Milton Keynes Waste Needs Assessment and Capacity Gap Analysis

Milton Keynes City Council

23 December 2024

Delivering a better world

Quality information

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Revision History

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FINAL 1	23/12/2024	Addressed client comments	MB	Mike Bains	Technical Director
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Abbreviations

Abbreviation	Description
AD	Anaerobic Digestion
C&I	Commercial and Industrial
CA	Civic Amenity
CD&E	Construction, Demolition and Excavation
CEP	Circular Economy Package
Defra	Department for Environment, Food and Rural Affairs
DPD	Development Plan Document
DRS	Deposit Return Scheme
EA	Environment Agency
EfW	Energy from Waste
EPR	Extended Producer Responsibility
EU	European Union
EWC	European Waste Catalogue
GBq	Giga-becquerel
HIC	Household, Industrial and Commercial
HLW	High Level Waste
ILW	Intermediate Level Waste
LAA	Local Aggregate Assessment
LACW	Local Authority Collected Waste
LLW	Low Level Waste
MKCC	Milton Keynes City Council
MRF	Material Recycling Facility
MSW	Municipal Solid Waste
NPPF	National Planning Policy Framework
NPPW	National Planning Policy for Waste
NPS	National Policy Statement
NSIP	Nationally Significant Infrastructure Project
PPGW	Planning Practice Guidance for Waste
R&D Code	Recovery and Disposal Code
RDF	Refuse Derived Fuel
Reg	Regulation
tpa	Tonnes per annum
UK	United Kingdom
VLLW	Very Low Level Waste
WCA	Waste Collection Authority
WDA	Waste Disposal Authority
WDF	WasteDataFlow

Abbreviation	Description
WDI	Waste Data Interrogator
WFD	Waste Framework Directive
WMP	Waste Management Plan
WPA	Waste Planning Authority
WTS	Waste Transfer Station

Executive Summary

Introduction

AECOM was appointed by Milton Keynes City Council in April 2024 to prepare a Waste Needs Assessment and Capacity Gap Analysis to inform the evidence base for the emerging Milton Keynes City Plan 2050 and Milton Keynes Minerals and Waste Local Plan.

The study area comprises the Milton Keynes administrative area, commencing in the baseline year of 2022 and extending to the end of the Plan period in 2050.

Scope and methodology

Aligned with the Planning Practice Guidance: Waste (PPGW) (MHCLG, 2015), the assessment considers the following waste streams:

- Local Authority Collected Waste (LACW) (including household waste and other wastes collected by the local authority)
- Commercial and Industrial (C&I) waste
- Construction, Demolition and Excavation (CD&E) waste
- Hazardous waste
- Other waste streams: mining wastes, agricultural wastes, low-level radioactive waste, wastewater

For each waste stream the assessment comprises:

- estimating the baseline annual waste arisings in the Plan area over the past 10 years (2013 to 2022) and forecasting the likely future annual waste arisings over the Plan period to 2050, based on a number of scenarios
- estimating the baseline waste management and forecasting the likely future waste management over the Plan period to 2050, based on a number of scenarios
- identifying future waste management needs over the Plan period by combining the forecasts of future waste arisings with the future waste management scenarios
- estimating existing waste infrastructure capacity within the Plan area
- identifying potential capacity gaps (or shortfall) in waste infrastructure capacity over the Plan period to 2050 by comparing the future waste management needs to the likely available waste infrastructure capacity
- considering the cross-boundary movement of waste (imports and exports) in the management of waste

LACW and C&I waste (HIC waste)

The forecast **waste management needs profile in 2050** (based on the high waste arisings scenario) for LACW and C&I waste is summarised below for the three recycling scenarios.

Waste stream	Waste management needs (in 2050)	Low recycling scenario ('000's tonnes per annum)	Medium recycling scenario ('000's tonnes per annum)	High recycling scenario ('000's tonnes per annum)
LAWC	Recycle / Compost / AD	91	109	118
	Incineration / Energy recovery	61	50	42
	Landfill	16	8	8
C&I	Recycle / Compost / AD	125	129	139
	Incineration / Energy recovery	32	50	40
	Landfill	42	20	20

The capacity gap analysis for **recycling / composting / AD capacity for HIC waste** identifies that:

- under the 'low recycling scenario' there is sufficient net capacity during the Plan period, although surplus capacity reduces over time due to the increasing quantity of waste to be managed via recycling / composting / AD
- under the 'medium recycling scenario', net surplus capacity reduces to zero by around 2048, with a deficit of approximately 5,000 tonnes per annum at the end of the Plan period
- Under the 'high recycling scenario', net surplus capacity reduces to zero by around 2041, with a deficit of approximately 23,000 tonnes per annum at the end of the Plan period

The recycling / composting / AD capacity for HIC waste in the Plan area largely comprises capacity for treating sewage sludge and other liquid and sludge wastes and therefore capacity availability for treating other waste types is a consideration in meeting future needs.

The capacity gap analysis for **energy recovery capacity for HIC waste** identifies that:

- under the 'low recycling scenario', 'medium recycling scenario' and 'high recycling scenario', there is sufficient energy recovery capacity during the Plan period, although surplus capacity reduces over time due to the increasing quantity of waste to be managed via energy recovery.

As the energy recovery capacity for HIC waste in the Plan area is provided solely by the Milton Keynes Waste Recovery Park, any changes in the future operation of this facility are a consideration in meeting future needs.

The capacity gap analysis for **non-hazardous landfill (disposal) capacity for HIC waste** identifies that:

- when only waste originating from Milton Keynes is included in the capacity gap analysis, then, under the 'low recycling scenario', 'medium recycling scenario' and 'high recycling scenario', there is sufficient non-hazardous landfill (disposal) capacity during the Plan period
- when waste originating from any WPA is included in the capacity gap analysis, then, based on recent (2018 to 2022) rates of waste input, the 'remaining lifetime input capacity' may be used up by around 2028 / 2029 if there is no change to the annual rate of waste input

The non-hazardous landfill capacity for HIC waste in the Plan area is provided solely by Bletchley Landfill Site. Although the Site has permission to operate until 2037, recent rates of waste input indicate that the remaining 'lifetime input capacity' may be used up prior to this

date. Therefore, monitoring of inputs and remaining capacity will be a consideration as well as planning for future need as the Plan period progresses.

The capacity gap analysis for **waste transfer facility capacity for HIC waste** identifies that:

- additional HIC waste transfer capacity of 14,000 to 62,000 tonnes per annum may be required by the end of the Plan period.

The need for waste transfer capacity for HIC waste will depend on a range of factors including the proximity to and the type of waste management infrastructure being used and is a consideration in meeting future needs.

CD&E waste

The forecast **waste management needs profile in 2050** (based on the high waste arisings scenario) for CD&E waste is summarised below for the three recycling scenarios.

Waste stream	Waste management needs (in 2050)	Low recycling scenario ('000's tonnes per annum)	Medium recycling scenario ('000's tonnes per annum)	High recycling scenario ('000's tonnes per annum)
CD&E	Recycle / recover	389	445	500
	Landfill	167	111	56

The capacity gap analysis for **recycling and recovery capacity for CD&E waste** (which assumes waste is managed at recycling capacity first, and any surplus waste is sent to recovery to land) identifies that:

- under the 'low recycling scenario' the recovery to land 'remaining lifetime input capacity' may be used up by 2031
- under the 'medium recycling scenario' and 'high recycling scenario', the recovery to land 'remaining lifetime input capacity' may be used up by 2030

If additional CD&E waste recycling capacity became available then the annual inputs to recovery to land may be reduced and the use of the 'remaining lifetime input capacity' may be extended over a longer period of time.

The capacity gap analysis for **inert landfill (disposal) capacity for CD&E waste** identifies that:

- when only waste originating from Milton Keynes is included in the capacity gap analysis, then, under the 'low recycling scenario' and 'medium recycling scenario' the 'remaining lifetime input capacity' may be used up by around 2030, and under the 'high recycling scenario' the 'remaining lifetime input capacity' may be used up by around 2031
- when waste originating from any WPA is included in the capacity gap analysis, then, based on recent (2018 to 2022) rates of waste input, the 'remaining lifetime input capacity' may be used up by around 2028 / 2029 if there is no change to the annual rate of waste input

The inert landfill capacity for CD&E waste in the Plan area is provided solely by Bletchley Landfill Site. Although the Site has permission to operate until 2037, recent rates of waste input indicate that the remaining 'lifetime input capacity' may be used up prior to this date. Therefore, monitoring of inputs and remaining capacity will be a consideration as well as planning for future need as the Plan period progresses.

The capacity gap analysis for **waste transfer facility capacity for CD&E waste** identifies that:

- sufficient waste transfer capacity for CD&E waste may be available in the Plan area. However, as CD&E waste management moves up the waste hierarchy and the demand for local landfill engineering and restoration materials at Bletchley Landfill Site ceases, then the need for CD&E waste transfer capacity may increase above available capacity.

Hazardous waste

The forecast **hazardous waste arisings in 2050** (based on the three waste arisings scenarios) are summarised below. For hazardous waste, the waste management needs are addressed in terms of the total waste management capacity requirement.

Waste stream	Low waste arisings scenario ('000's tonnes per annum)	Medium waste arisings scenario ('000's tonnes per annum)	High waste arisings scenario ('000's tonnes per annum)
Hazardous waste arisings and waste management need	12	13	15

The **capacity gap analysis for hazardous waste** identifies that:

- a capacity gap of approximately 5,000 to 8,0000 tonnes per annum may arise by the end of the Plan period.

As planning for the provision of hazardous waste infrastructure capacity is undertaken at a regional and national scale, any additional waste infrastructure capacity requirements will be addressed in this wider geographic context through existing or proposed facilities to meet collective regional or national demand for the wide range of hazardous waste types generated across the country.

Other waste streams

The small quantity of **agricultural waste, mining waste and low-level radioactive waste** arising in the Plan area was not considered sufficient to require the consideration of any specific waste infrastructure provision.

Cross boundary movements of waste

Waste exports from the Plan area (2018 to 2022) that exceed the guideline levels for the definition of strategic waste movements include:

- For HIC waste: 8 no. WPAs
- For CD&E waste: 3 no. WPAs
- For hazardous waste: 17 no. WPAs

Considerable waste infrastructure capacity is available in the geographic areas surrounding the Plan area and consultation with the relevant WPAs regarding strategic movements of waste is a consideration in developing the Waste Local Plan.

Waste imports into the Plan area also occur, particularly to the regionally important Bletchley Landfill Site and also to the Milton Keynes Waste Recovery Park and other waste management facilities.

1. Introduction

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The study area comprises the Milton Keynes administrative area, commencing in the baseline year of 2022 and extending to 2050.

This Waste Needs Assessment and Capacity Gap Analysis is set out in the following 12 sections:

- Section 1 Introduction
- Section 2 Policy context
- Section 3 Waste streams
- Section 4 Local Authority Collected Waste (LACW), baseline and forecast waste arisings and waste management
- Section 5 Commercial and Industrial (C&I) waste, baseline and forecast waste arisings and waste management
- Section 6 Construction, Demolition and Excavation (CD&E) waste, baseline and forecast waste arisings and waste management
- Section 7 Hazardous waste, baseline and forecast waste arisings
- Section 8 Other waste streams, including agricultural waste, mining waste, low-level radioactive waste and wastewater
- Section 9 Waste infrastructure capacity in the Plan area
- Section 10 Waste infrastructure capacity gap analysis
- Section 11 Cross boundary movements of waste
- Section 12 Conclusions and recommendations

2. Policy context

This section presents a summary of the main waste and planning policies and regulatory targets applicable to the Waste Needs Assessment and Capacity Gap Analysis.

The policies cover issues relating to waste prevention, recycling, economic growth, development, and waste management capacity. They are all policies which need to be followed by Milton Keynes City Council when planning for future waste needs. This includes policies set by the EU, which have been transposed into UK and/or English law, as well as policies set by national and local government.

Table 2-1 provides a summary of the relevant policy documents, outlines the primary purpose of each document, and how they are connected. A further description of each document has been provided in Appendix B.

