



Shine

Sustainable Healthcare in Newcastle

Waste and Resources Strategy 2025-2028



“If it can't be reduced, reused, repaired, rebuilt, refurbished, refinished, resold, recycled, or composted, then it should be restricted, redesigned or removed from production.”

Pete Seeger





Executive Summary

Newcastle Hospital's first Waste & Resources Strategy aims to formalise our approach to waste and resources management. It sets clear goals and objectives in line with the Trust's Climate Emergency Strategy and aligns with the targets established in the NHS England Clinical Waste Strategy. This Waste and Resources Strategy meets Trust goals of putting people and patients first, focusing on innovative approaches and ensuring sound environmental and financial outcomes.

The Strategy provides some horizon scanning; identifying pending regulatory changes across the waste industry which will have an impact on the Trust and require a response in terms of changes to waste segregation and consignment. The Strategy focuses on mitigating any financial impacts of these changes.

Using the Waste Hierarchy Model as its primary influence, this document identifies several Strategic Priorities and Targets for the years covering 2025-2028. These are shown in the table below. Page 12 provides further detail as to how these headline actions will be achieved.

Waste and Resources Strategic Priorities and Targets 2025-28

OVERALL OBJECTIVES

STRATEGIC PRIORITY ACTION	CURRENT PERFORMANCE	TARGET / MEASURE OF SUCCESS
Reduce overall volume of waste produced	2024-25 volume = 5060 tonnes	5% reduction in total waste volume = 4813 tonnes
Reduce volumes of waste per patient contact	2024-25 = 2.59kg per patient	2.35kg per pt contact (Assumed increase in pt activity of 5%)
Reduce hazardous waste consigned to Disposal level of the Waste Hierarchy	1.6% of total trust waste	1.2% of total trust waste
Case studies detailing measurable waste prevention and waste hierarchy initiatives	Limited. One or two Clinical Boards have implemented initiatives	Two case studies per clinical board shared and communicated. Impact measured and reported
Increase in waste recycled	2024-25 = 27%	35%

Newcastle Hospitals is well regarded nationally for its approach to waste management and results in many areas are very good both from a waste outcome and financial costs perspective. This strategy acknowledges that position and aims to improve upon it with an increased focus on avoidable waste: waste prevention and reuse. Physical waste that will continue to be produced must be considered differently with a focus on how this can continue as a resource and remain within the Circular Economy. The Trust (and the wider NHS) must move away from our reliance on energy from waste as an appropriate outcome for many of our waste streams. That approach is going to become increasingly unacceptable and increasingly costly in the coming years.

Traditional views on waste are now outdated. We must think of waste as a resource

1. Introduction

The Newcastle upon Tyne Hospitals Waste and Resources Strategy provides a framework for empowering and enhancing a compliant and cost-effective waste management system, applying Waste Hierarchy principles to help enable best practice to become integrated into Trust activities. This strategy establishes goals and objectives aimed at ensuring that the commitments set out in Newcastle Hospital's Climate Emergency Strategy and associated action plan, the NHS England Clinical Waste Strategy and the Trust's Waste Management Policy will be delivered.

Effective waste management is closely aligned with Trust strategic goals: putting patients and people first; promoting a pioneering and innovative culture and; maintaining sound environmental and financial performance.

The Newcastle Hospitals Waste and Resources Strategy has two primary aims; firstly, to identify areas of waste activity where the Trust performs well, maintains performance and improves results further. Secondly, the strategy aims to build on those foundations, identifying new areas of activity for investigation and providing a framework for delivering initiatives targeted at delivering results at all levels of the Waste Hierarchy.

1.1 Waste Management at Newcastle Hospitals

The volume and complexity of different waste types across the Trust is significant and the costs for disposal considerable. In 2024-25 over 5,000 tonnes of waste was generated across Trust-managed sites at a cost of £1.4m to transport and dispose at treatment facilities.

In order that a cost-effective, compliant and sustainable waste management service delivers strong results, core functions and activities must be fulfilled and robust standards be maintained. This includes fulfilling compliance and governance requirements; auditing internal and external processes; developing and maintaining procedures and initiatives; contract procurement and management; financial management and reporting; training, awareness and engagement; and networking and best practice sharing.

