

# Resources & Waste

Improvement and Scrutiny - Climate Change,  
Biodiversity and Carbon Reduction 3 July 2023

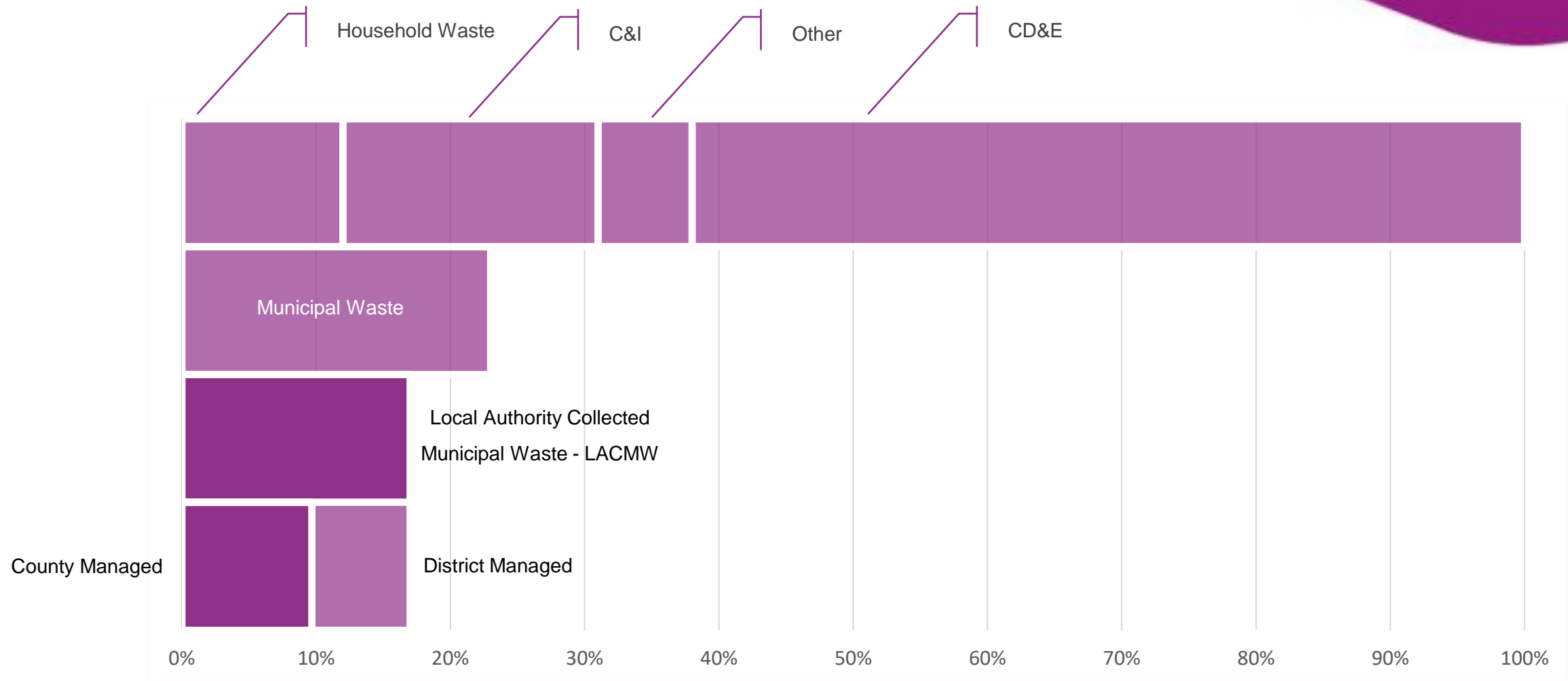
# Agenda

- Overview of resource and waste management
- Review of historic performance (locally and nationally)
- Summary of objectives and actions for 2022/23
- Review of outcomes for 2022/23
- Overview of national waste strategy landscape
- Future actions