Table 2-1 Key policy documents

Location	Document	Primary Purpose
European (EU)	Waste Framework Directive (WFD)	Principle EU legislation for waste. Sets out the basic concepts and definitions related to waste management, including the waste hierarchy and principles of proximity and self-sufficiency.
	Landfill Directive	Regulates the management of landfill sites in the EU.
	Circular Economy Package (CEP)	Legislative framework which revises a number of existing frameworks by introducing measures on adopting a circular economy.
National	National Planning Policy Framework (NPPF) (MHCLG, 2023)	Sets out planning policies for a wide range of topics including housing, business, economic development, transport and the natural environment.
	National Planning Policy for Waste (NPPW) (MHCLG, 2014)	Sets out detailed waste planning policies and should be read in conjunction with the National Planning Policy Framework (NPPF).
	Planning Practice Guidance: Waste (PPGW) (MHCLG, 2015)	Adds further context to the NPPF and NPPW and is updated when necessary. Should be read in conjunction with the NPPF.
	A Green Future: Our 25 Year Plan to Improve the Environment (HM Government, 2018a)	Sets out what the government will do to improve the environment within a generation.
	Our Waste, Our Resources: A Strategy for England (HM Government, 2018b)	Sets out how the government plans to help England preserve material resources by minimising waste, double resource productivity, eliminate avoidable waste of all kinds and move towards a circular economy.
	Waste Management Plan for England (Defra, 2021)	High-level document, bringing current and planned waste management policies together in one place, focusing on waste arisings and their management.
	Environmental Improvement Plan 2023: First revision of the 25 Year Environment Plan (HM Government, 2023)	Government review of the 25 Year Environment Plan, including updates to targets, commitments and actions, including long-term and interim targets to reduce residual waste.
Milton Keynes	Milton Keynes Waste Development Plan Document 2007 – 2026 (MKCC, 2008)	Sets out how the waste management requirements for the Milton Keynes administrative area will be achieved between 2007 and 2026.
	Plan:MK 2016 – 2031 (MKCC, 2019)	Milton Keynes' approach to local planning, setting out the vision and framework for the future development of the area.
	Milton Keynes Strategy for 2050 (MKCC, 2021)	Sets out seven big ambitions for the area covering sustainability, community, health and safety, education, and economic growth.

Key regulatory targets for waste management in England include:

- The Waste (England and Wales) Regulations 2011, as amended by the Waste (Circular Economy) (Amendment) Regulations 2020 set out *Preparing for re-use and recycling targets and landfill reduction targets* as:
  - the preparing for re-use and the recycling of municipal waste is a minimum of 65% by weight by 2035
  - the amount of municipal waste landfilled is reduced to 10% or less of the total amount of municipal waste generated (by weight) by 2035.

- The Environmental Targets (Residual Waste) (England) Regulations 2023 set out the *residual waste long-term target* as:
  - the total mass of residual waste for the calendar year 2042 does not exceed 287 kilograms per head of population in England.

Additional information is provided in Appendix B.

3. Waste streams

Planning Practice Guidance: Waste (PPGW) (MHCLG, 2015), at Paragraph 013, states that:

Waste planning authorities should plan for the sustainable management of waste including:

- *municipal/household*
- *commercial/industrial*
- *construction/demolition*
- *low level radioactive*
- *agricultural*
- *hazardous*
- *waste water*

To align with this guidance, this Waste Needs Assessment considers the following waste streams:

- Local Authority Collected Waste (LACW) (including household waste and other wastes collected by the local authority)
- Commercial and Industrial (C&I) waste
- Construction, Demolition and Excavation (CD&E) waste
- Hazardous waste
- Other waste streams:
  - Mining wastes
  - Agricultural wastes
  - Low level radioactive waste
  - Waste water

For each of the waste streams, sections 4 to 8 describe, where applicable:

- estimates of the baseline annual waste arisings in the Plan area over the past 10 years (2013 to 2022)
- forecasts of the estimated future annual waste arisings over the Plan period to 2050
- estimates of the baseline waste management scenario
- forecasts of likely future waste management scenarios over the Plan period to 2050

The forecasts of future waste arisings and waste management scenarios are used to estimate the requirement for waste management capacity within the Plan area over the Plan period, the likely availability of waste management infrastructure capacity and any identified gaps or shortfall in waste management capacity.

4. Local Authority Collected Waste (LACW)

4.1 Introduction

Local authorities in the UK have statutory duties to arrange for the collection and management of household waste within their administrative area. In undertaking these duties, local authorities offer householders access to waste services such as kerbside collections, bulky waste collections, bring banks and household waste recycling centres (HWRC). Local authorities also have duties to arrange for collection of commercial waste from premises in their administrative area (if requested) and to ensure highways and roads are kept clean and free from litter and refuse.

Local authorities are required to report information on the types and quantities of waste they collect through undertaking these duties. The information is reported on a quarterly basis into a web-based system called WasteDataFlow. This data source offers a consistent approach for reporting at the local authority level and is used to produce National (e.g. England) and UK waste statistics for reporting against key performance indicators and targets.

There are three main local authority waste recycling measures (and recycling rates) presented in the National and Official statistical publications and datasets which are calculated from local authority waste collection and disposal data. Defra's Recycling Explainer (Defra, 2024d) summarises these measures as:

- Waste from households: Waste collected via local authority kerbside collections from households, HWRCs and bring banks. Excludes construction & demolition type waste collected by local authorities and waste collected via street cleaning activities.
- Household waste: As for 'Waste from households' plus waste collected via other local authority waste activities such as street cleaning, parks and grounds, street bins etc.
- Local authority collected waste (LACW): As for 'Household waste' plus non household waste and any commercial waste collected and managed by local authorities. Essentially all waste collected by local authorities.

For the purpose of this Waste Needs Assessment, household waste and local authority collected waste data are used.

All other waste generated in the UK is collected and managed by private sector companies and is therefore excluded from local authority collected waste. This includes where a householder makes alternative arrangements for removing some waste from their home, such as via private sector waste skips, or manages waste themselves via, for example, home composting.

This section sets out the baseline waste arisings for LACW in the Plan area and provides three scenarios for forecasts of LACW arisings from the baseline year (2022) until 2050. It also sets out the baseline for waste management and provides three forecast scenarios for waste management from the baseline year (2022) until 2050. The associated waste infrastructure capacity requirements are presented for each waste management scenario.

4.2 LACW: Baseline waste arisings

To establish the baseline LACW arisings for Milton Keynes, data was extracted from WasteDataFlow and from Defra's accredited official statistics for LACW (Defra 2024b), which provide collated data from WasteDataFlow on household waste and LACW collection and management by financial year to 2022/2023.

In September 2023, Milton Keynes City Council introduced a new containerised waste collection system for most households, which replaced a previous bagged waste collection system. The new containerised waste collection system aimed to reduce total waste

collected and increase recycling and composting rates by reducing the residual waste storage capacity available to households and providing for the segregation of recyclable and compostable waste. This collection system comprises:

- Red lid wheelie bin: paper and cardboard, collected fortnightly
- Blue lid wheelie bin: plastic (bottles, pots, tubs, trays (including black plastic), Tetrapak), metals (including foil and lids) and glass, collected fortnightly
- Green wheelie bin or caddy: Co-mingled food waste and garden waste, collected weekly
- Yellow bag: household batteries, laptop and mobile phone batteries, collected weekly with the green wheelie bin
- Black wheelie bin: residual waste, collected weekly

To enable the effect of introducing the new containerised collection system to be considered within the LACW baseline waste arisings, Milton Keynes City Council provided provisional data from WasteDataFlow for the first two quarters of operation of the new collection system (October to December 2023 and January to March 2024). This data was combined and used on a pro-rata basis to give an estimate of LACW under the new waste collection system. The calculation does not account for any seasonality in waste arisings and therefore should be used as a guide only.

Further information on the methodology used to estimate the baseline LACW arisings can be found in Appendix C.

Table 4-1 and Figure 4-1 show the baseline LACW arisings for each calendar year from 2013/14 to 2022/23, presented as total household waste, total non-household waste and household waste per head of population.

Total household waste arisings have ranged between approximately 116,000 and 125,000 tonnes per annum. Figure 4-1 shows a general decline in total household waste arisings since 2016/17, and a corresponding decline in household waste per head of population.

The quantity of total non-household waste (e.g. non household waste and any commercial waste collected and managed by the local authority) has ranged from approximately 7,000 to 10,000 tonnes per annum, representing between 6 and 8% of total LACW arisings.

WasteDataFlow data for the first two quarters of operation of the new containerised collection system (October to December 2023 and January to March 2024) indicate a potential reduction in the quantity of LACW collected. However, as seasonality in waste types and quantities is not fully accounted for in the data (for example, higher quantities of garden waste arising in the summer months), it should be used cautiously and continue to be monitored.

Table 4-1 LACW baseline waste arisings, 2013/14 – 2022/23

Year	Total household waste ('000's tonnes)	Total non-household waste ('000's tonnes)	Total LACW ('000's tonnes)	Population (Note 2)	Household waste per head of population (tonnes)	LACW per head of population (tonnes)
2013/14	116	9	125	255,692	0.457	0.496
2014/15	119	10	130	259,245	0.464	0.507
2015/16	124	10	134	261,762	0.472	0.517
2016/17	125	9	134	264,479	0.470	0.512
2017/18	124	7	131	267,521	0.460	0.495
2018/19	117	10	127	268,607	0.434	0.475
2019/20	120	10	129	269,457	0.441	0.480
2020/21	117	7	124	270,203	0.432	0.461
2021/22	121	8	129	288,201	0.421	0.478
2022/23	116	9	125	292,180	0.395	0.432
Estimate for new containerised waste collection system (Note 1)	106	5	111	292,180	0.360	0.380

Note 1: based on data for October to December 2023 and January to March 2024 only. Does not include any adjustments for seasonality.

Note 2: The large increase in population between the year 2020/21 and 2021/22 is due to the 2021 census data providing more robust population estimates in 2021/22.