In order that a cost-effective, compliant and sustainable waste management service delivers strong results, core functions and activities must be fulfilled and robust standards be maintained

The waste management function manages key contracts and works in partnership with its waste contractors to achieve strong and robust environmental and financial results.

The Newcastle Hospitals waste management function works with and influences within the NHS across the North East and North Cumbria ICS region, nationally via NPAG and NHS England, and is developing communication channels with NHS Supply Chain and other waste management functions within the Shelford group of Trusts.

Externally the function works closely with a number of regional organisations including the North East Circular Economy and Waste Group and is represented on the executive of the North East Recycling Forum.

This Strategy is intended to formalise an approach to waste that further encompasses Waste Hierarchy principles of which waste prevention and minimisation are key aspects.

2. Newcastle Hospitals Waste Performance

2.1 Waste Hierarchy Performance

In recent years there has been significant progress towards achieving targets established for the segregation and classification of waste, in particular the reduction in hazardous waste requiring specialist treatment – disinfection or high temperature incineration.

Steady progress has been made towards the target of 35% of total waste being sent for recycling although it remains a challenging target and subject to situational fluctuation.

Overall however volumes of waste remain high and significant effort needs to be focused on this in the coming years. Resource management and the purchasing of consumables and single-use items must become the subject of significant attention – waste prevention and minimisation.

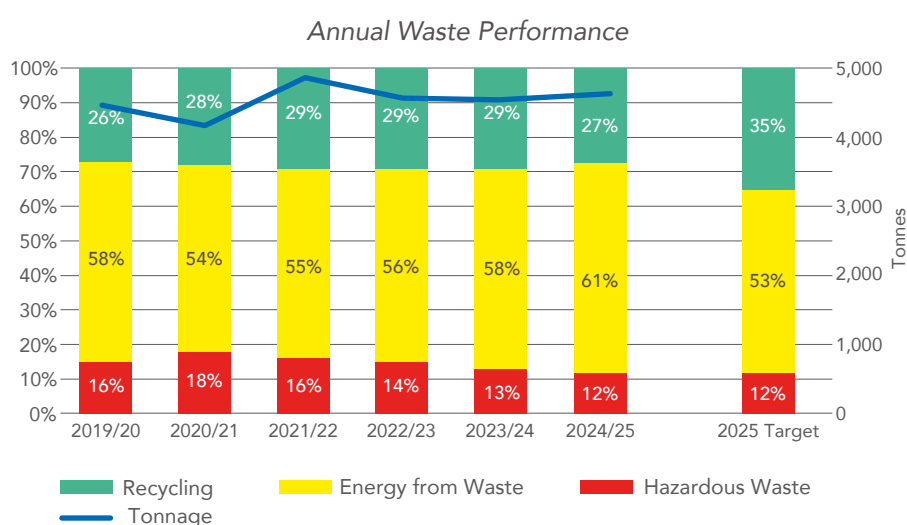


Figure 1: Total annual waste disposed of by waste outcome

Note: hazardous waste requires either high temperature incineration or disinfection prior to disposal.



Home Enteral Feeding Team who were nominated for a Celebrating Excellence Award for their innovative plastic reduction guideline, reducing the amount of plastic consumables for their patients



2.2 Segregation Performance

Figure 2 shows The Trust can demonstrate robust segregation outcomes for infectious, non-infectious and medicinal healthcare waste and recycling rates are high. However, we are not yet able to demonstrate achievement of our ambitious recycling target or progress towards reducing overall volumes of waste.

Similarly we are yet to develop meaningful prevention and reuse metrics for reporting activities resulting in waste prevention in areas such as Sterile Services, EME, Loan Equipment Service, Hotel Services and Catering. The positive environmental impact of the waste reduction efforts of these and other internal functions needs to be captured and reported because the importance of their processes in terms of waste and cost prevention needs to be better understood and appreciated. This will allow the Trust to build upon these results and reduce waste further.

