



# HSE Procurement Case Study Clinical Waste Initiative



## Context

As a key strategic buyer with an annual spend of nearly €5.4 billion a year, HSE Procurement is a vital enabler and support service to deliver climate action.

It is a significant mechanism for influencing the environmental and social impact of the products (both clinical and non-clinical) necessary to ensure the safe delivery of healthcare.

## The Challenge

In terms of waste management, waste products and used clinical items are typically sent to landfill or incinerated in accordance with the relevant infection prevention and control measures, Government legislation, best practice techniques and processes available.

Landfilling and incinerating waste products along with other clinical waste can result in adverse impacts through the release of toxic chemicals or potent Green House Gases (GHGs) such as methane.

This issue has been exacerbated over the last number of years by the high consumption of single-use plastics during the emergency response to COVID-19.

Such single-use plastics also breakdown into tiny particles known as 'microplastics' and release endocrine disrupting chemicals, posing a threat to human health.

(HSE Climate Action Strategy 2023 – 2050)

## ABOUT HSE PROCUREMENT

As the largest purchaser of goods and services in the State, the health service plays a central role in delivering greener public procurement.

The HSE Corporate Procurement Plan commits to enabling sustainable and greener public procurement through promoting awareness of climate change and sustainability measures across the health service.

Evolving procurement practices to promote greener goods and services is signalled as a fundamental part of the approach. An example of sustainable procurement is reflected in the area of clinical waste with the introduction of a Bio Sharps Management Solution.

This process provides reusable sharps containers across the acute setting in the health service where the service provider certifies that 100% of this treated healthcare risk is diverted from landfill and sent for recovery.



# The Solution

HSE Procurement established a contract for the collection, treatment, and disposal of healthcare risk waste from HSE locations across the country.

This contract demonstrates our commitment to working in consultation with key supply chain partners to incorporate sustainable solutions for greener procurement. Within this contract, the HSE included the provision of reusable sharps containers across the acute setting, recognising the need to provide more sustainable solutions in waste management services to help reach HSE targets in reducing single use plastics. In this regard the Bio System Sharps Management Solution provided by Stericycle was introduced.

This solution provides reusable containers which are UN approved, can be used up to 600 times after washing and disinfection, as opposed to single use containers which would be sealed and sent for alternative treatment prior to final disposal.



## The Benefits

- Improved compliance, as all sharps containers arrive at the hospital fully assembled and fitted with absorbent material
- All containers are UN approved and puncture resistant
- Pedal operated trolleys for the 30 litre containers, providing safe, hands-free opening
- 30 litre containers are UN approved for the disposal of both contaminated sharps and fluids
- Containers have proven to significantly improve waste segregation in healthcare settings
- Key lockable brackets for the 7.5 litre containers
- Restricted opening on the 7.5 litre container means hands cannot fit through and the design prevents overfilling



# A Sustainable solution because:

1 Reduction in our carbon footprint

2 For each Bio Systems container used, up to 600 single-use containers are prevented from being sent for alternative treatment and final disposal

3 Waste to landfill or incineration is reduced

4 Environmental impact is reduced, compared with the disposal of containers after a single use

5 As containers are re-used, bulky packaging waste from the purchase of single use containers is also eliminated

6 There is no longer a need to purchase sharps containers in bulk thereby dedicating valuable time to manage stock



## TESTIMONIALS

*Sustainability is critical to our collective obligations to provide safe patient care and contribute to reducing our collective carbon footprint.*

*This is an excellent example of Sustainable Procurement and collaboration across the health sector in driving and enabling sustainable practices.*

Gareth Morton  
National Director of  
HSE Procurement

*We are delighted with the implementation of the "Bio Systems Sharps Management Solution" which has been implemented throughout Cork University Hospital (CUH). This innovative approach is reflective of our commitment to ensuring we become a leading sustainable low carbon organisation, delivering sustainable healthcare into the future.*

Cork University  
Hospital

*This innovative approach has resulted with the service provider being able to certify that 100% of treated Healthcare Risk Waste is diverted from landfill and sent for recovery. The contract has delivered an improved service overall and contributes to reducing greenhouse gas emissions without incurring additional cost.*

Peter McGowan  
Digital Health &  
Innovation Portfolio  
HSE Procurement

*Bio systems are an example of the Circular Economy, and therefore supports the HSE's new Climate Action Strategy which prioritises carbon reduction through sustainable circular procurement and waste reduction.*

Helen Maher  
HSE Capital & Estates  
Climate Action &  
Sustainability Office



HSE staff working together to drive change for sustainability and patient care.

Sincere thanks to all who contributed to this initiative.



