

SHARPSMART IS WORKING TOGETHER WITH NHS TRUSTS AND THE HEALTHCARE MARKET TO DRIVE SUSTAINABLE INITIATIVES AND MITIGATE CLIMATE CHANGE THROUGH INNOVATIVE WASTE MANAGEMENT SOLUTIONS.

In October 2021, Sharpsmart Ltd were recognised for their sustainability credentials and efforts with supporting NHS trusts in reducing their carbon footprint at the NHS in the Midlands, Excellence in Supply Awards.

The team collected the top prize in the Sustainable Development award category following recognition of their commitment to supporting the NHS and providing sustainable operational resilience during the heights of the Covid-19 pandemic.

PROVIDING RESILIENCE

The Covid-19 pandemic resulted in unprecedented increases in healthcare waste volumes from increased sharps waste because of the vaccination programme, to the surge in soft clinical wastes due to the rise in the use of personal protective equipment (PPE).

As a response and to effectively manage the increase of pandemic-related waste production, Sharpsmart created additional treatment capacity for the UK healthcare waste industry which enabled them to continue to collect waste produced at NHS customer sites, providing operational resilience when it was required.

This increase in treatment capacity also allowed NHS Trusts to make use of Sharpsmart's sustainable waste disposal and treatment outlets rather than relying solely on high temperature incineration, a waste treatment process that produces a high level of carbon emissions.

IMPACTS WITHIN THE MIDLANDS

Across the 12 months running up to the award ceremony, **Sharpsmart collected a total of 602.5 tonnes of clinical waste** from NHS Trusts based in the Midlands areas. This waste was collected within the Sharpsmart reusable container system (a sustainable alternative to the standard single-use plastic containers), and then diverted from high temperature incineration and on to more sustainable treatment and disposal outlets.

The results:

- The prevention of the manufacture and incineration of an **estimated 301 tonnes of single-use plastic**
- Eliminating the release of **1,698 tonnes for CO₂e into the atmosphere.***

The by-product of this continued development and operation of the sustainable treatment method has produced **1.15 million kilowatt hours of energy** – enough to power 291 homes for a year!"

EMPOWERING NHS TRUST STAFF

To continue the Sharpsmart mission of making healthcare safer and more sustainable, the team continue to partner with NHS Trusts to empower staff through blended learning and touch point education.

This education not only ensures the safety of staff, patients, and the public, but it also helps to train staff in proper waste segregation in line with the most up to date policies and regulations and raises awareness of sustainability within the clinical setting.

Ultimately, it is Sharpsmart's aim to help all NHS Trusts within England and the rest of the UK to achieve their carbon reduction strategies and mitigate climate change through sustainable waste management practices.



Left: The Sharpsmart Team receiving their award for Sustainable Development at the NHS in the Midlands, Excellence in Supply Awards. Right: Sharpsmart Contract Manager, Guy Wing who submitted the winning award entry.

NOTES:

"This estimate is based on findings from UK-wide figures gathered from over 30 Hospital sites where burn bins have been replaced by the Sharpsmart service. 1/3 of a full single-use container's mass is the container itself. Carbon Emissions is based on the fact that single-use plastic production has an effect of 5.64 kg of CO₂ per kg produced (Plastic bags and plastic bottles - CO₂ emissions during their lifetime - Time for Change).

"This figure is based on the by-product of Sharpsmart's process having a Net Calorific Value of 19.5 MJ/ kg (confirmed by Associated Waste Management) which is equivalent to 5.42 KWh/kg. This means that the 529 tonnes of waste by-product holds a total calorific value of 2.87 million KWh. Assuming the power generator has an efficiency of 40% (Electricity Generating and Distribution Efficiency (mpoweruk.com)) and the average home uses 3941 KWh electricity per year (<https://www.ovoenergy.com/guides/energy-guides/how-much-electricity-does-a-home-use>).

For more information on Sharpsmart's sustainable solutions including the sharpsmart reusable container systems, contact Sharpsmart on **01388 810310** or email the team at **customerservice@sharpmart.co.uk**

