

Bath University, England

David Rixon, Services and Compliance Manager

An educated approach to sustainability and cost reduction

Sunday Times University of the Year 2011-12, Bath University, is committed to constantly improving its environmental sustainability. David Rixon, Services and Compliance Manager, explains how it's improving finances along with environmental performance!

What Was The Problem?

“ Prior to the **Waste-2-Water** system being introduced food waste was disposed of via the macerators, thus down the drain, or into black bags/bins to landfill. There are huge environmental and cost issues with both methods, macerators use in the region of 30 litres of water per minute whilst in use, require significant power and regular maintenance and repair.

In addition, drains are regularly blocked as a result of macerator use and have to be cleared by an external company at considerable expense. The landfill option is unsustainable and becoming more and more costly.

These increasing costs and our commitment to increasing our environmental performance gave us the impetus to search for a more sustainable food waste solution.

What was the Solution?

After a thorough review of available technology Bath University chose to implement the **Waste-2-Water** solution.

The system is simplicity itself to use. Food waste, including cooked and uncooked meat, are simply thrown into the machine. **Waste-2-Water** uses a bio-enzymatic formula that is completely safe for drains and sewage systems. That formula turns the food waste into grey water which is sent straight to the drains, this is the only output.

What are the Results?

Apart from the reduction in food waste to landfill we're also saving on drainage repair costs, electricity consumption and have drastically reduced our water usage. **Waste-2-Water** simply doesn't require anywhere near this excessive amount of water. The system has reduced our costs and consumption vastly improving our environmental performance.



I've kept in regular contact with staff using the machine and am glad to report they have seen the potential benefits and consider the **Waste-2-Water** straightforward to operate and use.

We're all really impressed with the reduction in costs and the huge benefit the **Waste-2-Water** system is having on Bath University's environmental performance. ”



Staff at Bath University discover the benefits of the **Waste-2-Water** system

Chester Racecourse, England Philip Dougherty, Catering Manager

Unique Food Waste Digester is Furlongs Ahead of the Field

Aside from the horses, Chester Racecourse is famous for award winning chefs, mouth-watering menus and first class service. And now they are closing the gap in the waste they send to landfill.

“ The **Waste-2-Water** system is so simple to operate the people who see it can't believe just how easy it is to use! Reducing food waste sent to landfill is vital and with the **Waste-2-Water** we've also had significant cost savings. ”

- 💧 Safely treating over **1,000kg** a week of food waste
- 💧 **Massive carbon reduction**
- 💧 Waste disposal **costs reduced** significantly
- 💧 Over **40,000 litres** of water returned to the water table



Chester Racecourse has a plethora of restaurants to keep hungry racing fans happy but the amount of food waste they generate was a cost that couldn't be overlooked. As Catering Manager Philip Dougherty explains:

“ With waste costs spiralling we knew we had to find another way of dealing with the high amounts of food waste a site of this size generates. When we saw the **Waste-2-Water** system we knew it was right for us.

I've recommended the **Waste-2-Water** machine to other catering operators wanting to explore alternative food waste solutions. It's the simplicity as much as anything else. There has been no change in the way we work using the **Waste-2-Water** so the kitchen staff have found it easy to make this massive difference to the environment



The **Waste-2-Water** has also made it easier to separate other recyclable waste streams. We're so happy with the results from using one machine we'll be installing another unit shortly so we can achieve 100% reduction in food waste to landfill. One of the best things for us is **Waste2 Ltd** provide excellent customer service. They're always there when you need them and really want to help their customers achieve real savings. ”

Thornton Hall Hotel and Spa, England Geoff Dale, General Manager

Food Waste Solution Boosts Hotel's Green Credentials

Multi-award winning Thornton Hall Hotel and Spa becomes the first hotel on Merseyside to invest in a money saving sustainable food waste solution that is already having a major impact reducing waste costs.

“ With waste costs spiralling we wanted to find another way of dealing with our food waste, and the **Waste-2-Water** system is an excellent eco friendly solution. It's the **Waste-2-Water's** simplicity as much as anything else. ”

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Thornton Hall Hotel General Manager, Geoff Dale, loves the simplicity of the **Waste-2-Water**.

The leading Wirral hotel aims to be the greenest in the region and has invested in the **Waste-2-Water** food digester saving money on waste costs and ensuring food waste does not have to go to landfill. General Manager Geoff Dale explains the simplicity:

“ There has been no change in the way we work using the **Waste-2-Water** system so the kitchen staff have found it easy to make this massive difference to the environment. The **Waste-2-Water** has also made it easier to separate other recyclable waste streams.

