

# **Communities and Local Services Scrutiny Committee 21<sup>st</sup> October 2021**

## **Waste Management**

# Responsible Waste Management is Everyone's Business



**DARLINGTON**  
Borough Council

# National Policy

## Resources and Waste Strategy for England

- Ambitious targets for increasing recycling – 45% to 65% (2035)
- Minimise future waste growth
- Preventing waste from disposal via landfill (10% limit)
- Food waste banned to landfill 2030
- 30% of all plastics shall be required to be derived from recycling
- Consistency for Dry Recycling
- Separate food waste collections (weekly) to be mandated
- Free Garden Waste Collection
- Extended Producer responsibility polluter pay packaging material from 2023
- Deposit Return Scheme from 2023



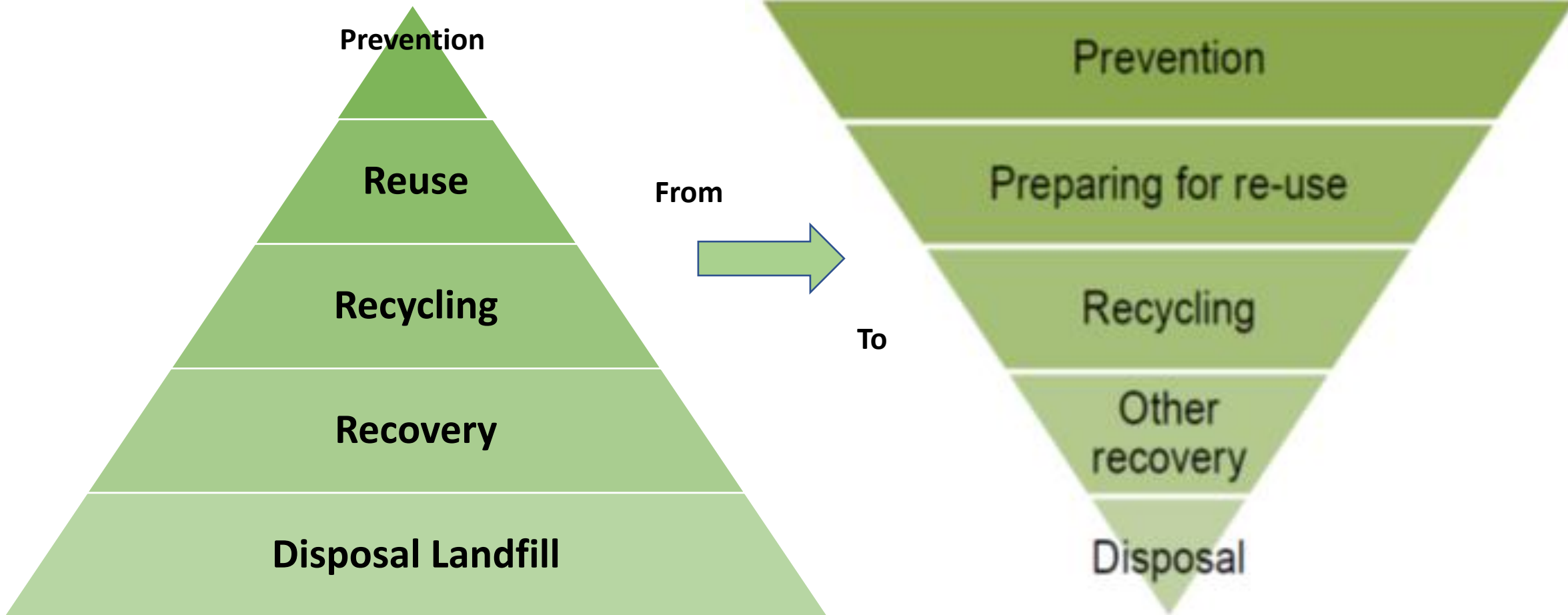


We all play our part

- Government
- Manufacturers
- Council
- Resident



# Waste Hierarchy



# Tees Valley Joint Waste Management Strategy 2020 – 2035

## **Our Vision for the Future – Sustainable Waste Management**

The Tees Valley Joint Waste Management Strategy aims to deliver a high quality, accessible and affordable waste management service that contributes to:

- economic regeneration, including employment and a more circular economy;
- the protection of the environment and natural resources; and
- reducing the carbon impact of waste management

and:

- delivers customer satisfaction;
- reduces the amount of waste generated by householders and the Councils;
- increases reuse and recycling;
- then maximises recovery of waste, and;
- works towards zero waste to landfill



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## Strategy Objectives

### ***Waste generation:***

- Aim to maintain the current level of below 1 tonne of household waste per household

### ***Reuse and recycling:***

Increase reuse, recycling and composting of household waste from the current levels to:

- 45% to 50% in the first five years of this strategy (2020 to 2025);
- between 2025 and 2030 seek to further improve reuse, recycling and composting beyond the 2025 levels;
- set targets for beyond 2030 during the strategy review in 2025

### ***Waste recovery and landfill diversion:***

- provide sufficient waste recovery capacity to ensure that no more than 10% of LACW waste is landfilled

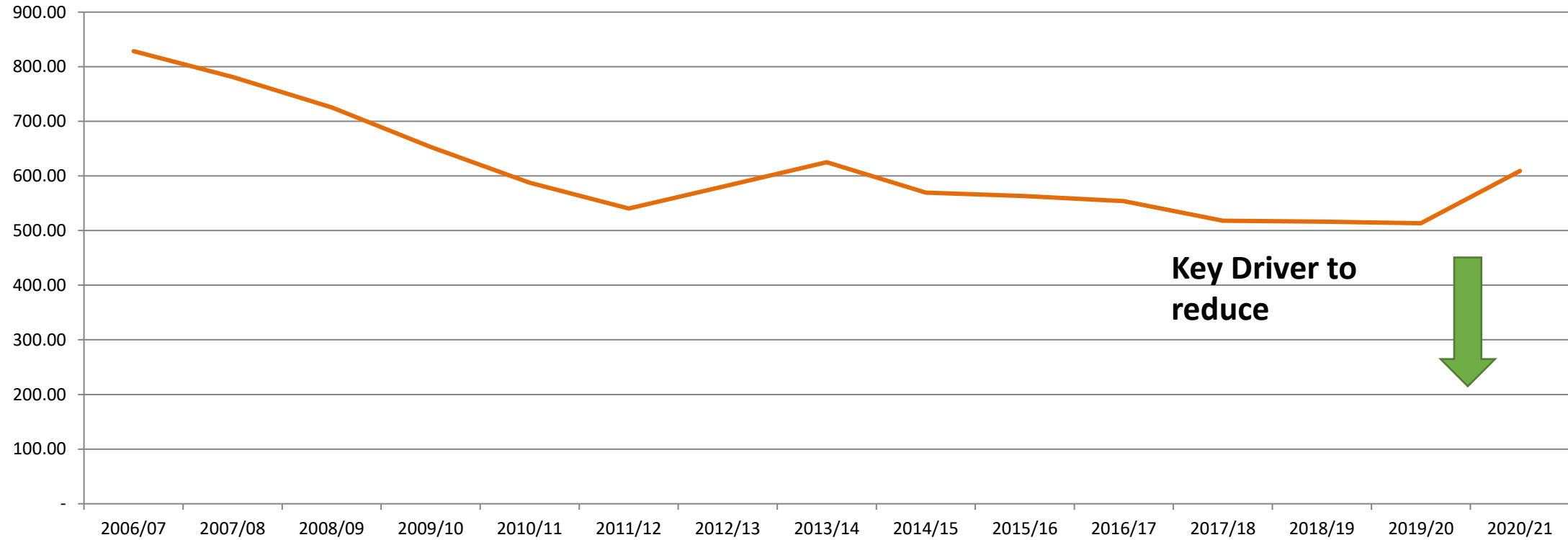
# Where Are We Now

- Residual waste collected fortnightly, which goes through a Mechanical Biological Treatment Process then majority of output Refuse Derived Fuel
- Fortnightly Dry Recycling; Paper, Card, Plastics, Cans and Glass
- Majority of properties 240L waste bin, 240L recycling bin, 40L glass box, approx. 7000 properties have 40L box for recycling. Plus option for larger waste bin and additional recycling bins therefore residents have adequate capacity for their waste if managed responsibly
- Chargeable Garden Waste Collections, 8900 properties, processed via in vessel composting to produce PAS 100 compost suitable for Soil Production or spread to agricultural land
- Chargeable Bulky Waste Collection Service
- Charities Providing Reuse of Furniture and White Goods
- Household Waste Recycling Centre

