

Message in a Bottle: Plastic's Prospects

*A decade ago, paper was at the forefront of environmental campaigning. Now it's plastic. In this article, **Peter Heslam** provides a business and Christian perspective on plastic. He challenges the growing negativity about this substance and showcases three highly innovative companies that refuse to see a conflict between the interests of planet and profit. In doing so, he suggests that plastic has prospects if we move from a linear to a circular economy.*

Plastic is fantastic. It is watertight, lightweight, inexpensive, hygienic, versatile, and easy to manufacture. No wonder that, in a little over a century, it has become fundamental to the quality of human life. While the use of wood, stone, clay, bone, leather, metal and glass has for centuries made life better for people, the contribution of plastic to human flourishing is immeasurable.

That success is reflected in the fact that our bodies are in almost constant contact with this substance. If that is not because of the clothes we wear, it's because of the smartphone, steering wheel, toothbrush, suitcase, or pen that is in our hands. Or it's because of the spectacles on our face, the audio device in our ears, the keyboard beneath our fingers, or the bank note and credit card in our pockets.

As those who have been hospitalised know, scarcely any treatment is administered without the use of plastic. Anyone who has visited a poor community anywhere in the world will understand the development value of a plastic bucket, bag, shoe sole, bottle of water, mosquito net, solar light, and toilet components. Plastic saves and dignifies lives, the world over.

What is damaging life, the world over, is plastic *waste*. This is what is

wreaking havoc to wildlife and threatening food chains, including our own. The problem is staggering. Although plastic generally takes hundreds of years to decompose, around 80 percent of plastic waste accumulates in landfills or the natural environment¹. This is without excuse, as most plastic is easy to recycle. Plastic is not the problem. The problem is with humans – we are wasteful.

The first step towards reducing plastic waste is, of course, to reduce the unnecessary use of plastic. But we need to tread with caution. Take plastic food packaging, for example. Many are calling for this to be reduced, or banished altogether. But in many cases, it protects food from damage, decay, and contamination. This is important, as food waste is at least as harmful to the environment as plastic waste.

It is true that suppliers and supermarkets need to avoid superfluous packaging. They also need to avoid packaging that encourages excessive buying, as the majority of food waste occurs in the home. **Apeel**, an ingenious innovation developed by the young scientist and entrepreneur James Rogers seeks to address these problems. **Apeel** is a tasteless edible plant-based coating that prolongs the shelf-life of fruit

and vegetables without the need of refrigeration or packaging. **Apeel Sciences**, the company Rogers founded in 2012, received start-up funding from the Bill and Melinda Gates Foundation, in part because of **Apeel's** development potential; while sufficient food is produced worldwide to feed the global population several times over, much of it goes to waste because it spoils².

Governments have a role that can augment that of supermarkets and their suppliers. The imposition of a small charge for plastic carrier bags in the UK has dramatically cut their use, proving how many of these bags were being used unnecessarily. It is gradually becoming second nature for UK consumers to bring used plastic bags with them when they go shopping. But again caution is needed. The production of most reusable carrier bags requires so much carbon consumption that they must be used many more times than they can generally withstand before there is any environmental benefit over ordinary plastic bags.

But too much talk about the impact of plastic waste, and fixation on the problems involved in addressing it, can be paralysing. Christians in particular need to be careful that their stewardship of God's creation does not remain at the level of