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What's the most highly-contested change an FM can introduce into a workplace? Not hot-desking, or increasing the staff restaurant prices. Nor day-time cleaning or increased security searches. A straw poll of a group of FMs revealed that removing individual desk bins is the one thing guaranteed to incense staff. **Cathy Hayward** reports about the challenge to reduce - and measure - waste

Rather like household battles about who will take the rubbish out, the humble desk bin is a major bone of contention. Removing it, in an effort to reduce workplace waste, has seen petitions and protests, followed by office workers bringing in their own bins or using other receptacles to avoid using centralised bins. But research from a group of global universities reveals that removing desk bins increased recycling rates by about 30 per cent.

More than 330 million tons of waste is produced in the UK each year according to the Environment Agency, with commercial waste making up about 23 per cent of that figure. To put this into context, household waste is just 10 per cent of all waste produced - construction, demolition, mining and quarrying are the biggest culprits.

The good news is that the overall level of waste produced in the UK is declining year-on-year as society slowly adopts the government's waste hierarchy. This gives top priority to preventing waste in the first place. When waste is created, it gives priority to preparing it for re-use, then recycling, then other recovery such as energy recovery, and last of all disposal, for example through landfill.

## **LACK OF DATA**

But the old adage "if you can't measure it, you can't manage it" holds true. Although waste produced is measured at a macro level, commercial waste data at an individual company level was traditionally "patchy" at best, says Bernard Amos, CEO of waste expert Helistrat. "Reporting relied on average weights and estimates, which were taken at face value as businesses either didn't want to challenge them or lacked the confidence to do so." Amos argues that it is starting to change, driven by the retail sector which recognises that environmental performance offered a significant commercial and brand opportunity and that reliable data was the key to achieving this.

Traditionally there wasn't a great deal of focus on measuring waste, in terms of measuring quantities, types of waste, optimal treatment and disposal

solutions, agrees Chris Howard, managing director of waste management specialist Countrystyle. "In the past five years, there has been a real emphasis on measuring all of these elements." Howard attributes this to legislative and financial pressures in addition to reputational issues. "The cost of waste disposal has continued to increase over the past few years. As the landfill tax rises, other treatment solutions mirror those increases so waste disposal is getting more and more expensive. Progressive businesses see it as a real opportunity to manage and understand the quantity and types of waste and managing that in the most advantageous way."

Howard also cites the pressure from regulation, and the corporate social responsibility angle. "There's a CSR element with a desire for businesses to manage waste streams in an optimal way. Organisations are conscious of waste and the adverse press of managing it incorrectly. They are increasingly seeing waste as similar to health and safety performance and records. People are investing time and effort and money to manage their waste professionally."

Customers are far more interested in their waste's final destination than they were a few years ago, agrees Natalie Ridler, commercial manager at OCS Wasteline. Not only do they want to know whether it's gone to landfill, a material recovery facility, or an energy from waste plant, they want to know the next step. "We're working with a law firm which has asked us to provide a day-in-the-life of seven key items such as coffee cups, food waste, plastic cutlery and confidential paper. They want the complete lifecycle from when it leaves their premises until it's been turned into another product - customers want granular detail about their waste."

## BARRIERS TO INFORMATION

However providing this data can be challenging in some instances, particularly when mobile compaction units are used to collect waste from a number of different premises at the same time. "Where we use mobile compactors, and the client wants in-depth data about their waste, we work with the wider OCS business, using our cleaning operatives to empty the bins, put it in colour-coded liners and then weigh it before it is collected by the waste teams. It's a good example of how an integrated approach to facilities management can reap rewards for the client."

Measurement can be tough, agrees Mick Ashall, director at B&M Waste Services. "Waste in a tower block with multiple tenants is much harder to measure than for a large one-site business or industrial park," he

Space is another issue. "Does a company have the space for multiple individual recycling containers or front-end loader containers? This is certainly worth noting for smaller businesses or offices where space can be at a premium. Therefore, a food segregation container and co-mingled dry mixed material is a suitable solution."