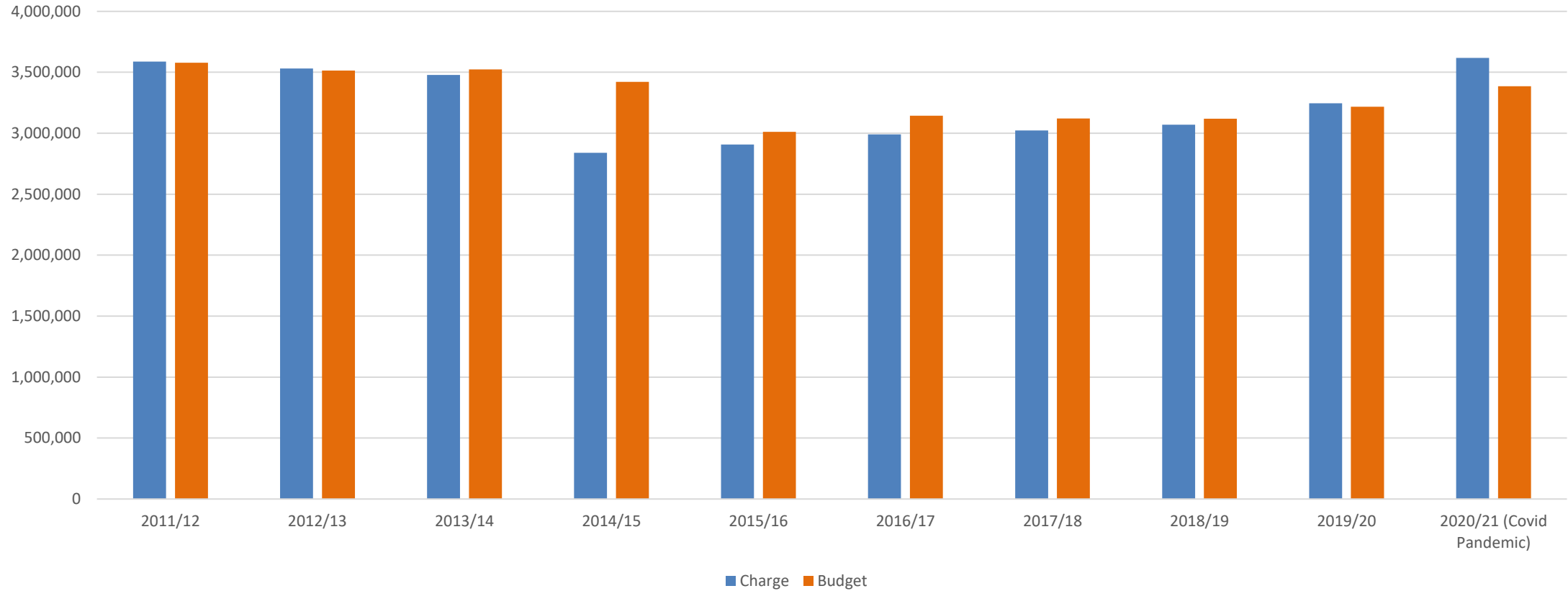




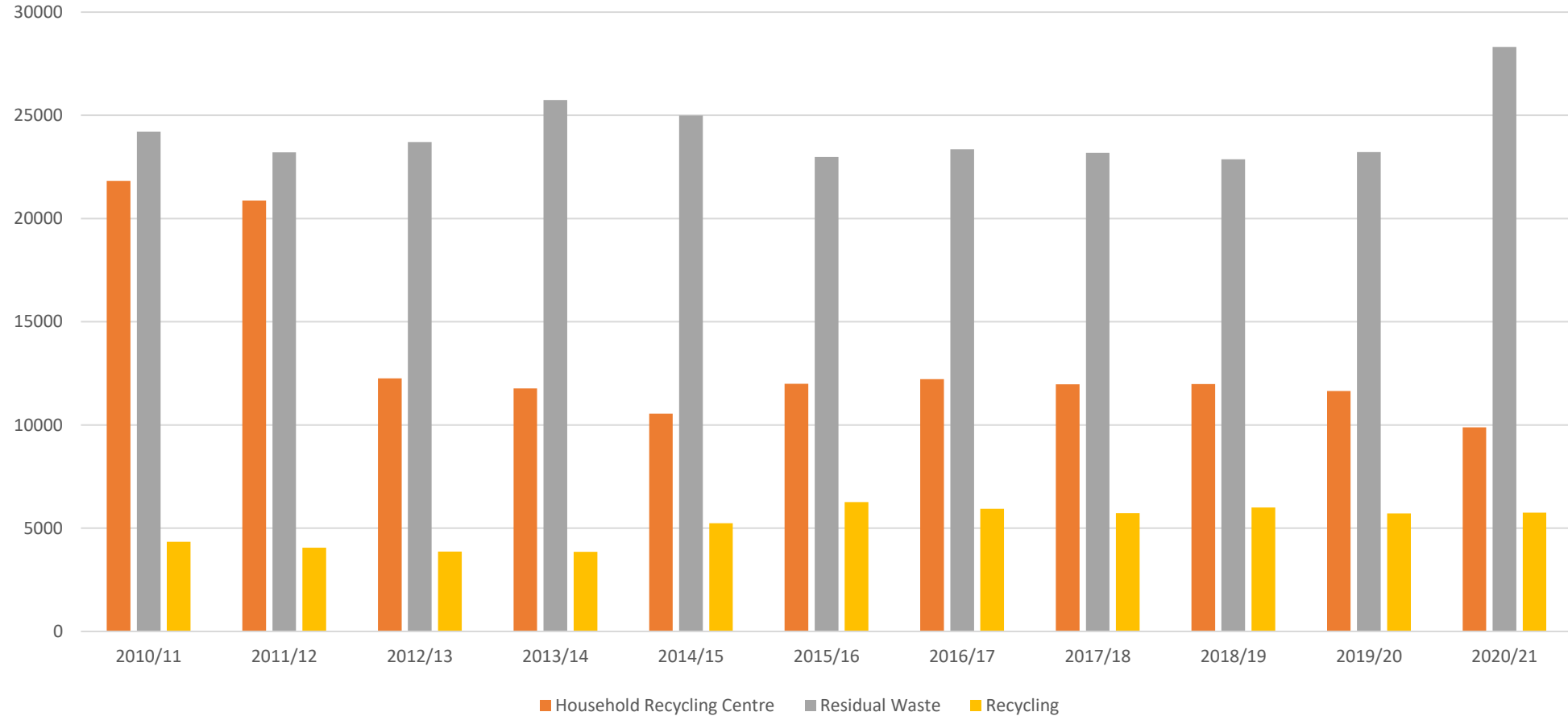
# Residual Household Waste per Household Kg



