



# WASTE<sub>2</sub>O

## A “First Class” for waste management: Environmental excellence at UCL helped by Waste<sub>2</sub>O

**University College London (UCL)** is renowned around the world, for its research and teaching excellence, and more recently, its ‘green’ prowess. In 2012 they created a new Environmental Sustainability team, launched their first Environmental Sustainability strategy and took significant action to manage their environmental impact. Today, UCL is recognized for its “first class” sustainability and prides itself on sending zero waste to landfill – thanks in part to Mechline’s **Waste<sub>2</sub>O!**

The Education sector wastes an estimated 125,000 tonnes of food waste a year and, although contributing to the generation of this food waste, institutions of higher education can serve as models in championing sustainability solutions. To get sustainability and waste management high on the agenda however, there are first difficult barriers to overcome. These may include finances, budget and budget cuts, lack of senior management commitment and strategic direction, and lack of staff resources.

UCL has a vision to become a leader in the field of sustainability and has set-up a dedicated ‘Green UCL’ team, who work with the UCL community to embed sustainability into research, buildings and behaviours at UCL, and beyond. As part of this it works with the UCL food community to meet targets set out in the Healthy and Sustainable Food Policy, which includes “disposing of all food waste through composting or energy



Image courtesy of UCL

recovery and not sending any material to landfill” and “achieving a 10% annual waste reduction.”

Sodexo, UCL’s Catering Partner since 2014, continually look for innovative ways to lessen the environmental impact of the catering service. Neil D Whittle, Contract Director for Universities at Sodexo, has assisted in introducing many initiatives across the university campus, including reusable eco-take-out boxes, trayless dining [to reduce the amount of food, packaging & energy that is wasted] and training staff specifically on issues of sustainability and waste reduction.

When The Refectory, a new student and staff space, opened at the heart of UCL’s Bloomsbury campus, sustainability was a key consideration of planning and development. Neil explains, “we worked closely with UCL and specialist catering space designers to ensure that the focus on sustainability and the



environment ran through all aspects of the new catering facility – now the biggest and most modern on campus! With 324 seats, and the potential for a lot of food waste, the designers proposed the use of the Mechline **Waste<sub>2</sub>O** system as a solution for the most appropriate, practical, environmental and economic solution for any end-of-life food waste, having had very positive feedback from operators at other sites! It's compact, has low energy consumption, is easy to use and experience has shown a good ROI in terms of cost savings to operators”

**Waste<sub>2</sub>O** manufacturers Mechline have values that are in keeping with those of both Sodexo and UCL. They understand that food waste prevention needs to go hand in hand with treatment technology as part of any sustainable waste management strategy and have developed a **Food Waste Reduction Programme (FWRP)** with this in mind. The **FWRP** helps operators waste less and profit more by choosing the best economic and environmental solution, beginning with prevention, reduction and reuse and followed where necessary with redistribution, recycle and reprocess. Mechline always help operators take measures to prevent and reduce food waste where possible first, before they use Mechline's bio-digester, **Waste<sub>2</sub>O**, as a sustainable and affordable end-of-life food waste processing solution.



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Mechline's **Waste<sub>2</sub>O** was installed into The Refectory at UCL as an integral part of its wider waste management approach. **Waste<sub>2</sub>O** bio-digester is an on-site reprocessing system for end-of-life food waste which converts the waste to water. Suitable end-of-life food is loaded into a chamber throughout the day and is mixed with microorganisms that safely breakdown the end-of-life food completely. The waste water from this then goes straight to the drain leaving no residue to deal with. It is easy to use and has numerous environmental benefits.

Through dealing with their food waste onsite in this way, UCL have removed the need for storage facilities, or transportation, and the carbon emissions and costs associated with these. Neil D Whittle, comments: “There has been little change in the way we work since the introduction of **Waste<sub>2</sub>O**, so kitchen staff have found it very easy. We still, and always will, prioritize reducing food waste in the first place, but for the amount we do end up with **Waste<sub>2</sub>O** is a blessing. Staff just need to lift the lid, pop it in and it's dealt with here onsite. We don't have to store it, don't have to arrange collection and it doesn't smell!”

**Waste<sub>2</sub>O** uses safe and naturally occurring microorganisms to convert food waste into water, which is then totally reclaimed, leaving few solids to manage.

The unit also has very low energy usage, running on a normal 10amp single phase electrical supply, and an energy saving mode, which can deliver operations savings of up to 15%. **Waste<sub>2</sub>O** allows Sodexo's operations to responsibly and economically



dispose of their end-of-life food waste with considerable benefits to the environment, whilst assisting UCL in meeting their target of not sending any material to landfill.

UCL has brought about significant improvements to its environmental sustainability, thanks to a clear strategy, investment and the engagement of staff, students and stakeholders. In one year alone they doubled the quantity of food recycled and diverted around 16 tonnes of materials from waste streams. With forward thinking, and open-mindedness to try new innovations – such as **Waste<sub>2</sub>O** 18 months ago – it continues to advance as an institution of quality research, teaching and environmental integrity.

For any commercial operation wishing to follow UCL's example, Mechline offer their **FWRP** free of charge, downloadable from **www.waste2-0.com**, which includes guidance on how operators can manage end-of-life food waste in a circular way and improve their overall environmental sustainability.

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