By not having our food waste collected to be disposed of elsewhere, we're also saving on transportation and therefore our carbon footprint. We are very conscious of our responsibilities to the environment and are aiming to be the greenest hotel in the region.



To achieve this we have implemented a robust green policy which includes switching over all our light bulbs to LED and installing a liquid cover on our swimming pool, which has slashed our heating costs dramatically. Coupled with the **Waste-2-Water** we are achieving real carbon reductions and cost savings. ”

Leamington Observer Thursday 8th September 2011



Eating into waste bill

WARWICK Hospital has installed a new food waste disposal unit which uses cutting edge technology to reduce the amount of food waste being sent to landfill.

The Waste-2-O unit uses a special formulation of micro-organisms to convert food waste into water that can then be safely disposed down drains and sewage systems in Warwick Hospital's kitchens.

It will help make savings of an estimated £8,500 per year.

Amit Mistry, waste environmental officer for the trust, said: "The installa-

tion is a fantastic innovative way for the hospital to reduce the amount of waste that we are creating."

It is latest effort by the trust to cut its carbon footprint. Earlier this summer, the trust teamed up with Community Energy Warwickshire to install solar panels onto the roof space of both Warwick and Stratford Hospitals.

Waste environmental officer Amit Mistry, Waste-2-O representative Lee Shelton and hospital matron Kathy Wagstaff. (s)

Hilton Heathrow Terminal 4

Skyport, Friday 2nd September 2011

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SKYPORT FRIDAY, SEPTEMBER 2, 2011

FEATURE ON THIS PAGE!
Email: editor@skyportuk.co.uk

team of the week

Name: Mark Hill

Position: Facilities manager

Has worked here: Three years

What's the current project you are working on? I am the project manager for Zero2Landfill and Waste2Water. Waste2Water aims all the food waste into grey water matter, which can be flushed down the drain.

This also helps by removing fat and food build-up in the drains, preventing blockages. The food is fed into a machine where it is mixed with a small amount of bi-enzymes. These eat away the food much like the contents of a human stomach, turning it into water.

With taking out the food contents from the rubbish bins, it means that the rest of the waste can go to a recycling plant, where it can be sorted and not go to landfill.

What challenges are you up against? Getting everyone to think positive about how we can recycle everything without creating more work and what effect it will have on the environment.

How do you spend your free time? With my family, gardening, making things for the house, and relaxing with friends.

Name: Stewart Puddan

Position: Shift engineer

Has worked here: 19 months

What does your job involve?

Day-to-day maintenance of the hotel, responding to breakdowns, repairs to fixtures and fittings, anything not working within the hotel. We are called to rectify problems including guest rooms, being on call outside of working hours.

Tell us about a highlight during the time you have worked here. Receiving the team member of the month award in recognition of my

response to a guest's needs and helping them move to a satisfactory room when their was not up to the standard required.

A lot of the work we do is behind the scenes and not normally recognised, but this showed not only is my work appreciated but it reflected on the whole facilities team.

What are your hobbies? When I can and have the time, I like to ski and scuba dive.

Being ex-military I like to get out into the countryside and walk, climb and take on challenges.

Name: Sobhanand Boodhun

Position: Roomcare engineer

Has worked here: 19 years

What would you say is interesting about your job? Variety. There are never two days the same, every room has a different challenge and I meet new people every day.

Tell us about a memorable achievement at work. Starting up roomcare. We were the first Hilton hotel to roll out the programme, which involves visiting every room in the hotel four times a year and making sure everything is in working order, ready for the guests.

What did you do over bank holiday? I spent the weekend with my daughters and decorating the bathroom.

Name: Steve Wildman

Position: Painter and decorator

Has worked here: Eight years

What's the best part of working at an airport hotel? Meeting new people.

Who would you swap jobs with in the aviation industry? A pilot, as I would make more money.

What would you say is your hidden talent? I am a DJ and own a mobile disco company and do a lot of discot for both adults and children with special needs.

I have done some of the discos here at the hotel for charity events such as the Race Night and Golf Day, which all raise money for the Hilton in the Community Foundation. I have had the company for over 10 years now and do it because I enjoy seeing people happy.



A TEAM: (From left) Mark Hill, facilities manager; Abdelilah Elharrak, Stewart Puddan, shift engineer; Dobromir Yordanov, Sobhanand Boodhun and Steve Wildman
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Reading Shopping Centre Reading Post, Friday 25th March 2011

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SHOPPING CENTRE: first in the UK to have food treatment on-site

Mall celebrates 'zero to landfill'

SALLY BRYANT

A READING shopping centre has scored a green first and can boast it contributes nothing at all to the country's rubbish mountain.