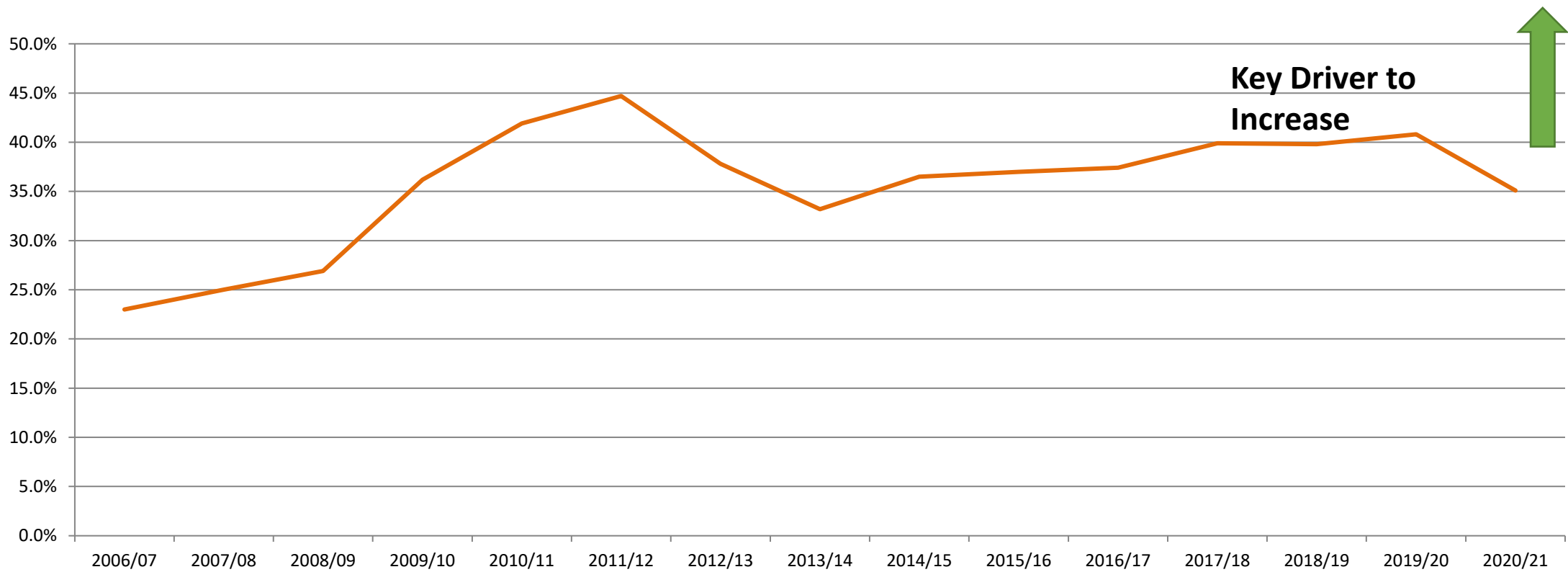
# Waste Treatment Cost V Budget



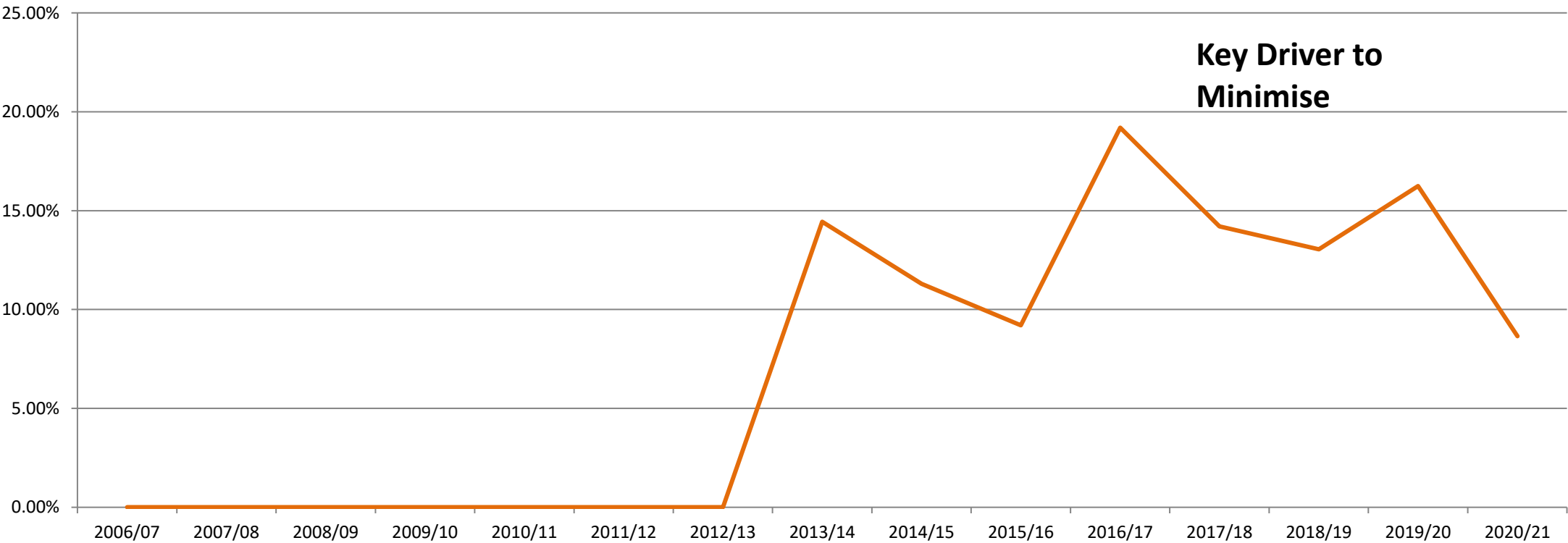