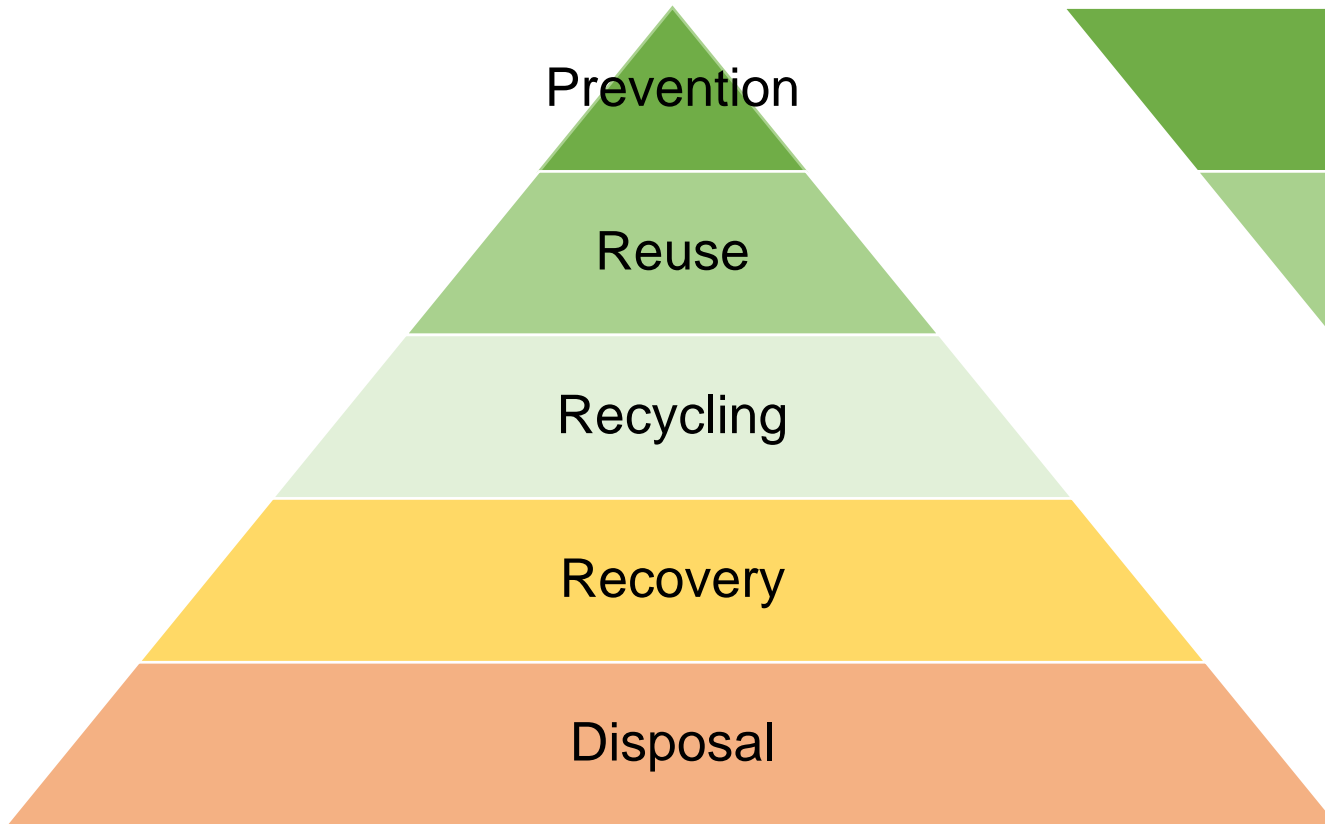
# Responsibilities

	District	County	Unitary
Waste Collection	Yes – Duty to collect household waste and commercial waste of a similar composition		Yes
Recycling	Yes – Duty to collect separately and ability (not duty) to source own recycling outlets	Yes – Duty to arrange disposal of all waste (including recycling) delivered to it by a WCA	Yes
HWRCs		Yes – Duty to provide location for free disposal of household waste for residents	Yes
Disposal		Yes – Duty to arrange disposal of all waste (including recycling) delivered to it by a WCA	Yes
Waste Strategy	Yes – Duty to have in place a Waste Strategy, including publicizing and consulting	Yes – Duty to have in place a Waste Strategy, including publicizing and consulting	Yes