Source: WasteDataFlow and Defra 2024b

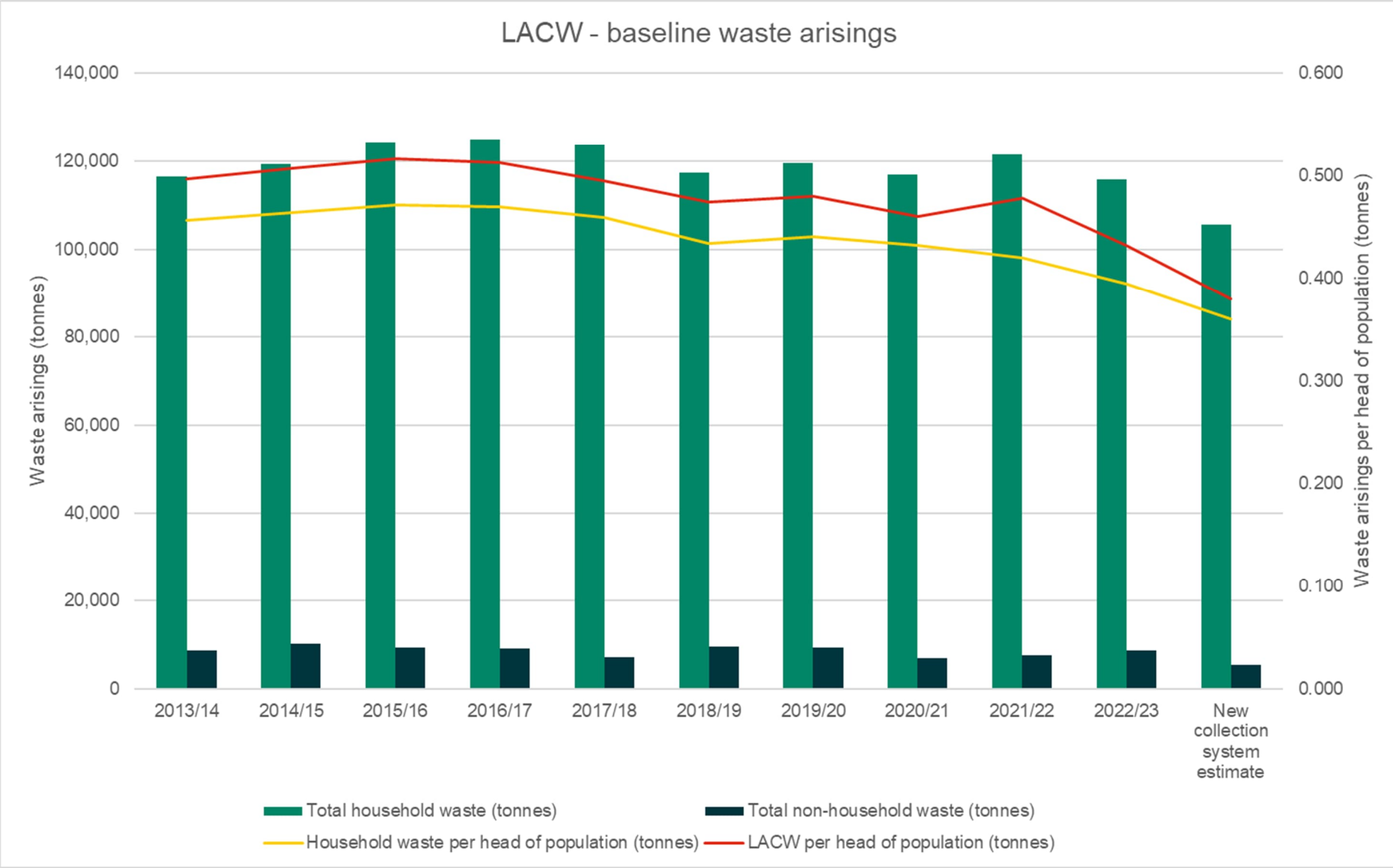

Figure 4-1 LACW baseline waste arisings (tonnes), 2013/14 – 2022/23

4.3 LACW: Forecast waste arisings

The PPGW (MHCLG, 2015), at paragraph 028, provides the following guidance on how waste planning authorities should forecast waste arisings:

> *"Waste planning authorities should anticipate and forecast the amount of waste that should be managed at the end of the plan period. They should also forecast waste arising at specific points within the plan period, so as to enable proper consideration of when certain facilities might be needed. However, the right balance needs to be made between obtaining the best evidence to inform what will be necessary to meet waste needs, while avoiding unnecessary and spurious precision."*

Regarding forecasting of LACW arisings, the PPGW (MHCLG, 2015), at paragraph 029, recommends forecasting future arisings by:

> "*….setting out a 'growth profile' based on two factors:*
>
> - *household or population growth; and*
> - *waste arisings per household or per capita."*

At paragraph 030, the PPGW (MHCLG, 2015), recommends establishing the growth profile by:

> - *"calculating arisings per head by dividing annual arisings by population or household data to establish short- and long-term average annual growth rates per household; and*
> - *factoring in a range of different scenarios, e.g. constant rate of growth, progressively lowering growth rates due to waste minimisation initiatives.*
>
> *The final forecast can then be modelled with scenarios based on the long- and short-term rate of growth per household or per capita, together with forecasts of household numbers or population."*

The LACW forecast waste arising scenarios are set out in Table 4-2 and combine scenarios for population growth and changes in LACW per head of population.

The scenarios for population growth are based on Milton Keynes aspirations for growth that are set out in the emerging Milton Keynes City Plan 2050 (MKCC, 2024) and the associated Housing and Economic Development Needs Assessment (HEDNA) (Opinion Research Services and Hardisty Jones Associates, 2024). Emerging housing growth trajectory has been applied to the total housing growth figures.

The scenarios for LACW per head of population are based on historic trends, which have seen a decline since 2015/16, and the need for waste minimisation to play its part in delivering the long-term residual waste target by 2042 (Environmental Targets (Residual Waste) (England) Regulations 2023).

It is noted that although the scenarios are based on a reduction in LACW per head of population, the aspirations for high population growth within Milton Keynes, will result in the combined effect of an overall increase in forecast LACW arisings in the Plan area.

Table 4-2 LACW forecast waste arisings scenarios

Parameter	Low waste arisings scenario	Medium waste arisings scenario	High waste arisings scenario
Population	Low population growth: Based on Standard Housing Method. 2022 baseline: • homes: c.119,900 • population: c.290,000 By 2050: • homes: +53,200 new homes (total c.173,000) • population: c. 391,000	High population growth: Based on MK City Plan 2050 preferred scenario. 2022 baseline: • homes: c.119,900 • population: c.290,000 By 2050: • homes: +63,000 new homes (total c.183,000) • population: c. 409,000	High population growth: Based on MK City Plan 2050 preferred scenario. 2022 baseline: • homes: c.119,900 • population: c.290,000 By 2050: • homes: +63,000 new homes (total c.183,000) population: c. 409,000
LACW per head of population	High decline scenario: 2022 baseline: • 0.432 tonnes LACW per head of population Decline: • 15% reduction in tonnes per head of population by 2042 (to contribute to the long-term residual waste target). • 2042 to 2050 no further change.	High decline scenario: 2022 baseline: • 0.432 tonnes LACW per head of population Decline: • 15% reduction in tonnes per head of population by 2042 (to contribute to the long-term residual waste target). • 2042 to 2050 no further change.	Low decline scenario: 2022 baseline: • 0.432 tonnes LACW per head of population Decline: • 5% reduction in tonnes per head of population by 2042 (to contribute to the long-term residual waste target). • 2042 to 2050 no further change.

The estimates of LACW forecast waste arisings based on the scenarios presented in Table 4-2 are summarised in Table 4-3 at 5-yearly intervals. The full set of output data is included in Appendix D and presented in Figure 4-2.

Table 4-3 LACW forecast waste arisings (in five-year intervals), 2022 – 2050

Year	Low waste arisings scenario ('000's tonnes)	Medium waste arisings scenario ('000's tonnes)	High waste arisings scenario ('000's tonnes)
2022	125	125	125
2027	128	130	133
2032	133	136	144
2037	135	140	152
2042	136	141	158
2047	141	147	164
2050	144	150	168

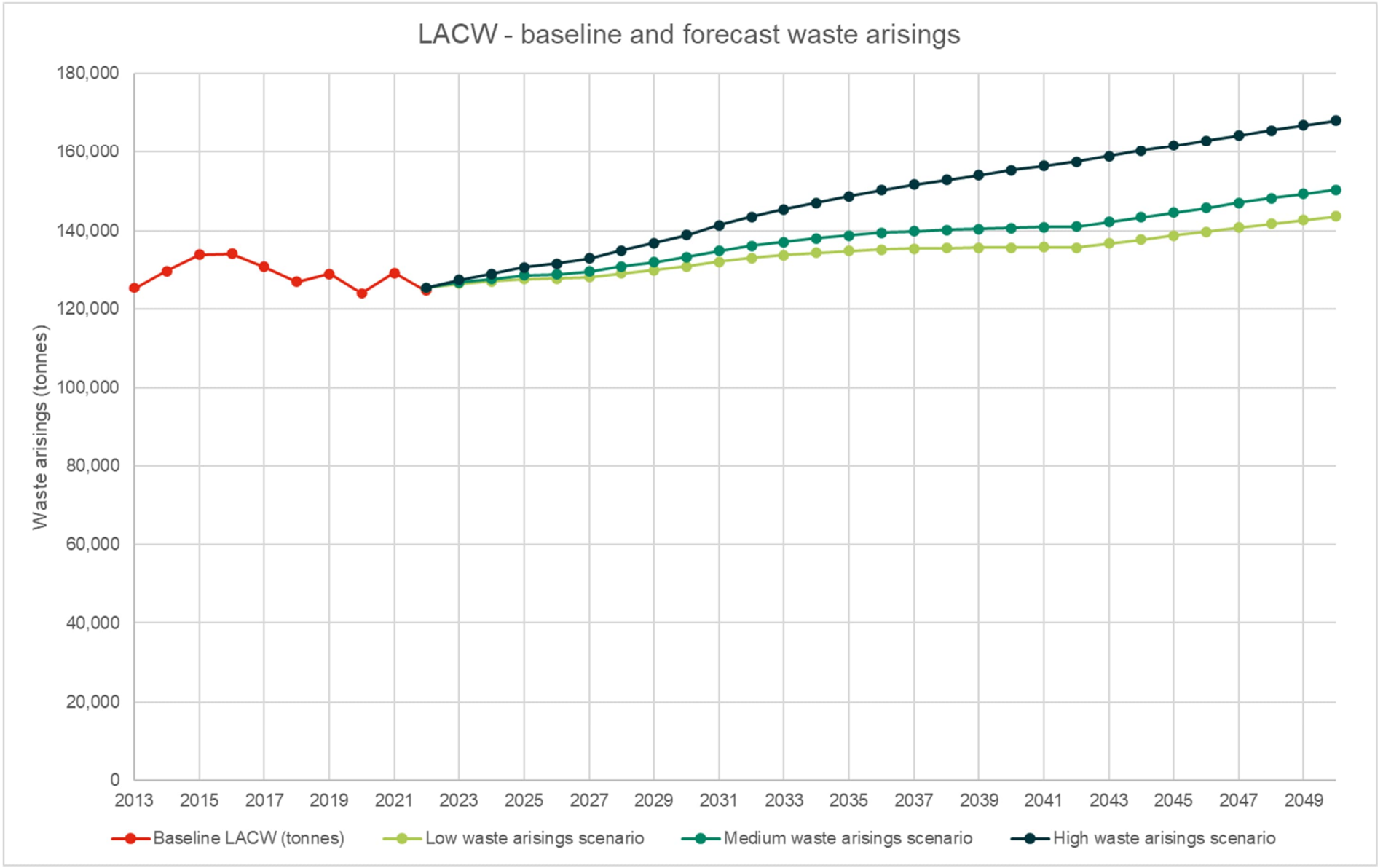

Figure 4-2 LACW baseline and forecast waste arisings (tonnes), 2013 – 2050

4.3.1 LACW: Forecast waste arisings preferred scenario

MKCC has adopted the 'high waste arisings scenario' as the preferred scenario for assessment in the capacity gap analysis (section 10). This scenario was selected as it reflects a likely worst-case scenario for the quantity of waste arising in the Plan area over the Plan period and therefore will reduce the risks involved in allocating land for a lower number of waste management facilities than what may actually be needed i.e. sites being proposed in (unallocated) less preferable locations close to sensitive receptors.

It is important to note however, that MKCC aspirations for LACW arisings are to achieve the best per capita waste reductions as possible, thereby reducing waste arisings and helping to reduce the need for more sites for waste management infrastructure.

4.4 LACW: Baseline waste management

To establish the baseline for LACW waste management in Milton Keynes data was extracted from WasteDataFlow and from Defra's accredited official statistics for LACW (Defra 2024b) by financial year from 2014/15 to 2022/23. Data for 2023/14 was not included within Defra's accredited official statistics for LACW (Defra 2024b) and is therefore not included in the data presented in this section.

LACW baseline waste management is presented in Table 4-4 using the following categories of waste management, as per Defra's accredited official statistics for LACW (Defra 2024b):

- Recycle / compost / AD
- Incineration / energy recovery
- Landfill
- Other (includes process losses and process rejects)

The data in Table 4-4 is presented in both tonnage and the percentage of the total waste managed for each category of waste management.

Table 4-4 shows a clear step-change in waste management in 2017 and 2018 as a result of the Milton Keynes Waste Recovery Park becoming fully operational and the associated shift from managing LACW via landfill to the new incineration/energy recovery facility.

Table 4-4 identifies annual variability in both the tonnage and percentage of LACW waste managed via each category of waste management, which has continued to be observed during the years since the Milton Keynes Waste Recovery Park become fully operational. The highest percentage of recycling / composting / AD was recorded in 2018/19 (59.4%) and 2019/20 (57.2%). This percentage reduced during 2020/21 (53.8%) and 2021/22 (52.0%) potentially due to changes in waste arising and management resulting from the Covid-19 pandemic restrictions.