# Waste Streams Tonnes



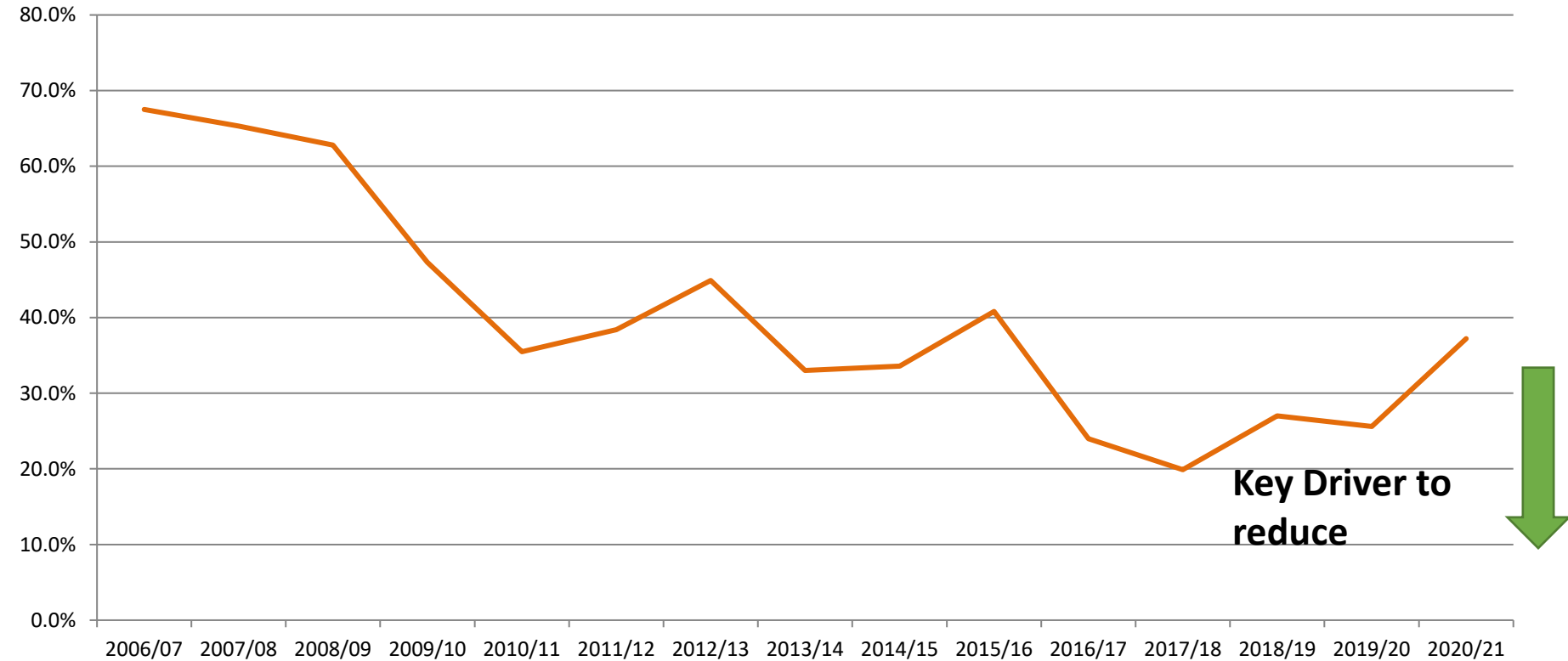
# Percentage of Household Waste sent for Reuse, Recycling or Composting