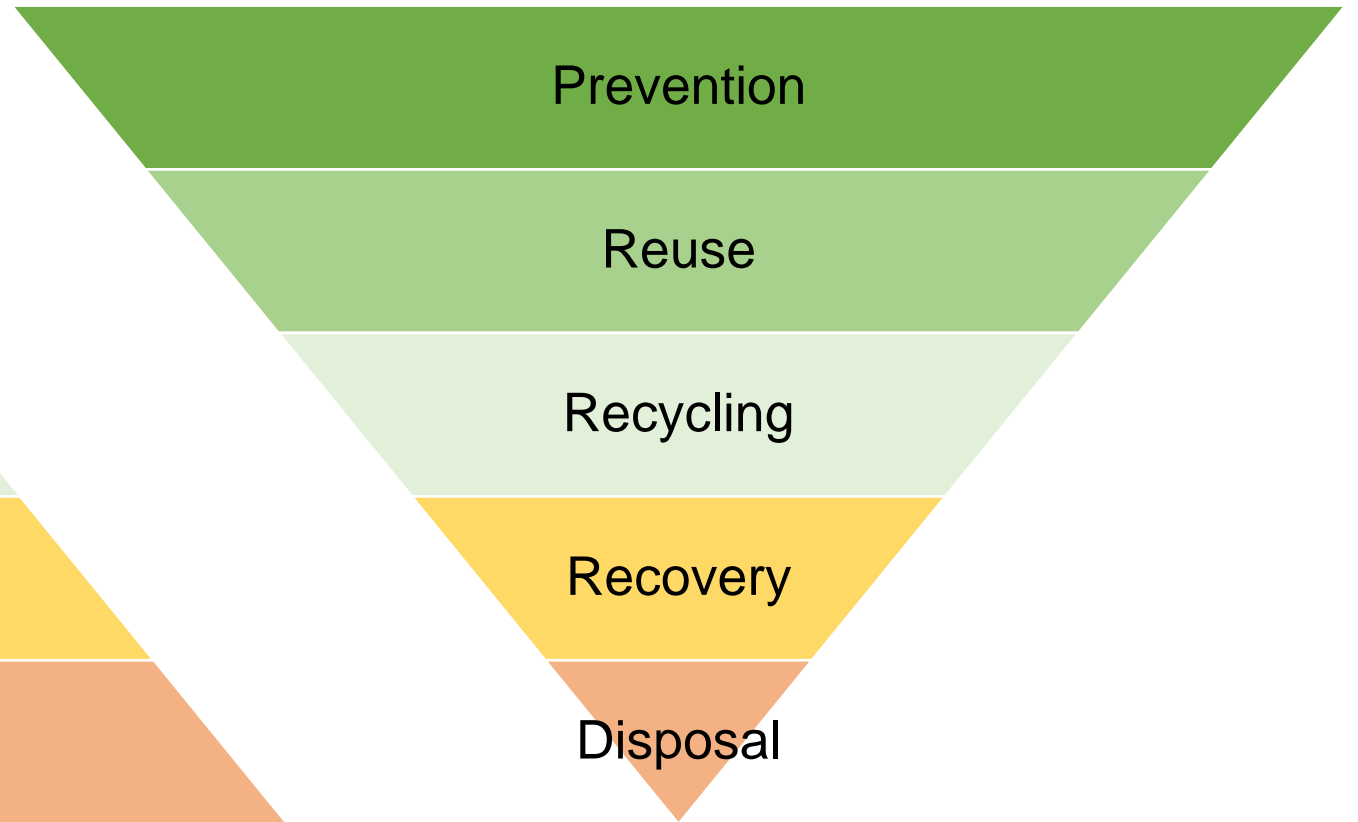
# Waste Classifications



# Waste Hierarchy



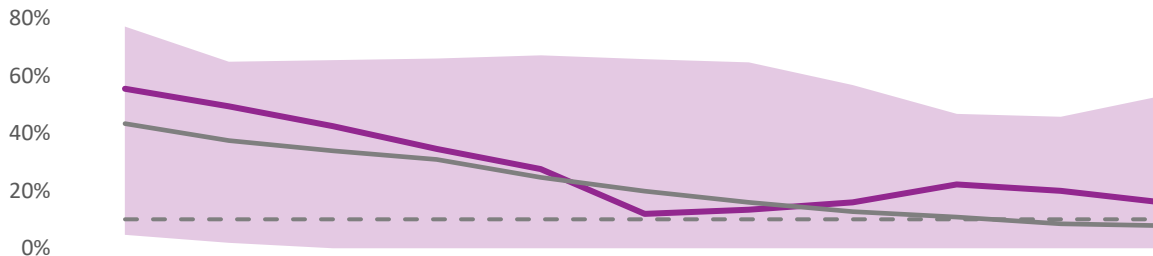
Current



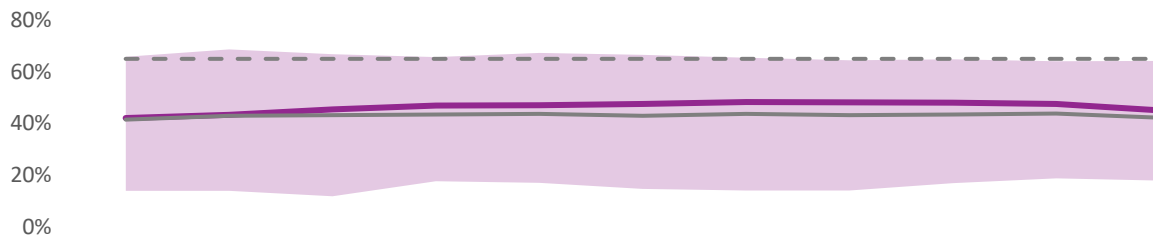
Desired

# Historic Performance

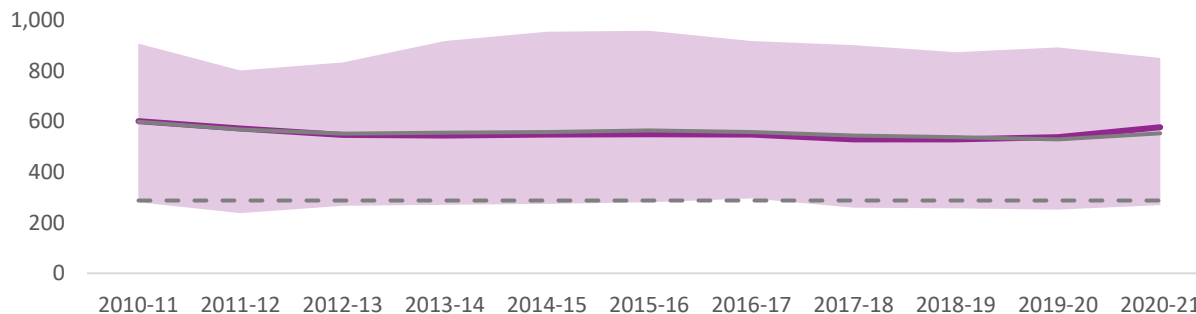
## Landfill Rate



## Reuse and Recycling Rate



## Residual Waste / Household (kg)



- Steady decline in the proportion of waste being landfilled locally and nationally.
- No improvement in recycling at a national level over the last decade.
- 1.8 percentage point improvement locally but recycling rates are still lower today than in 2012-13.
- Almost no reduction in residual waste per person nationally or locally.