The LACW waste management data for 2022/23 includes an extended period of down-time at the Milton Keynes Waste Recovery Park thermal treatment facility during which, waste was managed via a number of alternative routes reported, predominantly, in the 'Other' category of waste management. Since these waste management routes are not representative of the typical arrangement for LACW in Milton Keynes, the data for 2022/23 has been excluded from the baseline. The limitations of the 2022/23 data also reduce the understanding of how waste management has recovered post- Covid-19 pandemic.

Therefore, the baseline waste management scenario for LACW is assumed to comprise the average of the three years 2019/20, 2020/21 and 2021/22.

Waste managed in the 'other' waste management category is assumed, as a worst-case scenario, to be sent to landfill (Defra, 2024c; Defra 2024d).

The new containerised waste collection system for households and businesses introduced by Milton Keynes City Council in September 2023, is targeted at reducing total LACW collected and increasing percentages of recycling /composting / AD by reducing the residual waste storage capacity available to households and businesses and providing for the segregation of recyclable and compostable waste. When waste management data for the new waste collection system becomes available, the LACW baseline waste management assumptions should be monitored and reviewed.

Table 4-4 LACW baseline waste management, 2014/15 – 2022/23

Year	Recycle / Compost / AD		Incineration / Energy recovery		Landfill		Other (Note 1)		Total LACW
	(tonnes)	(%)	(tonnes)	(%)	(tonnes)	(%)	(tonnes)	(%)	(tonnes)
2014/15	67,623	52.1	34,346	26.5	27,721	21.4	7	0.0	129,697
2015/16	68,825	51.4	29,643	22.1	37,103	27.7	-1,640	-1.2	133,931
2016/17	70,548	52.6	24,186	18.0	39,390	29.4	0	0.0	134,124
2017/18	69,835	53.4	43,229	33.0	17,138	13.1	659	0.5	130,861
2018/19	75,400	59.4	42,185	33.2	3,276	2.6	6,138	4.8	126,999
2019/20	73,844	57.2	41,287	32.0	5,755	4.5	8,169	6.3	129,055
2020/21	66,736	53.8	49,239	39.7	50	0.04	8,059	6.5	124,084
2021/22	67,243	52.0	48,242	37.3	1,242	1.0	12,482	9.7	129,209
2022/23 (Note 2)	60,160	48.3	28,956	23.2	774	0.6	34,751	27.9	124,641
Baseline, 3-year average (Note 3)	**69,274**	**54.4**	**46,256**	**36.3**	**2,349**	**1.8**	**9,570**	**7.5**	**127,449**

Note 1: 'Other' includes process losses and process rejects.

Note 2: LACW waste management data for 2022/23 includes an extended period of down-time at the Milton Keynes Waste Recovery Park thermal treatment facility during which, waste was managed via a number of alternative routes captured, predominately, in the 'Other' category of waste management.

Note 3: Baseline waste management assumed to comprise the average of the three years 2019/20, 2020/21 and 2021/22. The year 2022/23 has been excluded from the baseline as it is not representative due to the reasons in Note 2.

Source: WasteDataFlow and Defra 2024b

4.5 LACW: Forecast waste management

To estimate the waste management capacity required for each category of waste management facility during the Plan period, the LACW waste management scenarios in Table 4-5 were developed to reflect the waste management requirements of low, medium and high recycling scenarios. These waste management scenarios are based on local baseline performance, and local and national policy and targets.

Table 4-5 LACW waste management scenarios

Waste management	Low recycling scenario	Medium recycling scenario	High recycling scenario
Recycle / Compost / AD	All years to 2050: • No change from baseline waste management. • 54.4%	Baseline year: 54.4% By 2035: • 65%, in line with national targets (Defra, 2021) • Assume linear percentage growth 2036 to 2050: • No further change, 65%	Baseline year: 54.4% By 2025: • 60%, in line with Milton Keynes Waste Development Plan Document 2007 – 2026 (MKCC, 2008)) • Assume linear percentage growth By 2035: • 65%, in line with national targets (Defra, 2021) • Assume linear percentage growth. By 2042: • 70%, further increase towards achieving residual waste long term target (HM Government, 2023) • Assume linear percentage growth 2043 to 2050: • No further change, 70%.
Incineration / Energy recovery	All years to 2050: • No change from baseline waste management. • 36.3%	Baseline year: 36.3% All years: • Percentage balance that is not managed via recycle / compost / AD or landfill • 2035: 28.5% • 2042: 30.0% • 2050: 30.0%	Baseline year: 36.3% All years: • Percentage balance that is not managed via recycle / compost / AD or landfill • 2035: 30.0% • 2042: 25.0% • 2050: 25.0%
Landfill	All years to 2050: • No change from baseline waste management. • 9.3% • Meets national target for municipal waste to landfill not exceeding 10% by 2035 ((Defra, 2021)	Baseline year: 9.3%/ By 2042: • 5%, further decrease to move waste up the waste hierarchy and towards achieving residual waste long term target (HM Government, 2023) • Assume linear percentage reduction 2043 to 2050: • No further change, 5%	Baseline year: 9.3%/ By 2035: • 5%, further decrease to move waste up the waste hierarchy and towards achieving residual waste long term target (HM Government, 2023) • Assume linear percentage reduction 2036 to 2050: • No further change, 5%

The LACW waste management scenarios (Table 4-5) have been applied to the LACW forecast waste arisings for the 'high waste arisings scenario' (Table 4-3 and Figure 4-2). The resulting tonnage of LACW by waste management category for the Plan years of 2035, 2042 and 2050 are shown in Table 4-6, and illustrate the likely waste management needs for LACW in the Plan area.

It should be noted that the estimated quantity of LACW to landfill is a likely maximum for the purpose of ensuring a sufficient supply of landfill capacity. This does not preclude this waste from being managed higher up the waste hierarchy (e.g. incineration / energy recovery or recycle / compost / AD) where viable.

Table 4-6 LACW waste management needs profile in 2035, 2042 and 2050, high waste arisings scenario ('000s tonnes)

Year	Waste management	Low recycling scenario	Medium recycling scenario	High recycling scenario
2035	Recycle / Compost / AD	81	97	97
	Incineration / Energy recovery	54	42	45
	Landfill	14	10	7
2042	Recycle / Compost / AD	86	102	110
	Incineration / Energy recovery	57	47	39
	Landfill	15	8	8
2050	Recycle / Compost / AD	91	109	118
	Incineration / Energy recovery	61	50	42
	Landfill	16	8	8

5. Commercial and Industrial (C&I) waste

5.1 Introduction

Commercial and industrial (C&I) waste consists of waste generated by businesses and industrial operations, including retail units, offices and any other business, trade or factory. A small proportion of C&I waste is collected by the local authority and is included within the LACW arisings, with the remainder collected and managed by private sector companies.

This section sets out the baseline waste arisings for C&I waste in the Plan area and provides three scenarios for forecasts of C&I waste arisings from the baseline year (2022) until 2050.

5.2 C&I: Baseline waste arisings

There is no regulatory requirement for most commercial and industrial waste producers to report on the waste that they generate. Methodologies have been developed at the national level for estimating C&I waste arisings (Defra, 2014 and Defra, 2018). However, it is important to note that these methodologies produce an estimate of C&I waste arisings that is subject to considerable uncertainty. Adaptations of these methods can be applied at the WPA level, however, due to the uncertainty in the outputs, should be considered as an estimate only.

C&I waste arisings for the Plan area have been estimated by adapting the Defra 'reconcile' methodology (Defra, 2014) for use at the WPA level. This methodology was adopted as it provides a simpler approach that can be applied to each of the last 10 years of waste arisings data (taking account of changes in data collected over that time), which enables variability and changes in waste arisings and management over time, to be considered.

The adapted 'reconcile' methodology includes:

- waste received by permitted facilities (with a waste origin of the Plan area)
- waste received by incineration facilities (with a waste origin of the Plan area)

and the following are excluded:

- LACW, CD&E waste, hazardous waste, agricultural waste and mining waste streams (as these are accounted for elsewhere in this assessment)
- waste received by transfer facilities (to reduce double counting of waste as it moves between transfer and treatment or disposal facilities).

More information on the methodology used to calculate baseline C&I waste arisings is provided in Appendix C.

It should be noted that for Milton Keynes Waste Recovery Park the Waste Data Interrogator does not identify any inputs coded as having an origin WPA of Milton Keynes. Instead, the waste inputs from Milton Keynes have been coded with an origin WPA of Buckinghamshire and, as such, are not identified as waste arising from Milton Keynes. As inputs to the Milton Keynes Waste Recovery Park account for a significant proportion of the Milton Keynes LACW, a conservative approach was adopted and the quantities of LACW were not deducted during the estimation of C&I waste.

The estimated baseline C&I waste arisings for the years 2013 to 2022 are shown in Table 5-1 and Figure 5-1.

Annual arisings vary between approximately 115,000 and 185,000 tonnes per annum, with peak years observed in 2015 and 2021.

Table 5-1 C&I waste baseline waste arisings, 2013 – 2022

Year	Total C&I waste ('000's tonnes)
2013	143
2014	134
2015	185
2016	146
2017	135
2018	129
2019	114
2020	148
2021	179
2022	151

Source: Waste Data Interrogator, Incinerator waste returns, WasteDataFlow

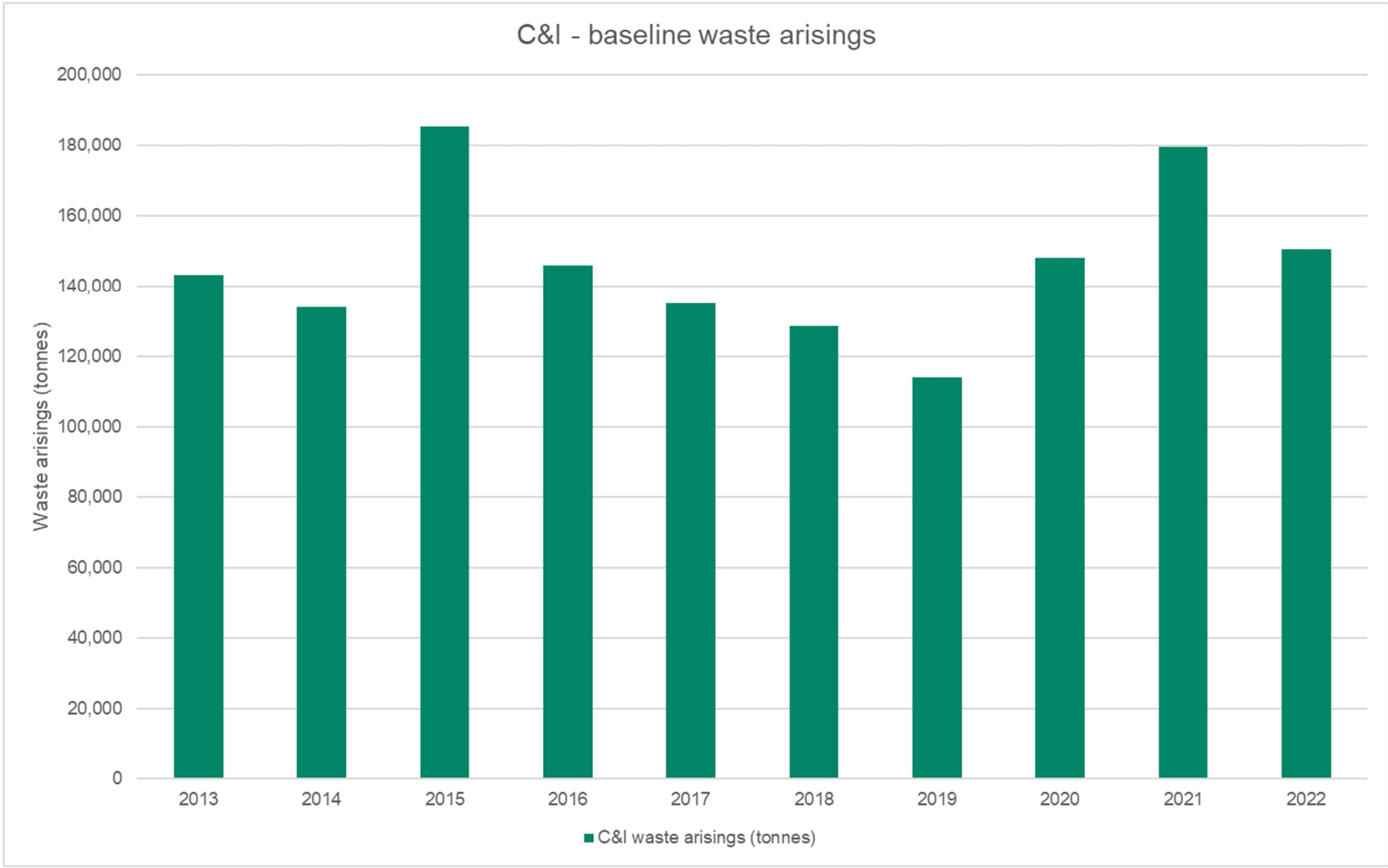

Figure 5-1 C&I waste baseline waste arisings (tonnes), 2013 – 2022

5.3 C&I: Forecast waste arisings

As for LACW, the PPGW (MHCLG, 2015), at paragraph 028, provides the following guidance on how waste planning authorities should forecast waste arisings:

> *"Waste planning authorities should anticipate and forecast the amount of waste that should be managed at the end of the plan period. They should also forecast waste arising at specific points within the plan period, so as to enable proper consideration of when certain facilities might be needed. However, the right balance needs to be made between obtaining the best evidence to inform what will be necessary to meet waste needs, while avoiding unnecessary and spurious precision."*

Regarding forecasting of C&I waste arisings, the PPGW (MHCLG, 2015), at paragraph 032, recommends forecasting future arisings as follows:

> *"Waste planning authorities can prepare growth profiles, similar to municipal (LACW) waste, to forecast future commercial and industrial waste arisings. In doing so, however, they should:*
>
> - *set out clear assumptions on which they make their forecast, and if necessary forecast on the basis of different assumptions to provide a range of waste to be managed*
> - *be clear on rate of growth in arisings being assumed. Waste planning authorities should assume a certain level of growth in waste arisings unless there is clear evidence to demonstrate otherwise."*

The C&I waste forecast waste arising scenarios are set out in Table 5-2 and combine scenarios for growth in employee numbers and changes in C&I waste per employee.

The scenarios for growth in employee numbers are based on Milton Keynes aspirations for growth that are set out in the HEDNA (Opinion Research Services and Hardisty Jones Associates, 2024, section 8) based on the proposed economic scenarios, which also align with the proposed Housing Needs Scenarios. Linear growth is assumed, in line with HEDNA.

The scenarios for C&I waste per employee are based on a baseline year of 2022 and, similarly to LACW, are based on the need for waste minimisation to play its part in delivering the long-term residual waste target by 2042 (Environmental Targets (Residual Waste) (England) Regulations 2023).

It is noted that although the scenarios are based on a reduction in C&I waste per employee, the aspirations for high employment growth within Milton Keynes, will result in the combined effect of an overall increase in forecast C&I waste arisings in the Plan area, although in the low waste arisings scenario waste arisings are almost constant.

Table 5-2 C&I forecast waste arisings scenarios

Parameter	Low waste arisings scenario	Medium waste arisings scenario	High waste arisings scenario
Employees	Low employee growth: Based on HEDNA low economic scenario. 2022 baseline: • employees: c.194,000 (MKCC, 2024) Employee growth: • 1,600 new jobs per year 2022 to 2050	Mid employee growth: Based on HEDNA low economic scenario. 2022 baseline: • employees: c.194,000 (MKCC, 2024) Employee growth: • 2,100 new jobs per year 2022 to 2050	High employee growth: Based on HEDNA low economic scenario. 2022 baseline: • employees: c.194,000 (MKCC, 2024) Employee growth: • 2,700 new jobs per year 2022 to 2050
C&I waste per employee	High decline scenario: 2022 baseline: • 0.776 tonnes C&I waste per employee Decline: • 15% reduction in tonnes per employee by 2042 (to contribute to the long-term residual waste target). • 2042 to 2050 no further change.	Mid decline scenario: 2022 baseline: • 0.776 tonnes C&I waste per employee Decline: • 10% reduction in tonnes per employee by 2042 (to contribute to the long-term residual waste target). • 2042 to 2050 no further change.	Low decline scenario: 2022 baseline: • 0.776 tonnes C&I waste per employee Decline: • 5% reduction in tonnes per employee by 2042 (to contribute to the long-term residual waste target). • 2042 to 2050 no further change.

The estimates of forecast C&I waste arisings based on the scenarios presented in Table 5-2 are summarised in Table 5-3 at 5-yearly intervals. The full set of output data is included in Appendix D and presented in Figure 5-2.

Table 5-3 C&I waste forecast waste arisings (in five-year intervals) (000s tonnes), 2022 – 2050

Year	Low waste arisings scenario	Medium waste arisings scenario	High waste arisings scenario
2022	151	151	151
2027	151	155	159
2032	151	158	167
2037	150	162	175
2042	149	165	183
2047	154	172	193
2050	158	177	199

5.3.1 C&I: Forecast waste arisings preferred scenario

MKCC has adopted the ‘high waste arisings scenario’ as the preferred scenario for assessment in the capacity gap analysis (section 10). As for LACW, this scenario was selected as it reflects a likely worst-case scenario for the quantity of waste arising in the Plan area over the Plan period and therefore will reduce the risks involved in allocating land for a lower number of waste management facilities than what may actually be needed i.e. sites being proposed in (unallocated) less preferable locations close to sensitive receptors.

It is important to note however, that MKCC aspirations for C&I waste arisings are to achieve the best per employee waste reductions as possible, thereby reducing C&I waste arisings and helping to reduce the need for more sites for waste management infrastructure.

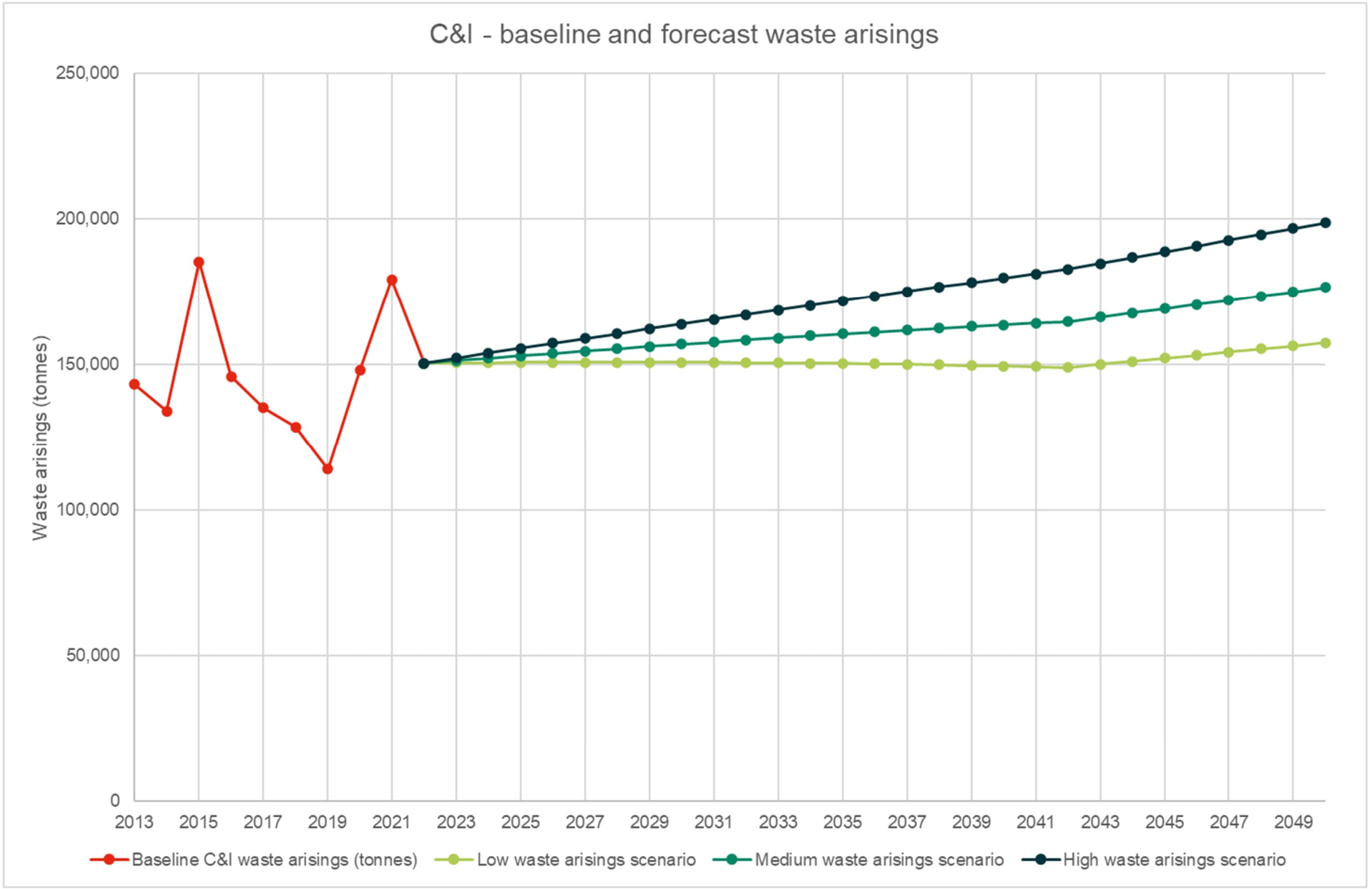

Figure 5-2 C&I waste baseline and forecast waste arisings (tonnes), 2013 – 2050

5.4 C&I: Baseline waste management

To establish the baseline for C&I waste management in Milton Keynes data on the waste management facilities receiving C&I waste arisings from Milton Keynes was extracted from Waste Data Interrogator (for the calendar years from 2013 to 2022) and Incinerator Waste Returns (for the calendar years from 2016 to 2018).

C&I baseline waste management is presented in Table 5-4. The data in Table 5-4 is presented in both tonnage and the percentage of the total waste managed for each category of waste management.

Table 5-4 shows a general trend for C&I waste over the past 10 years towards higher percentages for recycle / compost / AD and incineration / energy recovery and lower percentages to landfill, in line with national policy and trends.

Therefore, the baseline waste management scenario for C&I waste is assumed to comprise the 2022 data.

Table 5-4 C&I baseline waste management, 2013– 2022

Year	Recycle / Compost / AD		Incineration / Energy recovery (Note 1)		Landfill		Total C&I waste
	(tonnes)	(%)	(tonnes)	(%)	(tonnes)	(%)	(tonnes)
2013	55,703	38.9	11,747	8.2	75,786	52.9	143,236
2014	59,102	44.0	11,747	8.8	63,365	47.2	134,213
2015	101,210	54.6	11,747	6.3	72,480	39.1	185,437
2016	60,151	41.2	11,747	8.0	74,041	50.7	145,939
2017	49,059	36.3	4,219	3.1	82,008	60.6	135,286
2018	44,478	34.6	835	0.6	83,409	64.8	128,722
2019	55,190	48.4	10,104	8.9	48,761	42.8	114,055
2020	84,315	56.9	21,603	14.6	42,239	28.5	148,157
2021	101,900	56.8	22,922	12.8	54,578	30.4	179,400
2022	94,710	62.9	24,002	15.9	31,829	21.1	150,542

Note 1: Annual C&I waste inputs to incineration in 2013 to 2015 are assumed to be the same as in 2016.

Source: WasteDataFlow and Incinerator Waste Returns

5.5 C&I: Forecast waste management

To estimate the waste management capacity required for each category of waste management facility during the Plan period, the C&I waste management scenarios in Table 5-5 were developed to reflect the waste management requirements of low, medium and high recycling scenarios. These waste management scenarios are based on local baseline performance, and local and national policy and targets.