Time is another inhibitor, adds Matt Nichols, sales director at waste management and recycling contractor Reconomy, particularly for large FM service providers managing hundreds of clients' waste. "The time spent gathering that data together is a massive issue. An environmental advisor for a construction business, spends 70 per cent of her time gathering, consolidating, collating, checking and reviewing waste data rather than actually analysing and doing something with it."

There are a number of challenges to quality data says Helistrat's Amos including a lack of standardised reporting for commercial waste;

mindset about waste."

but also the amount of waste per individual production process to improve those particular areas and manage inefficiency out of the processes." He also predicts that England and Wales could follow Scotland's example by banning certain materials, such as food waste, going to landfill for organisations above a certain size; and the introduction of compulsory recycling.

Businesses will be supported by greater online reporting, he adds. "There will be continued developments in online reporting capabilities with facilities professionals being able to drill down and see waste management data in minute detail, process by process, type by type in addition to realtime documentation such as waste transfer notes and any permits. All of this will make measurement and management even easier and more transparent."

The real question is whether we are actually measuring the right things, says Reconomy's Nichols. "There is almost a myopic view that diversion from landfill is important, but increasingly people are more aware of the carbon impact of their waste. You might avoid landfill but if, as a result, you increase your carbon footprint by transporting waste miles, that defeats the overall objective. Whether it's diversion from landfill, increasing segregation or recycling, then you need to agree the measurements upfront."

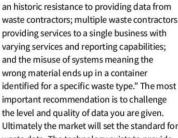
Measuring waste produced is one thing, but businesses need to go back to the

Part of the solution clearly lays in changing the UK's

as simply rubbish stations. Instead they must be viewed as sophisticated processing facilities that incorporate advanced technologies to produce a valuable commodity material. Factors such as energy efficiencies, plant uptime and maintenance costs all need to be factored in to optimise the return on investment from such facilities," says Iona Smith, events director at Environment Media Group, "As the industry continues to become ever-more innovative, and progresses along the UK's resource efficiency roadmap, this mindset will inevitably become second nature. But businesses that can think about waste as a resource, consider waste minimisation a cost-saving exercise and look at efficiency improvements in terms of increased profitability, will steal a lead in experiencing the fiscal benefits and supporting the UK's waste agenda."

OCS Wasteline's Ridler predicts that some areas of waste disposal will become more competitively-priced in the future, such as material going to energy from waste plants. A great deal of waste currently goes to energy from waste plants in Eastern Europe to power the local grids, but as more plants are built in the UK, the price will fall as it becomes commoditised. But with the planned introduction in 2016 of a ban on food waste being disposed of in general waste for organisations producing more than 50 kilos of food waste, then costs will rise, "Many of our conscientious clients are already separating food waste and disposing of it separately. The proposed law will act as a final push for those organisations which have looked at it, and decided it was too expensive."

All of which means that more FMs will go through the pain of removing desk bins in their premises - and face the inevitable wrath of their end-users. [31]



identified for a specific waste type." The most Ultimately the market will set the standard for waste data. The technology exists to provide accurate data in virtually real time. Business should set out their data expectations, as part of their contracts and those unable to meet the standard should be excluded."

## **FUTURE PROOFING**

Howard agrees that the pressure to measure and manage waste will become even more acute in the future. "Customers are going to require more data in future. Not just total levels of waste managed, recycled. composted and recovered by energy recovery waste hierarchy and work out why the waste is being produced in the first place. Exploring where the waste comes from can make the business more efficient as well as saving money and carbon emissions, says Richard Sanders, director of vacant property management expert SitexOrbis. "Focusing on your waste production can lead you to reduce errors in your manufacturing processes at source, or in services can lead you to segmenting and reusing or recycling what would otherwise be waste. Our approach to waste has led us to minimise journeys and fuel burnt, at the same time as making sure all we pick up for clients is streamed to the most appropriate end location." He recommends that FMs start by encouraging staff to take an interest in waste, thereby helping to remove it at source by avoiding creating it.

Part of the solution clearly lays in changing the UK's mindset about waste. "To maximise the profitability of modern recycling or Waste to Energy plants, they can no longer be seen