# Climate Change Strategy

## County-wide targets

- Derbyshire's county-wide target is net zero by 2050.
- To be on course to deliver net zero by 2050 requires a 47% reduction in emissions by 2025 against a 2005 baseline.

## County-wide targets for Resources and Waste

- T1
  - Reduce household waste production by 20% by 2025 against 2015 baseline.
- T2
  - Less than 10% municipal solid waste sent to landfill by 2035, with 100% waste diverted by 2050.
- T3
  - No more food and garden waste sent to landfill by 2030.

# Progress in 2022/23

## Actions

## Objectives

**Procurement and mobilisation of new Residual Waste Treatment and disposal contract**

- Secure capacity at Energy from Waste facilities to recover value from the County's residual waste streams. (LTA1)
- Reduce the amount of the County's residual and organic waste that ends up in landfill. (T2, T3)
- Reduce the carbon intensity and total CO<sub>2</sub>e emitted as a result of the County's waste. (STA4)

**Procurement and mobilisation of new Household Waste Recycling Centre Contract**

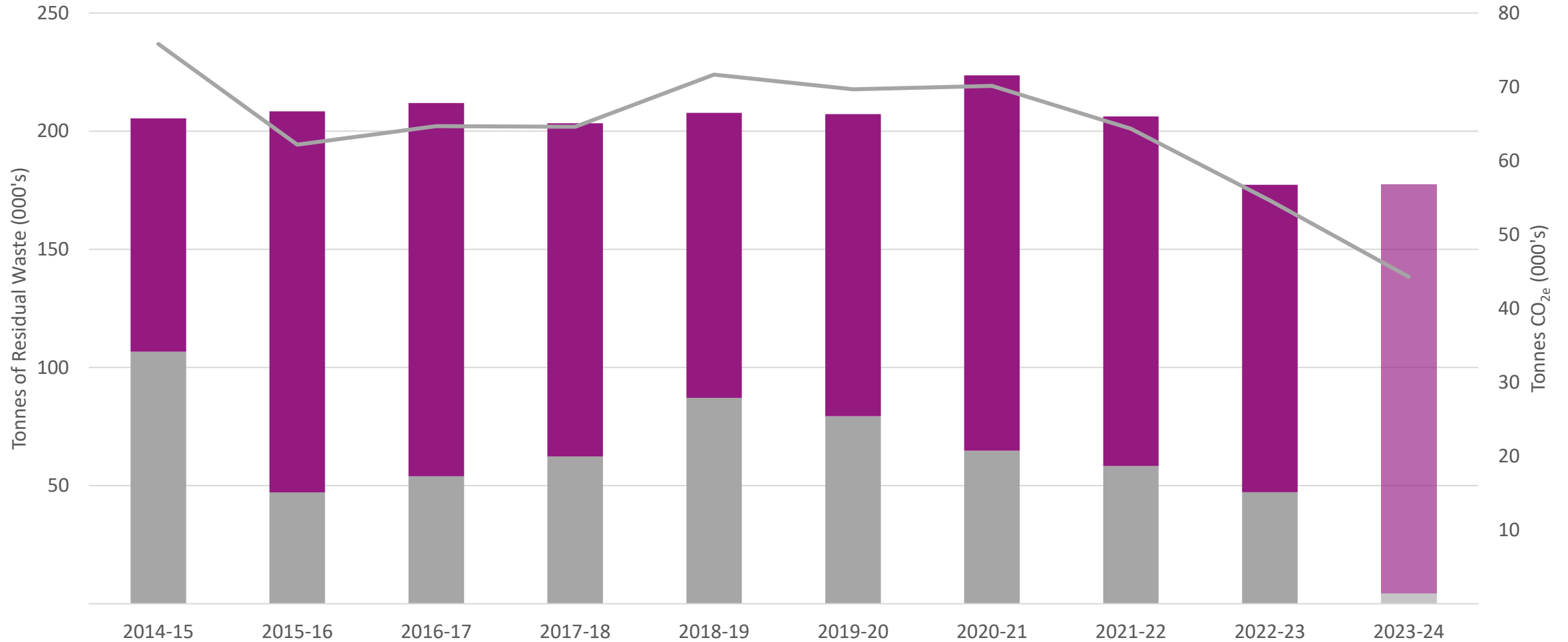
- Improve recycling rates at the County's HWRCs. (STA4, T3)
- Develop new recycling solutions for household waste materials. (PA1)
- Increase re-use in the County (T2, PA4)