The Broad Street Mall is the first shopping centre in the UK to have a food treatment process in place.

Two machines, the very latest equipment, are munching up all food waste and turning it into 'grey' water [which can't be drunk but can be used]. The grey water goes straight into the drain and back to the water table.

And the machines put the centre ahead of the game as they are up and working before new legislation, which is expected to state no food waste can be sent to landfill, is introduced.

Centre manager Steve Fawke estimates 70 tons of food waste will be processed every year, returning an impressive 56,000 litres of water to the water table.

He says there would still be some food waste going to landfill if the mall used the traditional bin to compost method of getting rid of it. And the fact the recycling is happening on site has cut food waste land miles by around 7,800 miles a year, which means Broad Street Mall is saving more than six tonnes of CO₂.

The food digesters, known as 'Waste 2.0 technology', are the latest step in a programme that has led to the centre being 'zero to landfill'. The mall recycles cardboard and plastic, which brings in money. Now the waste is baled, stored and only collected

when there is a full 20-tonne load, to keep lorries off the roads.

All the rest of the centre's rubbish is collected in a compact skip and goes to make green energy – enough for 26 average UK households for a year. A new compactor means the skips are more tightly packed and heavier when they are taken away, which Mr Fawke estimates is going to save more than 1,000 waste transportation miles this year. The carbon reduction will be 0.8 tonnes of CO₂.

The 80-unit centre, with 72 shops, has been working on reducing its carbon footprint with waste management consultant Enviro-Waste and Mr Fawke is thrilled with what has been achieved.

He said on Wednesday: "I am over the moon! As a centre manager I am extremely proud to have created a 'zero to landfill' platform at the Broad Street Mall, whilst being the first shopping centre in the UK to introduce a food treatment process in situ.



LEADING THE WAY: Antony Bunce of Enviro-Waste), Broad Street Mall manager Steve Fawke and Ian Blakeman with the new machine that munches up food waste and converts it to grey water
Picture: MUE LAMB (Ref 110511)

"I know for a fact it is going to savings all round – the income from card has gone up from £5,000 to £22,000 a year. With revenue with everything else we have done and savings, we could recoup more our carbon footprint is reducing than £30,000 a year. We are significantly and there are big leading the way here."

Innovation driven by needs of customers

Milton Keynes Citizen, Tuesday 18th January 2011



KEEPING in touch with the needs of customers has given a Milton Keynes company a steady stream of potential money making ideas.

The latest product - Waste2O - created by Mechline, based on Carters Lane, Kiln Farm, takes food waste and turns it into grey water that can be poured down the drain like bath water.

Mechline's ethos won it both the innovation through technology award and the overall business excellence award at the Milton Keynes and North Bucks Chamber of Commerce awards.

Mechline MD Peter Sage-Passant was one of four people who set up Mechline 20 years ago. The others are financial director David Graves, Ian Blakeman and Peter Galliford. He's an engineer by training and at heart and there's little he likes more than sticking his head under a sink with a spanner in hand making something work.

But, as Mr Sage-Passant says, that gives him a real strategic insight into the needs of his company's customers. "Our whole ethos is growth through innovation," he said. "It positions us as a deliverer of really good solutions and new products."

Despite current problems with funding - Waste2O and its self-funded development costs were put at "hundreds of thousands of pounds" - Mr Sage-Passant says investment is something that has to be done.

"The biggest risk to us is through not doing it," said Mr Sage-Passant. "The danger of not being innovative is that we become stagnant as a company and are seen as irrelevant by our customers."

Mr Sage-Passant said Mechline benefits from having a "brilliant team" of people, who help think of new products and who are keen on the change culture that the company thrives on.

It was that striving for something new that helped create Waste2O that has been successfully trialed at a major food outlet. The idea developed from trade calls for a product that deals with fats, oils and grease and an appreciation of demands from government to reduce the amount of waste going to landfill.

Companies that use food, like restaurants and supermarkets, can make big savings on waste costs by reducing the amount they send to landfill. Products were available but generally bulky and at a high price. Mechline's customers needed something that was simple to use and robust. The resultant machine has one button and uses a 5amp fuse.

Importantly to the company, Waste2O was created using products from British companies, some of which are only a stone's throw from Mechline. The machine works by using bacteria in wood chips to break down food waste. Mechline claims the hungry bugs can digest up to 180kg of food waste in 24 hours.

Innovation driven by needs of customers
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