Table 5-5 C&I waste management scenarios

Waste management	Low recycling scenario	Medium recycling scenario	High recycling scenario
Recycle / Compost / AD	All years to 2050: • No change from baseline waste management. • 62.9%	Baseline year: 62.9% By 2035: • 65%, in line with national target for municipal waste (Defra, 2021) • Assume linear percentage growth 2035 to 2050: • No further change, 65%	Baseline year: 62.9% By 2025: • 65%, in line with Milton Keynes Waste Development Plan Document 2007 – 2026 (MKCC, 2008)) • Assume linear percentage growth By 2042: • 70%, further increase towards achieving residual waste long term target (HM Government, 2023) • Assume linear percentage growth 2043 to 2050: • No further change, 70%
Incineration / Energy recovery	All years to 2050: • No change from baseline waste management. • 15.9%	Baseline year: 15.9% All years: • Percentage balance that is not managed via recycle / compost / AD or landfill • 2035: 25.0% • 2042: 25.0% • 2050: 25.0%	Baseline year: 15.9% All years: • Percentage balance that is not managed via recycle / compost / AD or landfill • 2035: 22.1% • 2042: 20.0% • 2050: 20.0%
Landfill	All years to 2050: • No change from baseline waste management. • 21.1%	Baseline year: 21.1% By 2035: • 10%, in line with national target for municipal waste to landfill not exceeding 10% by 2035 ((Defra, 2021) • Assume linear percentage reduction 2036 to 2050: • No further change, 10%	Baseline year: 21.1% By 2035: • 10%, in line with national target for municipal waste to landfill not exceeding 10% by 2035 ((Defra, 2021) • Assume linear percentage reduction 2036 to 2050: • No further change, 10%

The C&I waste management scenarios (Table 5-5) have been applied to the C&I forecast waste arisings for the 'high waste arisings scenario' (Table 5-3 and Figure 5-2). The resulting tonnage of C&I waste by waste management category for the Plan years of 2035, 2042 and 2050 are shown in Table 5-6, and illustrate the likely waste management needs for C&I waste in the Plan area.

As with LACW, it should be noted that the estimated quantity of C&I waste to landfill is a likely maximum for the purpose of ensuring a sufficient supply of landfill capacity. This does not preclude this waste from being managed higher up the waste hierarchy (e.g. incineration / energy recovery or recycle / compost / AD) where viable.

Table 5-6 C&I waste management needs profile in 2035, 2042 and 2050, high waste arisings scenario ('000s tonnes)

Year	Waste management	Low recycling scenario	Medium recycling scenario	High recycling scenario
2035	Recycle / Compost / AD	108	112	117
	Incineration / Energy recovery	27	43	38
	Landfill	36	17	17
2042	Recycle / Compost / AD	115	119	128
	Incineration / Energy recovery	29	46	37
	Landfill	39	18	18
2050	Recycle / Compost / AD	125	129	139
	Incineration / Energy recovery	32	50	40
	Landfill	42	20	20

6. Construction, Demolition and Excavation (CD&E) waste

6.1 Introduction

Construction, demolition and excavation (CD&E) waste comprises all waste generated by construction activities, which may include construction of buildings and infrastructure, demolition works, and excavation of soil and rock for construction purposes.

This section sets out the baseline waste arisings for CD&E waste in the Plan area and provides two scenarios for forecasts of CD&E waste arisings from the baseline year (2022) until 2050.

6.2 CD&E: Baseline waste arisings

There is no regulatory requirement for businesses to report on the CD&E waste that they generate. Methodologies have been developed at the national level (Defra, 2012) and regional level for estimating CD&E waste arisings. However, it is important to note that these methodologies produce an estimate of CD&E waste arisings that is subject to considerable uncertainty. Adaptations of these methods can be applied at the WPA level, however, due to the uncertainty in the outputs, should be considered as an estimate only.

The CD&E waste arisings for the Plan area have been estimated by adapting Defra's 'Methodology for estimating annual waste generation from the Construction, Demolition and Excavation (CD&E) Sectors in England' (Defra, 2012) to the WPA level. For the purposes of this assessment, CD&E waste has been defined as waste with a waste code of chapter 17, sub-chapter 19 13, 19 12 09 or 20 02 02.

This methodology considers:

- CD&E waste received by permitted facilities (with a waste origin of the Plan area).
- CD&E waste received by incineration facilities (with a waste origin of the Plan area).

- CD&E waste received by exempt facilities (located within the Plan area).
- Waste recycled as aggregate (with a waste origin of the Plan area).

The following wastes are excluded:

- CD&E waste received by transfer facilities (to reduce double counting of waste as it moves between transfer and treatment or disposal facilities).

More information on the methodology to calculate CD&E waste arisings has been presented in Appendix C.

The baseline CD&E waste arisings for the plan area are shown in Table 6-1 and Figure 6-1. Variation in CD&E waste arisings are observed between years with a range of between approximately 107,000 and 1.04 million tonnes per annum. The years 2020 and 2021 identify much higher arisings than in other years. This has been identified as arisings imported to Stewartby Landfill and Bletchley Landfill for use in engineering and restoration works. For all other years the range in CD&E waste arisings is approximately 107,000 to 422,000 tonnes per annum.

Table 6-1 CD&E waste baseline waste arisings, 2013 – 2022

Year	Total CD&E waste ('000's tonnes)
2013	122
2014	107
2015	151
2016	208
2017	385
2018	290
2019	374
2020	1,035
2021	657
2022	422

Source: Waste Data Interrogator, Incinerator Waste Returns, Register of Waste Exemptions

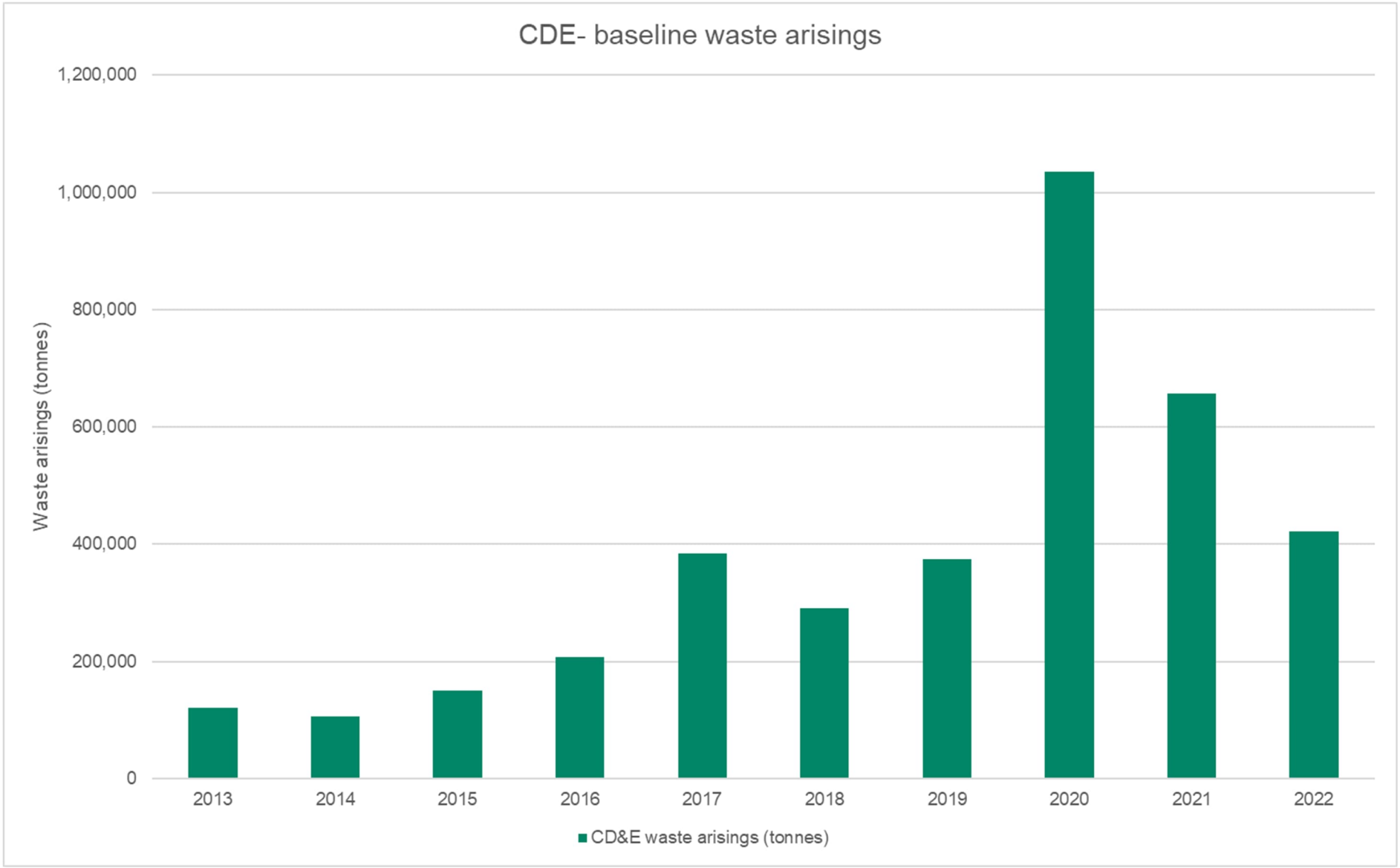

Figure 6-1 CD&E waste baseline waste arisings (tonnes), 2013 – 2022

6.3 CD&E: Forecast waste arisings

The PPGW (MHCLG, 2015), at paragraph 033, provides the following guidance on how waste planning authorities should forecast CD&E waste arisings:

> *"Waste planning authorities should start from the basis that net arisings of construction and demolition waste will remain constant over time as there is likely to be a reduced evidence base on which forward projections can be based for construction and demolition wastes. However, when forecasting construction and demolition waste arisings, the following may be relevant:*
>
> - *annual existing returns from waste management facilities*
> - *data from site waste management plans (where available)*
> - *the fact that a sizeable proportion of construction and demolition waste arisings are managed or re-used on-site, or exempt sites, so it is critical that some provision is made for unseen capacity in this way*
> - *any significant planned regeneration or major infrastructure projects over the timescale of the Plan."*

The nature of the construction industry means that there is a natural fluctuation in the amount of construction activity happening at any one time. Construction projects have a start and end date, potentially coinciding with other construction project timelines.

Due to the complexity of predicting construction activity in the future, only major construction projects have been considered to potentially have a significant impact on CD&E waste generation rates. Upgrade works associated with East West Rail to the railway between Bletchley and Woburn Sands are expected between 2024 and 2030, as part of works to deliver East West Rail services between Oxford and Bedford by 2030. This may influence CD&E waste arisings.

Based on the recommendations of the PPGW, it is considered a reasonable assumption that future CD&E waste arisings in the Plan area can be forecast to remain consistent over the plan period.

The CD&E waste forecast waste arising scenarios are set out in Table 6-2 and comprise two scenarios based on the 10-year average (2013 to 2022) and 5-year average (2018 to 2022) for CD&E waste arisings in the Plan area.

Table 6-2 CD&E forecast waste arisings scenarios

Parameter	Low waste arisings scenario	High waste arisings scenario
Historic CD&E waste arisings	10-year average (2013 to 2022) for CD&E waste arisings in the Plan area	5-year average (2018 to 2022) for CD&E waste arisings in the Plan area

The estimates of forecast CD&E waste arisings based on the scenarios presented in Table 6-2 are summarised in Table 6-3 at 5-yearly intervals. The full set of output data is included in Appendix D and presented in Figure 6-2.

