products and exploit brands. The plan now is to put together an industry-led agenda on packaging for future workshops.