# Percentage of Household Waste sent for Energy Recovery



# Percentage of Municipal Waste sent to Landfill



# Changes Required to Improve Performance

- New residual waste treatment facility with options for carbon capture
- Food waste collection service and
- Food waste treatment contract
- Free garden waste collection service
- Dry recycling service to meet national consistency standards
- Additional vehicles for food waste collection, garden waste and additional properties
- Funding for the above



# Tees Valley Energy Recovery Facility (TVERF)

- Designed to take 450K tonne and have 40- year lifespan TV 5 Councils, DCC and NCC managed through a local authority special purpose vehicle LA-SPV
- Even under the most ambitious future recycling scenarios, there will still be a proportion of residual waste that needs to be treated. (waste left over after reuse and recycling)
- TVERF will provide a secure, sustainable, reliable and affordable solution for residual waste
- Will help Darlington and other LAs to work towards achieving zero-waste to landfill.
- For comparison, energy recovery typically produces around 200kg less CO2 for every tonne of residual waste processed compared with landfill.
- Teesside carbon capture project an MOU with the project has been signed therefore actively looking to develop a carbon capture solution for Teesside and the TVERF.
- TVERF will utilise industry standard flue gas treatment technologies and will have very strict emissions limits which will be closely monitored by the Environment Agency.
- In practice, well-run modern facilities like the TVERF typically operate well within their permitted levels across the range of emissions factors and this is a matter of public record.





# Food Waste

- Separate food waste collections to be introduced weekly from 2024/25.
- From the Waste Flow Models for the TVERF, it is estimated that the 5 TVA's will generate ~39ktpa of separately collected food waste
- Across the 12 LA's, it is estimated that ~97ktpa of food waste will be collected.
- Across England, +1.4mt of food waste will be collected by 2033, with a surge likely 2023-2025.
- There is lack of food waste treatment capacity both regionally and nationally (+35 plants at 40ktpa required by 2031).
- New plant minimum 40ktpa capacity required for a gate £40/t at ~ £18m capex per plant. 25 year contract; gas to grid
- Need to scope out the approach to food waste treatment with N.E Councils



# Timeline for Waste Management Changes

	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35
Joint Waste Management Strategy	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey
Existing Contract Residual Waste	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey
Existing contract HWRC	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey
Existing Contact Recycling Material	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey
Cabinet Report LA-SPV and IAA	Blue													
New ERF 7 LAs		Green	Green	Green	Green	Red	Red	Red	Red	Red	Red	Red	Red	Red
New Transfer and Haulage Contract						Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey
Consistency in dry recycling			Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Food Waste					Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Cabinet Report free Garden Waste / Food Waste		Blue												
Food Waste Treatment Contract to Procure			Green	Green	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red
Free Garden Waste			Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow



In Place  
 Waiting for Environment Bill  
 New Contract  
 Cabinet Report  
 Procurement



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