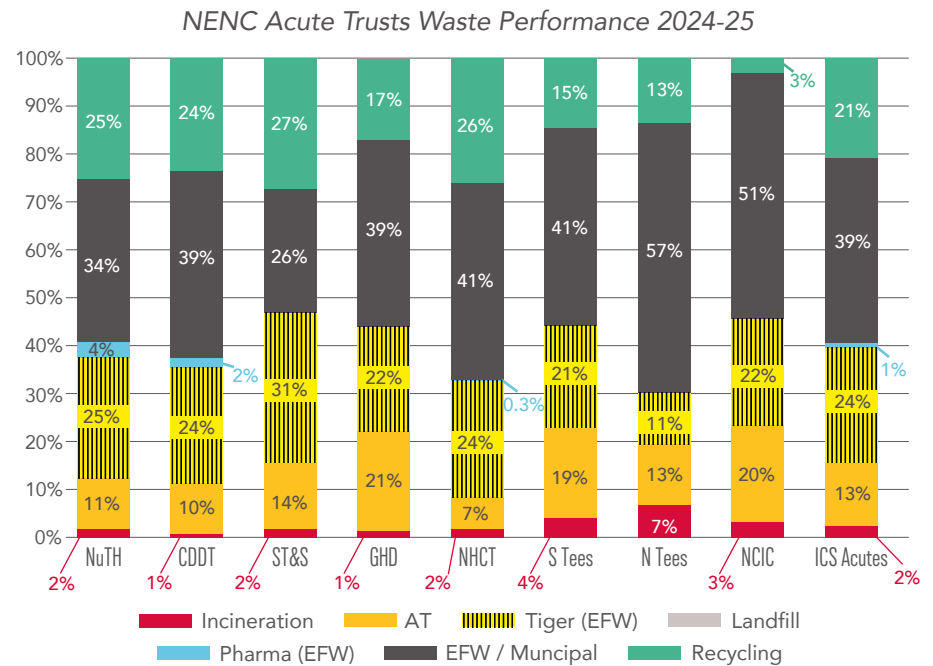


Figure 2: Newcastle Hospitals Waste Performance Benchmarked – NENC ICS

Together with the reuse agenda must be **substantial efforts** to address other aspects of waste prevention in both clinical and non-clinical practices.



We must **buy less and buy better.**



Theatres and laboratories consumables reduction initiatives; medicines management; gloves-off; and supply chain engagement have **considerable potential** to **reduce waste generation** and promote **Circular Economy thinking**.



2.3 Financial Performance

Trust waste costs benchmark well, both regionally and nationally. The function comes in below budget every year. Last year's waste costs were approximately £200,000 under budget. Waste costs in 2024-25 were the same as in 2010-11 demonstrating that continual review and adaptation of routines, segregation improvements and contract management has significant financial benefits to the Trust.

Segregating waste appropriately and compliantly saves money. Working effectively with the offensive (tiger) and medicinally contaminated (blue) waste streams saved the Trust over £300,000 in unnecessary waste costs in 2024-25. Recycling saves the trust a further £50,000 every year.

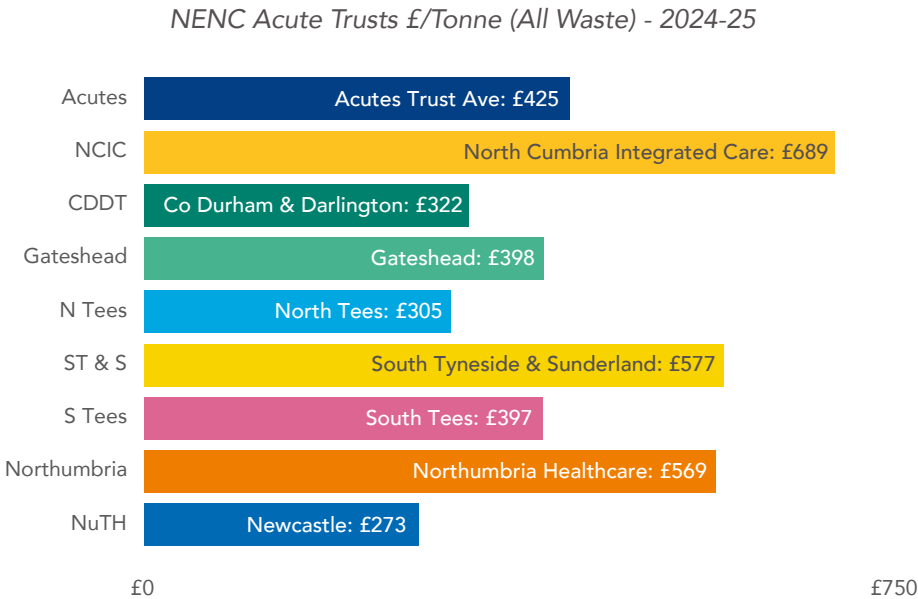


Figure 3: Newcastle Hospitals Waste Financial Performance (£/Tonne disposal)

Proactive management of waste contracts and a strong focus on segregation routines and auditing of processes means waste costs in 2024-25 were the same as in 2010-11.