**Review long-term planning and preparedness for legislative and broader sectoral change**

- Identify impacts and opportunities arising from national waste policy developments. (STA4)
- Review anticipated resource requirements and funding sources (STA4)
- Develop high-level milestones for 2023/24 – 2024/25 (STA4, LTA1)

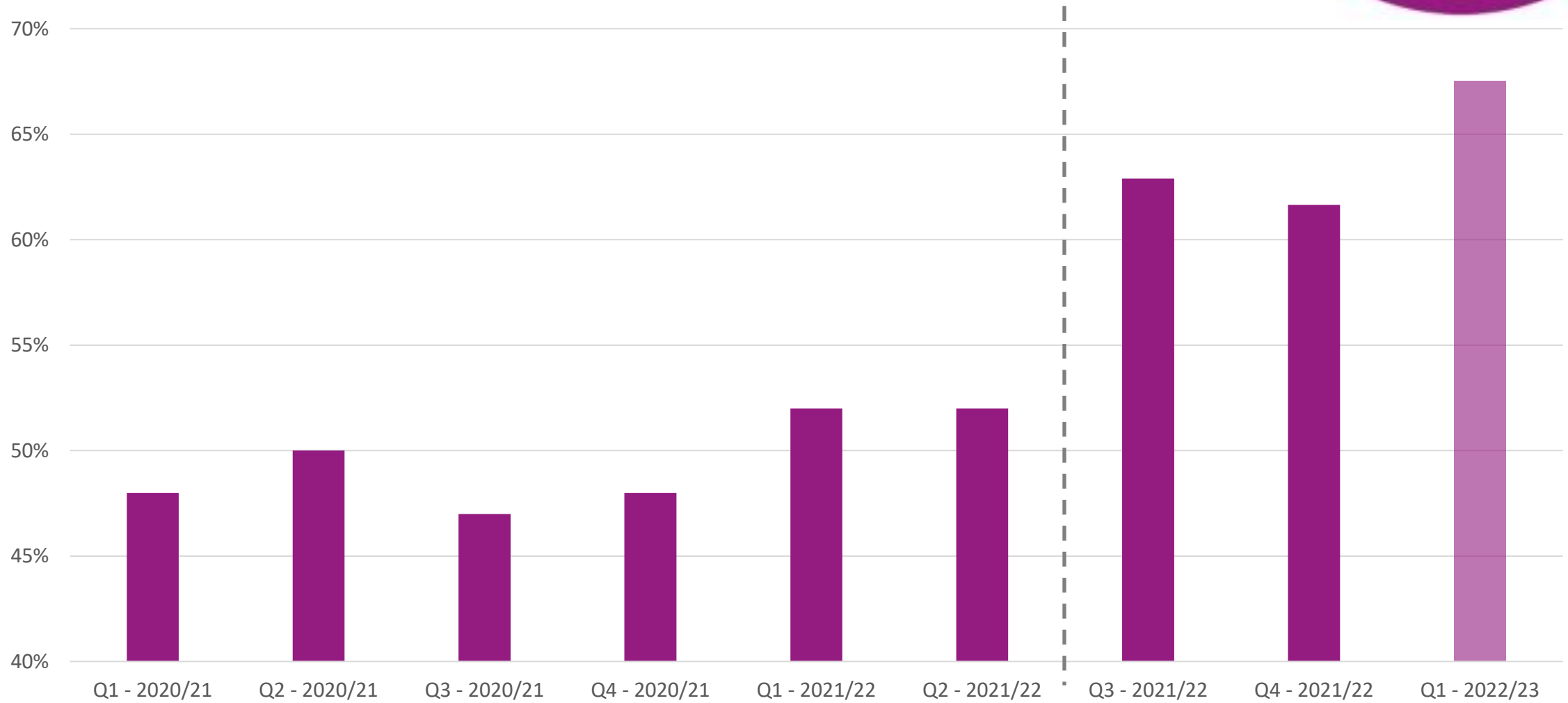


# Diversification from Landfill Performance



\*CO<sub>2</sub>e calculations based on Experimental Statistics on the carbon impact of waste from households managed by local authorities in England, Defra, 14 December 2022

# HWRC Recycling Performance



# Climate Outcomes

- 11,000 tonnes less household waste going to landfill (2021/22 v 2022/23).
- Forecast to reduce by a further 43,000 tonnes in the first full contract year (based on current diversion performance).
- c.20% reduction in CO<sub>2</sub>e emissions per tonne of residual waste compared to 2021/22.
- 20,000 tonne reduction in CO<sub>2</sub>e emissions.
- CO<sub>2</sub>e emissions from residual waste are now 42% lower than in 2014/15.
- HWRC recycling rates have increased by over 11 percentage points.
- Introduction of carpet recycling at HWRCs.
- No household waste has been landfilled under the new HWRC contract since its commencement in October 2022 and only 21.34 tonnes of non-household contract waste.
- Contract includes provision for the development of 1<3 re-use shops at our HWRCs over the next two years.
- Creation of new Waste Strategy and Engagement team (5 FTE).

# National Strategy



# Government Interventions

- Extended Producer Responsibility (EPR) – April 2024?
- Mandatory separate weekly food waste collection – March 2025?
- Greater consistency of recycling at national and regional level.
- Incineration within scope of UK Emissions Trading Scheme (UKETS).
- New systems for digitally tracking waste from source.
- Deposit return scheme.
- Recycling targets of 65% and aim to reduce residual waste per capita by half.

# Projected Benefits – UK\*

- Financial benefits for local authorities of the order of up **£400 million** over eight years.