Table 6-3 CD&E waste forecast waste arisings (in five-year intervals) (000s tonnes), 2022 – 2050

Parameter	Low waste arisings scenario	High waste arisings scenario
2022	375	556
2027	375	556
2032	375	556
2037	375	556
2042	375	556
2047	375	556
2050	375	556

6.3.1 CD&E: Forecast waste arisings preferred scenario

MKCC has adopted the 'high waste arisings scenario' as the preferred scenario for assessment in the capacity gap analysis (section 10). As for LACW and C&I waste, this scenario was selected as it reflects a likely worst-case scenario for the quantity of waste arising in the Plan area over the Plan period and therefore will reduce the risks involved in allocating land for a lower number of waste management facilities than what may actually be needed i.e. sites being proposed in (unallocated) less preferable locations close to sensitive receptors.

It is important to note however, that MKCC aspirations for CD&E waste arisings are to prioritise reducing waste arisings thereby helping to reduce the need for more sites for waste management infrastructure and extending the lifetime of existing facilities with finite lifetime capacity (e.g. landfill and deposit for recovery).

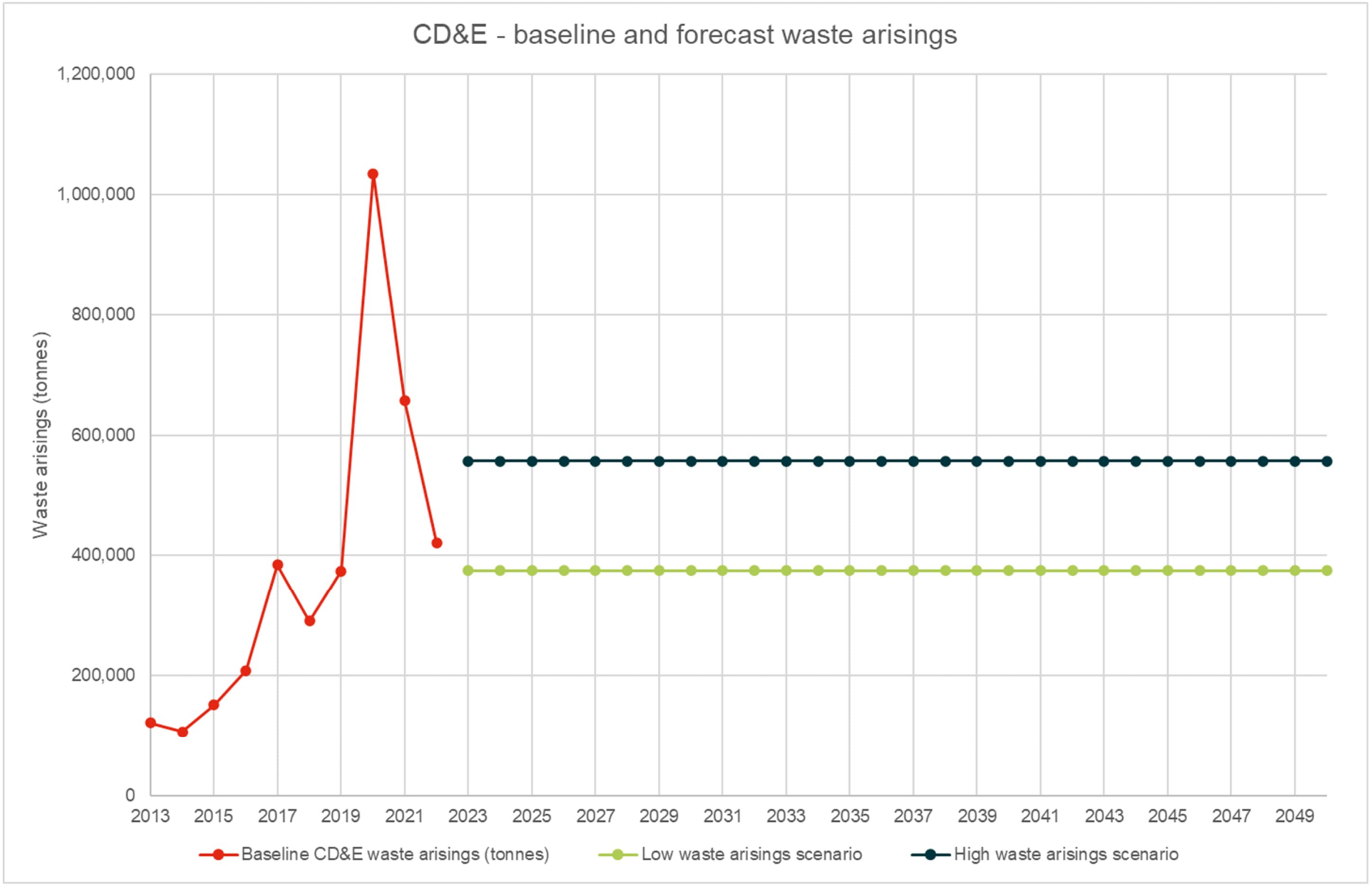

Figure 6-2 CD&E waste baseline and forecast waste arisings (tonnes), 2013 – 2050

6.4 CD&E: Baseline waste management

To establish the baseline for CD&E waste management in Milton Keynes data on the waste management facilities receiving CD&E waste arisings from Milton Keynes was extracted from the Waste Data Interrogator (for the calendar years from 2013 to 2022), Incinerator Waste Returns (for the calendar years from 2016 to 2018) and registered U1 exemptions.

The Waste Data Interrogator and Incinerator Waste Returns only identified CD&E waste managed via incineration / energy recovery in 2022, and this was for a very limited quantity (269 tonnes of wood waste). It is likely that further CD&E waste is managed via incineration / energy recovery but that the Waste Data Interrogator captures this waste under a different waste code (chapter 19) as it is initially received by a transfer or MRF facility. Where this is the case, the waste quantity will be included within the C&I waste stream assumptions, and therefore is not considered further in the management of the CD&E waste stream.

The Waste Data Interrogator identifies large quantities of CD&E waste arisings from Milton Keynes as being received at landfill facilities. From 2017 onwards, the Waste Data Interrogator identifies the 'fate' of waste received at permitted waste management facilities and, for CD&E waste received at landfill, enables some distinction between waste that is managed via disposal and waste which is recovered through, for example, use in landfill engineering, landfill restoration or other deposit to land for recovery operations.

CD&E baseline waste management is presented in Table 6-4 in both tonnage and the percentage of the total waste managed for each category of waste management. From 2017 onwards, CD&E waste to landfill is subdivided into recovery and disposal based on the 'fate' defined in the Waste Data Interrogator.

Table 6-4 shows considerable variability in the tonnage and percentage of CD&E waste managed by recovery or disposal. This variability is likely to be due to the varying demand for engineering and restoration materials at Bletchley Landfill site and other major landfill sites in proximity to Milton Keynes, including landfill restoration works at Stewartby Landfill in 2020.

Table 6-4 CD&E baseline waste management, 2013– 2022

Year	Recycle / compost / AD		Recovery (On / in land under U1 exemptions)		Landfill		Total recovery		Landfill		Total CD&E waste
					Recovery				Disposal		
	(tonnes)	(%)	(tonnes)	(%)	(tonnes)	(%)	(tonnes)	(%)	(tonnes)	(%)	(tonnes)
2013	54,128	44.4	10,540	8.6	Not specified		64,668	53.0	57,325	47.0	121,993
2014	2,235	2.1	10,400	9.7	Not specified		12,635	11.8	94,114	88.2	106,749
2015	2,870	1.9	10,400	6.9	Not specified		13,270	8.8	138,208	91.2	151,477
2016	418	0.2	10,400	5.0	Not specified		10,818	5.2	197,493	94.8	208,312
2017	1,255	0.3	10,400	2.7	197,898	51.4	209,553	54.5	175,227	45.5	384,780
2018	3,311	1.1	10,922	3.8	149,218	51.4	163,450	56.3	126,939	43.7	290,389
2019	21,940	5.9	10,400	2.8	164,028	43.8	196,367	52.5	177,926	47.5	374,294
2020	64,143	6.2	10,524	1.0	784,380	75.8	859,047	83.0	175,695	17.0	1,034,742
2021	153,639	23.4	10,400	1.6	247,301	37.6	411,340	62.6	246,111	37.4	657,451
2022	102,857	24.4	10,400	2.5	111,327	26.4	224,584	53.3	196,733	46.7	421,318

Source: Waste Data Interrogator and Incinerator Waste Returns

Therefore, the baseline waste management scenario for CD&E waste is assumed to comprise the 2022 data.

6.5 CD&E: Forecast waste management

To estimate the waste management capacity required for each category of waste management facility during the Plan period, the CD&E waste management scenarios in Table 6-5 were developed to reflect the waste management requirements of low, medium and high recycling scenarios. These waste management scenarios are based on local baseline performance, and local and national policy and targets.

Table 6-5 CD&E waste management scenarios

Waste management	Low recycling scenario	Medium recycling scenario	High recycling scenario
Recycle / recovery	All years to 2050: • 70.0%, in line with national target for C&D waste recovery (Defra, 2021)	Baseline year: assume 70.0%, in line with national target for C&D waste recovery (Defra, 2021) By 2042: • 80% • Assume linear percentage growth 2043 to 2050: • No further change, 80%	Baseline year: assume 70.0%, in line with national target for C&D waste recovery (Defra, 2021) By 2035: • 80% • Assume linear percentage growth By 2042: • 90% • Assume linear percentage growth 2043 to 2050: • No further change, 90%
Landfill	All years to 2050: • Percentage balance that is not managed via recycle / recovery • 30%	Baseline year: 30.0% All years: • Percentage balance that is not managed via recycle / compost / AD or landfill • 2042: 20.0% • 2043 to 2050: No further change, 20%	Baseline year: 30.0% All years: • Percentage balance that is not managed via recycle / compost / AD or landfill • 2035: 20.0% • 2042: 10% • 2043 to 2050: No further change, 10%

The CD&E waste management scenarios (Table 6-5) have been applied to the CD&E forecast waste arisings for the ‘high waste arisings scenario’ (Table 6-3 and Figure 6-2). The resulting tonnage of CD&E waste by waste management category for the Plan years of 2035, 2042 and 2050 are shown in Table 6-6, and illustrate the likely waste management needs for CD&E waste in the Plan area.

As with LACW and C&I waste, it should be noted that the estimated quantity of CD&E waste to landfill is a likely maximum for the purpose of ensuring a sufficient supply of landfill capacity. This does not preclude this waste from being managed higher up the waste hierarchy (e.g. incineration / energy recovery or recycle / compost / AD) where viable.

Table 6-6 CD&E waste management needs profile in 2035, 2042 and 2050, high waste arisings scenario ('000s tonnes)

Year	Waste management	Low recycling scenario	Medium recycling scenario	High recycling scenario
2035	Recycle / recover	389	425	445
	Landfill	167	131	111
2042	Recycle / recover	389	445	500
	Landfill	167	111	56
2050	Recycle / recover	389	445	500
	Landfill	167	111	56

7. Hazardous waste

7.1 Introduction

Waste is considered hazardous when it exhibits hazardous properties that may be harmful to human health or the environment. Hazardous waste can include chemicals, batteries, asbestos or pesticides. Guidance on the classification of waste is provided within Technical Guidance WM3 (EA, 2021). Due to the hazardous properties of hazardous waste, specialist collection, treatment and disposal methods need to be adopted to minimise potential impacts on human health and the environment.

This section sets out the baseline waste arisings for hazardous waste in the Plan area and provides three scenarios for forecasts of hazardous waste arisings from the baseline year (2022) until 2050.

7.2 Hazardous waste: Baseline waste arisings

The EA is required to monitor all movements of hazardous waste within England. The EA Hazardous WDI collates data on hazardous waste movements using hazardous waste consignment notes. Hazardous waste received by permitted facilities is reported with the EA WDI and has been used to extract data on hazardous waste arising in the Plan area.

In keeping with the methodology used to calculate C&I waste arisings, waste received by transfer facilities and waste received by exempt sites have been excluded when estimating hazardous waste arisings.

More information on the methodology to calculate hazardous waste arisings has been presented in Appendix C.

The baseline hazardous waste arisings for the Plan area are shown in Table 7-1 and Figure 7-1.

Hazardous waste arisings generated by the plan area have shown some fluctuation, with higher arisings observed since 2017 of between approximately 8,000 and 13,000 tonnes per annum.