Waste Awareness Training with Trust Facilities staff



Medication management stall at the RVI



2.4 Waste Performance Summary

Proactive management of waste means the Trust demonstrates a consistent approach to waste segregation: with effective internal auditing and external Duty of Care schedules; robust management of contractors with confidence in our segregation routines (alleviating their own risk-related concerns); and a dedicated waste management function focused on meeting compliance, cost and environmental requirements of the operation.

By focusing on minimising waste and ensuring compliant segregation of unavoidable waste, the Trust can moderate exposure to future price increases and materials market volatility. Costs for disposal for many waste streams are expected to increase substantially in the coming years, especially with the inclusion of energy recovery facilities into the UK Emissions Trading Scheme. 70% of trust waste ultimately ends up at EfW. This development, although financially very unwelcome, can be used to encourage the Trust to re-evaluate practices and look at alternatives ways of working and procuring now and in future years.

Costs for disposal for many waste streams are expected to increase substantially in the coming years, especially with the inclusion of energy recovery facilities into the UK Emissions Trading Scheme

Delivering Waste
Awareness Training
at Corporate
Induction



3. Drivers for Change and Improvement

3.1 Newcastle Hospitals Waste Management Policy:

Newcastle Hospitals Waste Management Policy sets the framework for waste management across the Trust - handling, segregation, containment, internal movement and consignment - and encompasses almost every working area and scenario where waste may arise.

3.2 Newcastle Hospitals Climate Emergency Strategy – Waste Goals

The Trust is committed through the Climate Emergency (Sustainability) Policy, the Climate Emergency Strategy and related Climate Emergency Action Plan to reducing its impact on the environment and in adopting Waste Hierarchy principles to achieve Zero Waste by 2040.

WHAT DO WE WANT TO ACHIEVE:

Generate less waste; reuse and recycle more, and ensure unavoidable waste is disposed in the most sustainable way

- Reduce the amount of waste we create by working and purchasing in more resource-efficient ways
- Increase the number of items we reuse with a focus on reducing single-use plastics
- Repair or reuse more items that can be repaired or reused.
- Increase the amount of waste that we reuse or recycle to 35% of consigned waste by volume



ZERO WASTE LONGER TERM GOALS

- By **2030** we will reuse and repair everything that can be reused and repaired.
- By **2040** we will produce no waste. We will manage resources within the circular economy, with items surplus to requirements becoming a resource in another part of the system.



The Trust is committed to reducing its impact on the environment and in adopting Waste Hierarchy principles to achieve Zero Waste by 2040

3.3 Regulatory Drivers include:

- The Separation of Waste (England) Regulations 2024.
 - Simpler Recycling and Food Waste segregation (for businesses by 2025)
 - Films and flexibles recycling (2027)
 - Deposit Return Scheme (DRS) for retailers of beverage containers (2027)
 - UK Emissions Trading Scheme (2028) – Likely to significantly increase disposal costs
- The Environment Act 2021
- The Waste (England & Wales) Regulations 2011
- The Hazardous Waste (England & Wales) Regulations 2005