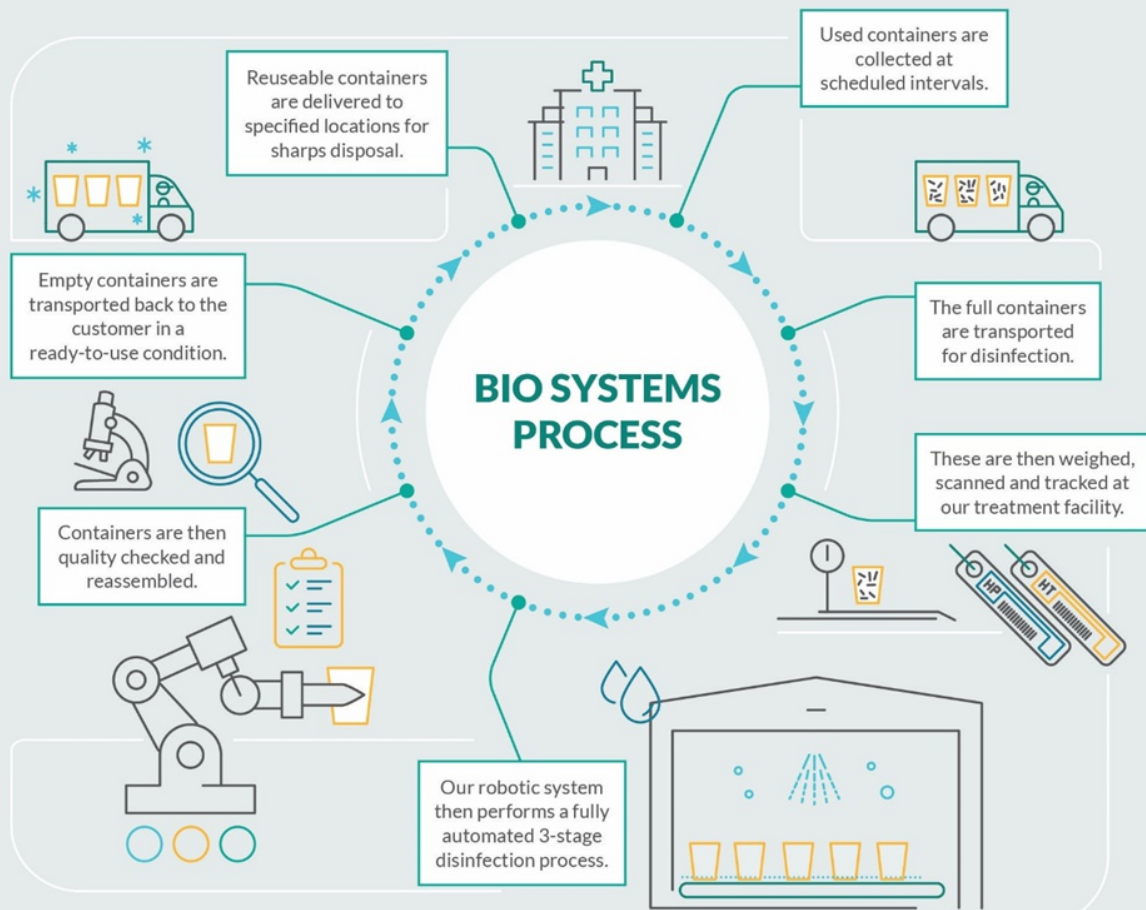
<https://www.hse.ie/eng/about/who/finance/nationalfinance/procurement/>



[Procurement.Comms@hse.ie](mailto:Procurement.Comms@hse.ie)



# The Process



## About Bio Systems



### Bio Systems



#### SUSTAINABLE

For each Bio Systems container used, up to 600 single use containers are prevented from being sent for alternative treatment and final disposal.

#### SAFE

Typical reduction of 77% of needle stick injuries. Puncture resistant, eliminates over filling by proactively managing replacement of containers.



#### CHOICE

Two different container types - 7.5l & 30.2l with corresponding wall brackets, lid types and trollies to maximise use of space.

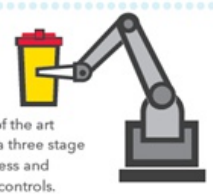


#### ECONOMICAL

Average cost saving of 10-20% over the total costs involved against operating a single-use sharps container.

#### CLEAN

Unrivalled state of the art technology with a three stage disinfection process and stringent quality controls.



# HSE and Public Voluntary Hospitals with Stericycle Bio Systems



1. Midland Regional Hospital Tullamore
2. Galway University Hospital (partial roll out)
3. Our Lady of Lourdes, Louth
4. Louth County Hospital
5. Our Lady's Hospital Navan
6. Roscommon University Hospital
7. St. Luke's Hospital Kilkenny (partial roll out)
8. Cork University Hospital & Maternity Hospital
9. Mayo University Hospital
10. Midlands Regional Hospital Portlaoise, Laois
11. Portiuncula University Hospital, Galway
12. Cavan General Hospital, Cavan

## Dublin:

13. St. James Hospital and Laboratory
14. St. Vincent's University Hospital
15. Cappagh Orthopaedic
16. Rotunda Hospital
17. Coombe Women's Hospital
18. St. Michael's Hospital
19. Dublin Dental Hospital
20. Peamount Hospital
21. St. Luke's Hospital Rathgar
22. Connolly (partial roll out)
23. Royal Victoria Eye & Ear
24. St. Joseph's Raheny
25. Beaumont Hospital (phased roll out)