

Drastic plastic measures

20 September 2019

Single-use plastics and their catastrophic impact on the environment have forced organisations to reconsider the way they work ? and facilities management is no exception. How is the sector responding, asks Antony Law?

Given the sheer volume in use today, it's easy to forget that plastic is still a relatively new material. It's barely more than 100 years since Bakelite, the first fully synthetic plastic, was invented by Belgian chemist Leo Baekeland in 1907. But subsequently, we've [produced 8.3bn tonnes in total](#) , or enough to cover every inch of the UK ankle-deep ten times over.

The widespread use of plastic is no doubt because it is durable, water-resistant, hygienic and, perhaps most importantly, very cheap to manufacture. But plastic is also destructive. It's choking our oceans and waterways and, shockingly, [91 per cent of all plastic ever made has never been recycled](#) , with the majority of it ending up in oceans or landfill.

As concerning as that all is, the larger, more visible pieces of plastic present just one part of the problem. Mounting research now shows that microplastics, the tiny debris left behind once consumer products and industrial plastic waste break down, are even more pervasive and possibly even more damaging. A recent [study from Bangor University](#) , for example, found up to 1,000 pieces of microplastic per litre of water collected from the River Tame near Manchester, with similar findings recorded at different locations around the world. These particles are now known to be present throughout food chains, but the harm they cause to humans and animals is yet to be fully understood.

A stream of bad news combined with distressing documentary images has forced the public to reconsider what it throws away. In response, some organisations have committed to drastic reduction or even total elimination of single-use items in their supply chains. While some of this work is being carried out internally by clients, there is as much emphasis on facilities management partners to provide a sustainable service and change the culture.

The power to effect lasting change sits with support service providers, and the users of the sites they service

This is not a coincidence. The profession is often seen as an ally in helping client organisations to shift operational procedures and colleague behaviour while maintaining a healthy bottom line. Facilities management is also in regular contact with suppliers and often processes company waste, giving it a unique perspective on what plastic is unnecessary and what is indispensable for a successfully functioning business. From a workplace perspective at least, the power to effect lasting change sits with support service providers, and the users of the sites they service.

However, the sector is far from having the problem solved. Progress on the issue requires collective responsibility to be taken, with support from both central and local government. There are currently [39 different sets of rules](#) on what can be put in UK plastic recycling collections, making it difficult for organisations to manage waste effectively across different regions. These gaps offer an opportunity for facilities management to take a stand, representing a profession that wants to push through meaningful changes in waste processing.

Indeed, the need for collaboration has never been more pressing, particularly considering [the World Economic Forum's prediction](#) that plastic production is going to double during the next 20 years. To offset this growth, it's clear that reducing and reusing plastic wherever possible will have the most immediate benefit as a longer-term framework is put in place to achieve a plastic-free economy.

Few can argue with ambitious targets to recycle greater amounts of plastic, but knee-jerk strategies should be approached with caution. As it stands, the UK doesn't have the requisite infrastructure in place to process all its plastic waste and, [as the Guardian reports](#), what is not recycled domestically ends up in dumps in countries such as Turkey and Malaysia. This means that businesses could actually be making the problem worse by adding greater amounts of material to a mix that is already at capacity.

As a result, those believing they are acting in good faith could in fact be shifting the problem out of view as more damage is done to the environment. I believe tougher laws and higher taxation on single-use products will help to fund the means to process UK waste properly, as well as other plastic-free innovations, while a more conscientious consumer can help to reduce the rate of plastic production by passing on goods with unnecessary packaging.

Degrading plastic not only pollutes the environment but also contributes to climate change

Some will argue that the problem can only truly be dealt with by eliminating all plastic from the supply chain. This appears all the more important when discovering that degrading plastic not only pollutes the environment but also [contributes to climate change](#). However, this requires long-term planning and overlooks the many benefits of plastic when it's used responsibly? reuseable coffee cups and water bottles, eco-friendly cleaning products and sustainable catering supplies such as large condiment dispensers, for example. While we need to cut down drastically on unnecessary consumption, completely demonising the material would be counterproductive.

So, what action can be taken that protects commerce but also mitigates its environmental impact? First, companies should focus their efforts on eradicating excessive single-use plastic, both internally and in partnership with client organisations, as this will reduce both demand and subsequent introduction of new material into the environment. In catering, for example, items such as plastic straws, coffee cups with polyethylene lining and disposable cutlery should now be long gone: not only are they easily replaceable, but [consumers also expect them to be phased out](#) in favour of greener alternatives. Such actions contribute to a change in the consumption habits that [ecologists such as Matt Wilkins argue are found at the root of the problem](#).

Since plastic pollution entered the public consciousness, much noise has been made about biodegradable alternatives, with many regarding them as the best compromise for businesses that want to reduce their impact but also limit operational disruption. On the

face of it this appears to make sense, but the approach will inevitably prove counterproductive to any organisation with legitimate green aspirations: in the first instance, there is no actual reduction in the amount of plastic being used, and second, these alternatives emit powerful greenhouse gases such as methane and ethylene as they decompose. Like simply recycling more, this choice runs the risk of kicking the can further down the road.

Others have proposed using only polyethylene terephthalate (PET) and other already recycled plastics. PET is grade 1 on the table of resin codes, the system that is used to identify plastic composition in products, and the easiest type for recycling plants to process. The argument goes that the more businesses use these plastics, the more efficient the entire recycling process becomes, which in turn diverts refuse from landfill. While this would reduce the UK's processing bottleneck, it would require considerable effort to disseminate this information to the general public, and more still to get everyone fully on board. It is also difficult to implement this change under current rules. A reduction in consumption rates would therefore seem more effective until better legislation is put in place.

Perhaps the most practical solution, then, is greater collaboration and education. Partnering with suppliers that share similar aspirations in terms of sustainability will help to shift the behaviour that is a large part of why there is so much plastic in the environment. Facilities management service provider Churchill, for example, has been working with its janitorial distributor to develop sustainable packaging for some of its most popular products. This move will see 60,000 single-use plastic items removed from operation, a figure expected to increase as more products are replaced. The company has also partnered with marine conservation charity [Surfers Against Sewage](#) to educate staff and partners about the wider-reaching damage that the existing throwaway culture is having on the environment.

Moves like this will not solve our problem with plastic; neither can facilities management be asked to take sole responsibility. It does, however, have the power to instigate sustainable changes that will over time turn off the plastic tap. Our addiction to plastic is powerful ? though not unbreakable, if we adopt an intelligent strategy and sense of collective responsibility.

Antony Law is managing director of [Churchill](#)

Further information

- Related competencies include [Sustainability](#)
- This feature is taken from the RICS *Property Journal* (July/August 2019)
- Related categories: [Sustainability for surveyors](#) ; [Waste management](#)