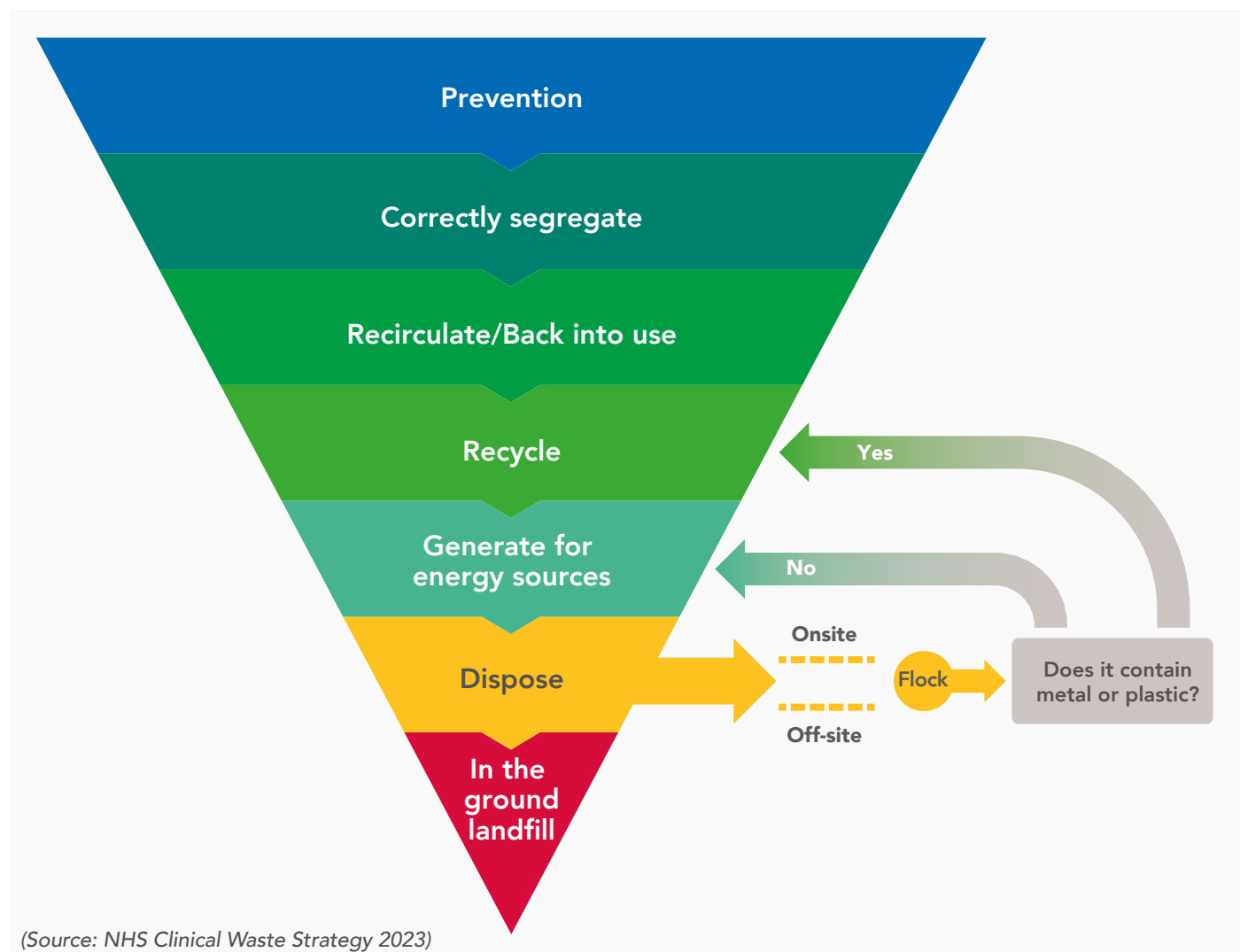
Duty of Care Audit to a Recycling Facility