- Up to **£478 million of materials returned to the economy** from the sale of dry recyclables.
- Up to **11.6mt of materials and food waste collected for recycling**, adding approximately 7 percentage points to the household waste recycling rate for England.
- Up to **£33 million in reduced costs to reprocessors** from not having to remove contamination from materials before processing.
- Up to **8mt of organic fertiliser available to the agri-sector**, with a nutrient value of £30 million
- Supplying around **682,000 homes with renewable energy** generating sales of up to £280 million a year, improving the UK's energy security.
- Improved environmental outcomes with up to **5.1mt CO<sub>2</sub>e avoided**, benefiting the environment directly and supporting the UK's overall carbon budget targets.

# High Level Plan (STA4)

**1**

## Resourcing (9 months)

- Realigning revenue budgets to create additional capacity for strategy development, infrastructure management and contract/commercial management.
- Identifying funding for building an evidence base.
- Procurement of external support.
- Recruitment of internal resource.

**2**

## Building an evidence base (6 months)

- Waste composition analysis
- Creation of As-Is waste management system model
- Mapping costs
- Carbon intensity assessment and waste mass balance of current system
- Long-list of policy/operational interventions and delivery mechanisms

**3**

## Identifying delivery options (3-6 months)

- Evaluation of shortlist policy/operational options
- Cost/Benefit analysis
- Development of critical success factors

**4**

## Business case development (4 months)

- Mapping the financial and non-financial impacts of local options and government policy (winners and losers)
- Public consultation and engagement

**5**

## Governance model (6-8 months)

- Establishing clear governance arrangements to put the DWP on a more formal footing.
- Agreeing commercial principles / pain gain sharing

**6**

## Delivery (TBD)

# Questions?