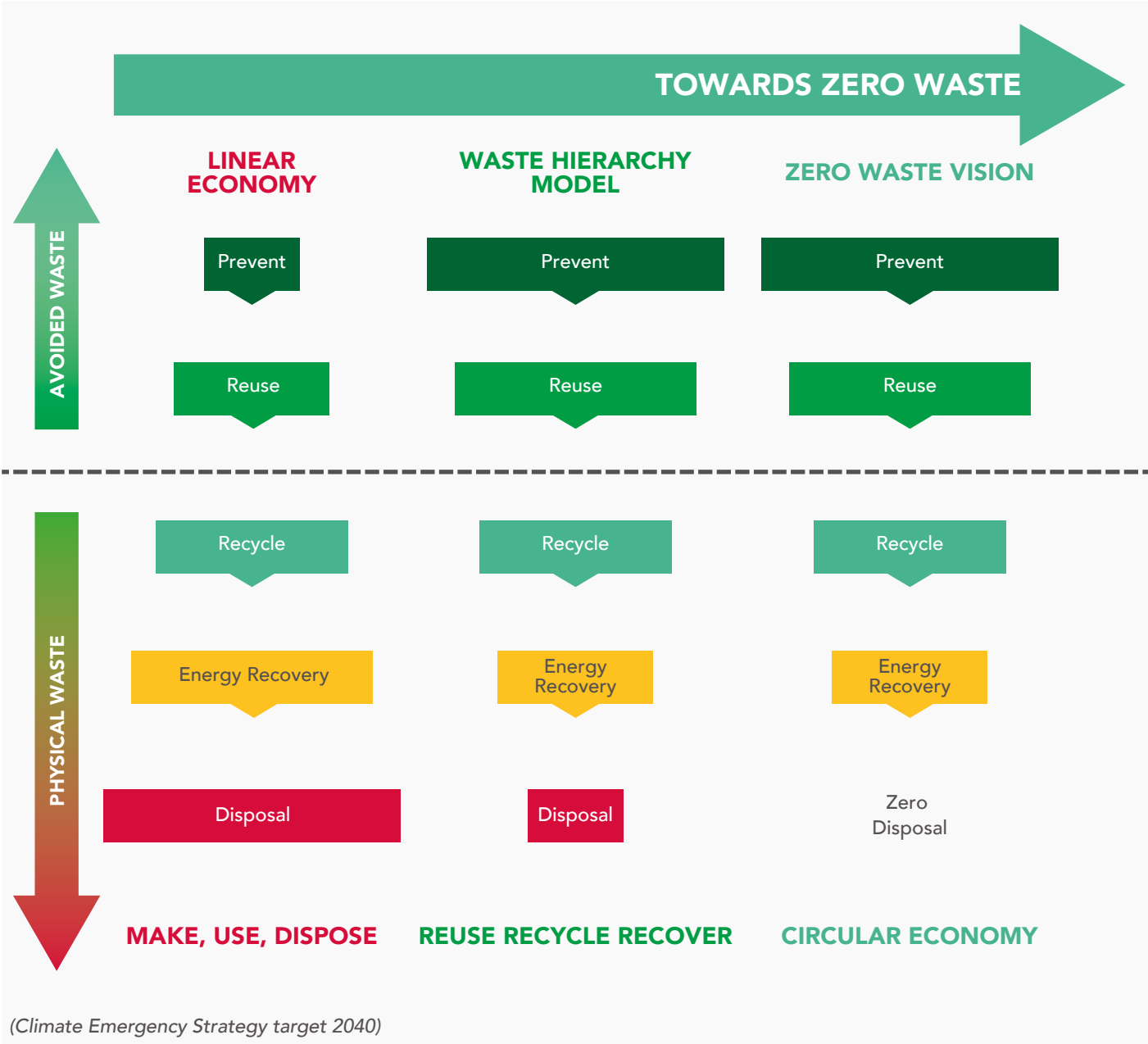
3.4 Other Strategic Drivers:

- UK Government – 25 Year Environment Plan (2018)
- Our Waste, Our Resources: A Strategy for England (HM Government 2018)
- NHS England Clinical Waste Strategy (2023)
- NHS Estates 'Net Zero' Carbon Delivery Plan (and Technical Annex) (2022)
- HTM 07/01 Safe Management of Healthcare Waste (2022)
- The Waste Hierarchy Model (adapted for clinical waste) (3.5 below)
- Newcastle Hospitals Zero Waste Model (3.6 overleaf)

3.5 The Waste Hierarchy (adapted for clinical waste)



3.6 Newcastle Hospitals Zero Waste Model



The models complement each other and provide a visual representation of how both NHSE and the Trust aims to classify and manage waste moving towards our respective targets.



3.7 Driver for Change and Improvement Summary

Two key themes must be addressed simultaneously.

- Significantly increased activity must happen at the higher levels of the Waste Hierarchy i.e. in the areas of waste prevention, minimisation and reuse – i.e. before waste is physically created. This will reduce volumes of waste being produced and sent to recycling or energy recovery.
- Simultaneously, at the lowest level of the Waste Hierarchy, efforts must continue in the elimination of waste destined for disposal (high temperature incineration) - currently 1.6% of Trust waste.

The latter aim is not straightforward: government regulation and HTM 07/-01 guidance requires that certain waste streams (cytotoxic/cytostatic, anatomical, medicinally contaminated infectious waste) be consigned to high temperature incineration. However in recent years there have been developments for waste streams previously considered as suitable only for incineration - non-cytotoxic sharps and medicinally contaminated waste - and it is not inconceivable that new technologies may emerge or changes in guidance arise that allow for the further diversion of clinical waste from incineration in the targeted time frame – Zero Waste by 2040.

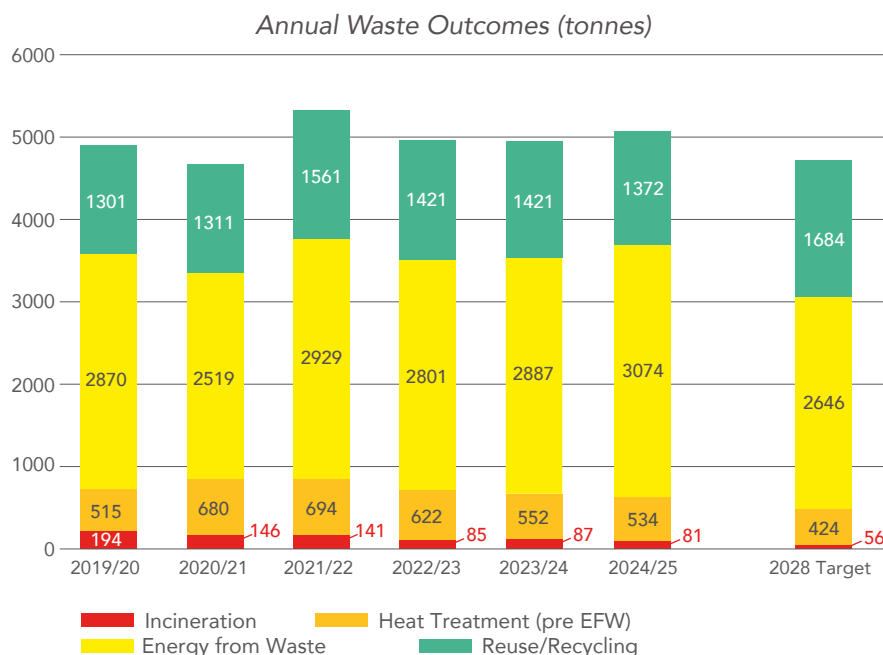


Figure 4: Newcastle Hospitals Waste Outcomes (Tonnes)

The above graph demonstrates the progress that has been made towards reducing overall volumes of waste consigned to high temperature incineration in recent years.

The elimination of that waste outcome will result in the trust achieving Zero Waste.


It is not inconceivable that new technologies may emerge or changes in guidance arise that allow for the further diversion of clinical waste from incineration in the targeted time frame

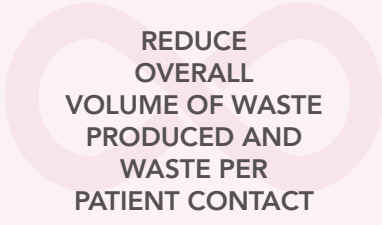
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Headline Actions - How This Will Be Achieved






REDUCE OVERALL VOLUME OF WASTE PRODUCED AND WASTE PER PATIENT CONTACT


- Development of cross-functional working groups aimed at reducing packaging, waste and increasing reuse.
- Case studies detailing waste reduction or outcome improvements developed and shared with the aim of a minimum of two per clinical board.
- Trust and regional engagement with suppliers and NHS Supply Chain aimed at reducing waste and packaging and increasing reuse.
- Furniture and equipment reuse scheme established.
- Increase in capacity for trust repair and refurbishment.
- Exploration of potential for external sterile service provision if internal capacity becomes unable to deliver required services.






REDUCE HAZARDOUS WASTE CONSIGNED TO DISPOSAL LEVEL OF THE WASTE HIERARCHY

- Address mis-consignment opportunities for e.g. cytotoxic waste.
- Engage with NHSE, wider waste industry and regulatory authorities to address remaining waste streams currently requiring High Temperature Incineration.





INCREASE IN WASTE RECYCLED

- Using the opportunity of Simpler Recycling; Increase opportunities for the types of materials that can be segregated for recycling and simplify communication.
- Ensure all food waste, including staff areas, is captured and sent for processing and recycling.
- Identify and implement opportunities for materials to be extracted from Trust waste streams – e.g. polymer extraction, plastic recycling initiatives in labs, etc.
- Trust (and regional) engagement with suppliers and NHS Supply Chain aimed at influencing manufacturers and reducing the number and type of fossil-based polymers used for healthcare products to facilitate recycling opportunities