Table 7-1 Hazardous waste baseline waste arisings, 2013 – 2022

Year	Total hazardous waste (tonnes)
2013	8,046
2014	4,140
2015	4,146
2016	6,198
2017	8,127
2018	10,322
2019	13,066
2020	13,481
2021	11,839
2022	11,017

Source: Waste Data Interrogator

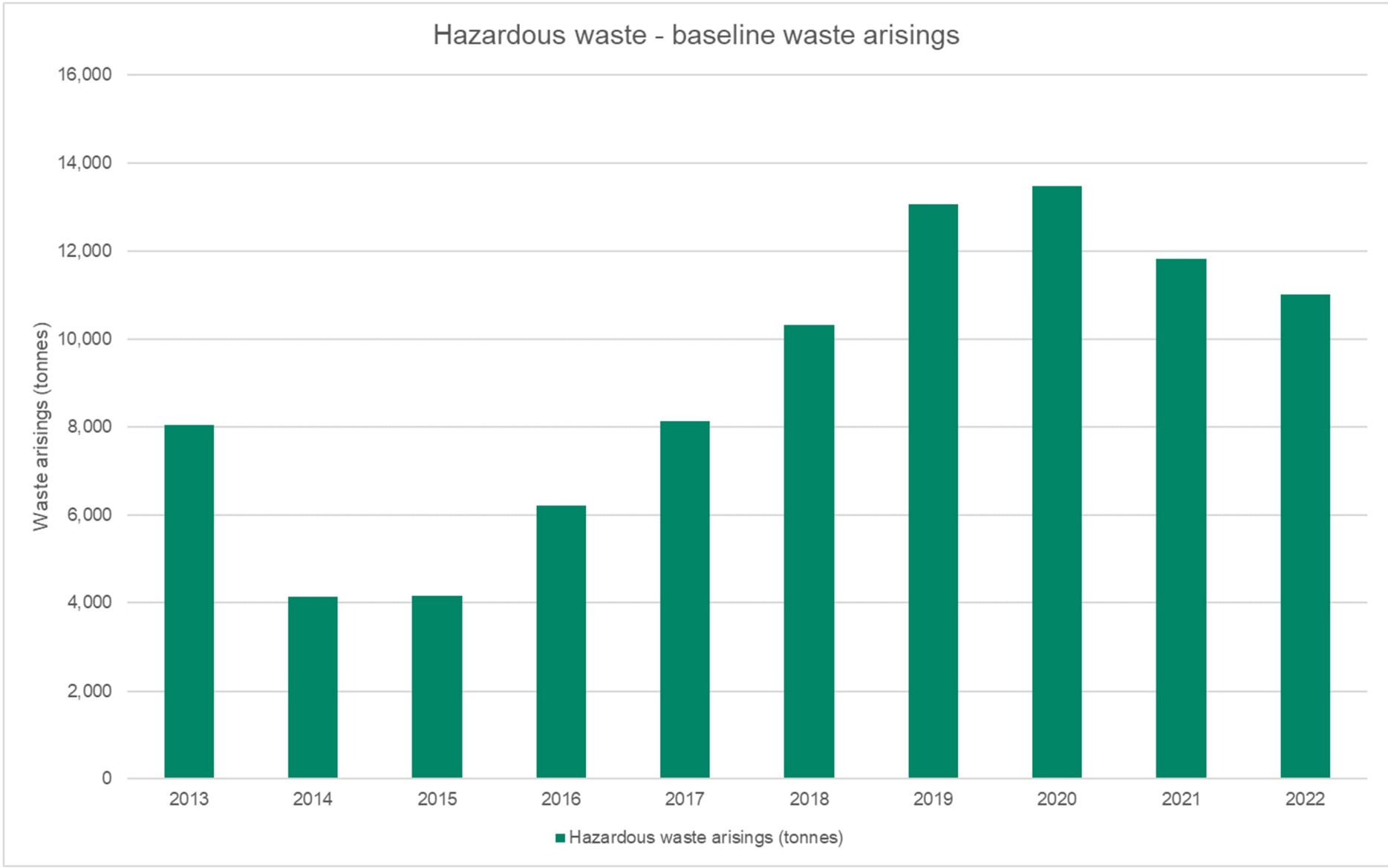

Figure 7-1 Hazardous waste baseline waste arisings (tonnes), 2013 – 2022

7.3 Hazardous waste: Forecast waste arisings

The PPGW (MHCLG, 2015), at paragraph 034, provides the following recommendation on how waste planning authorities should forecast hazardous waste arisings:

"Since existing data on hazardous waste arisings is likely to be robust, waste planning authorities should plan for future hazardous waste arisings based on extrapolating time series data."

The baseline waste arisings for hazardous waste (Figure 7-1) show fluctuations in arisings between years with high percentage growth between 2015 and 2020. Extrapolation of this trend, in line with the PPGW recommendation, would result in forecasting very high growth in hazardous waste arisings which was not considered to be realistic. Therefore, the hazardous waste forecast waste arising scenarios have assumed growth aligned with the combined annual percentage change in LACW and C&I waste arisings, as set out in Table 7-2.

It is noted that although the LACW and C&I forecast waste arising scenarios are based on a reduction in LACW per head of population and C&I waste per employee, the aspirations for high population and employment growth within Milton Keynes, will result in the combined effect of an overall growth in waste arisings. The resulting hazardous waste growth scenarios therefore also show an increase in forecast hazardous waste arisings in the Plan area, although in the low waste arisings scenario waste arisings are almost constant.

Table 7-2 Hazardous waste forecast waste arisings scenarios

Parameter	Low waste arisings scenario	Medium waste arisings scenario	High waste arisings scenario
Hazardous waste	2022 baseline. • Percentage annual change in total LACW and C&I waste arisings in low waste arisings scenario.	2022 baseline. • Percentage annual change in total LACW and C&I waste arisings in medium waste arisings scenario.	2022 baseline. • Percentage annual change in total LACW and C&I waste arisings in high waste arisings scenario.

The estimates of forecast hazardous waste arisings based on the scenarios presented in Table 7-2 are summarised in Table 7-3 at 5-yearly intervals. The full set of output data is included in Appendix D and presented in Figure 7-2.

Table 7-3 Hazardous waste forecast waste arisings (in five-year intervals) (000s tonnes), 2022 – 2050

Year	Low waste arisings scenario	Medium waste arisings scenario	High waste arisings scenario
2022	11	11	11
2027	11	11	12
2032	11	12	12
2037	11	12	13
2042	11	12	14
2047	12	13	14
2050	12	13	15

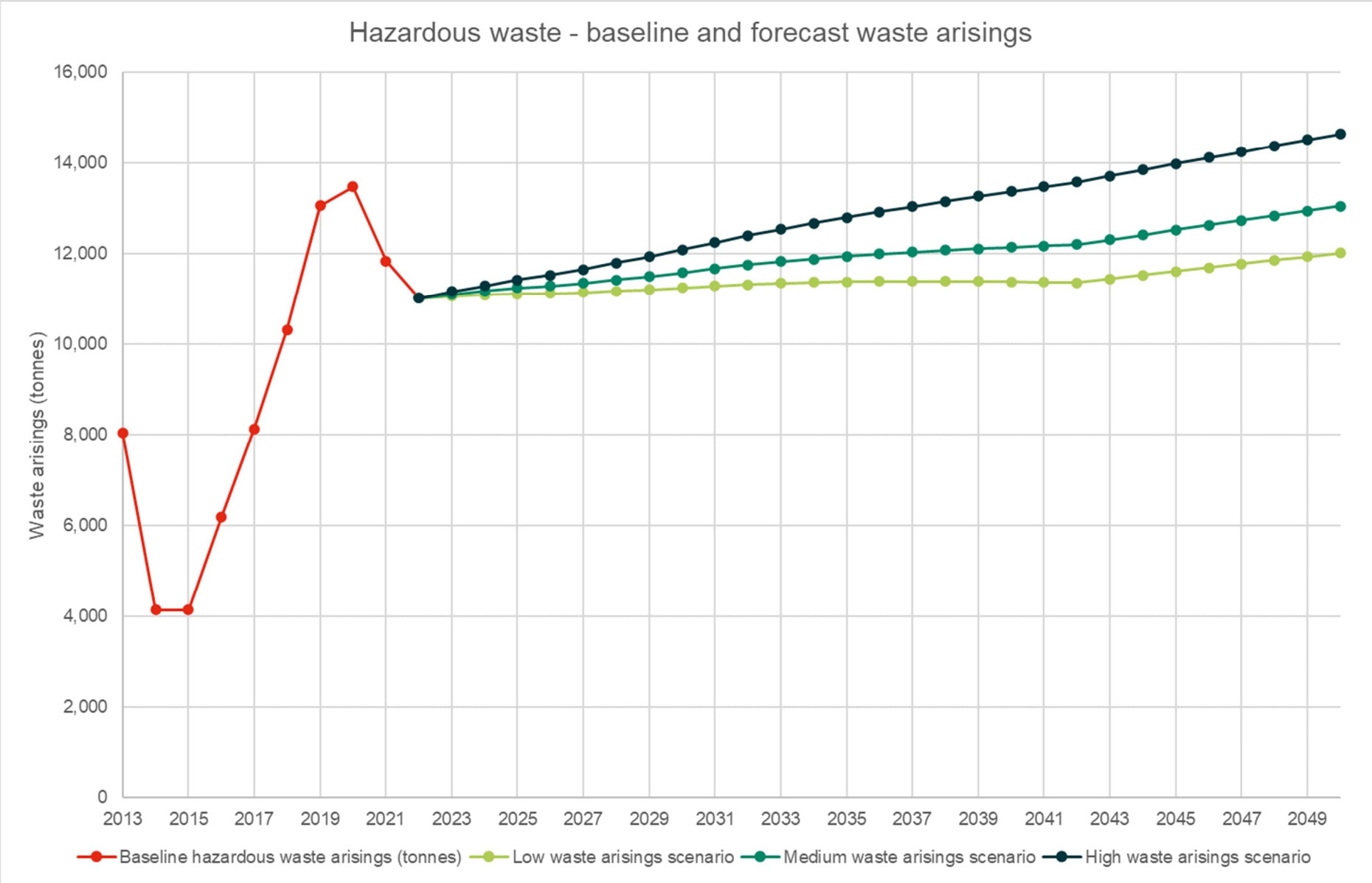

Figure 7-2 Hazardous waste baseline and forecast waste arisings (tonnes), 2013 – 2050

8. Other waste streams

8.1 Agricultural waste

8.1.1 Introduction

Agricultural waste is defined as waste from premises used for agriculture within the meaning of the Agricultural Act 1947. Agricultural waste is included within the Waste Management (England and Wales) Regulations 2008, and this requires producers of agricultural waste to either send their waste for disposal at a permitted facility, or to apply to manage their waste on the farm, under a suitable authorisation.

The baseline agricultural waste arisings generated within the plan area are discussed in this section, noting that only those agricultural wastes which are recorded as being managed at a permitted facility are included in the data.

8.1.2 Agricultural waste: Baseline waste arisings

Agricultural waste arisings managed at permitted waste facilities were estimated using the EA WDI, with agricultural waste identified as waste sub-chapter code of 02 01. Hazardous waste and waste received by transfer facilities and exempt sites were excluded.

More information on the methodology to calculate agricultural waste arisings has been presented in Appendix C.

The baseline agricultural waste arisings generated by the plan area are shown in Table 8-1 and Figure 8-1.

Agricultural waste arisings per year of up to approximately 700 tonnes arise in the plan area and are manged via permitted waste facilities. This quantity fluctuates between years.

As only a small amount of agricultural waste is generated within the plan area the identification of specific waste management capacity for this waste stream is not considered to be required.

Table 8-1 Agricultural waste baseline waste arisings, 2013 – 2022

Year	Total agricultural waste (tonnes)
2013	2
2014	648
2015	6
2016	455
2017	697
2018	47
2019	101
2020	268
2021	251
2022	84

Source: Waste Data Interrogator

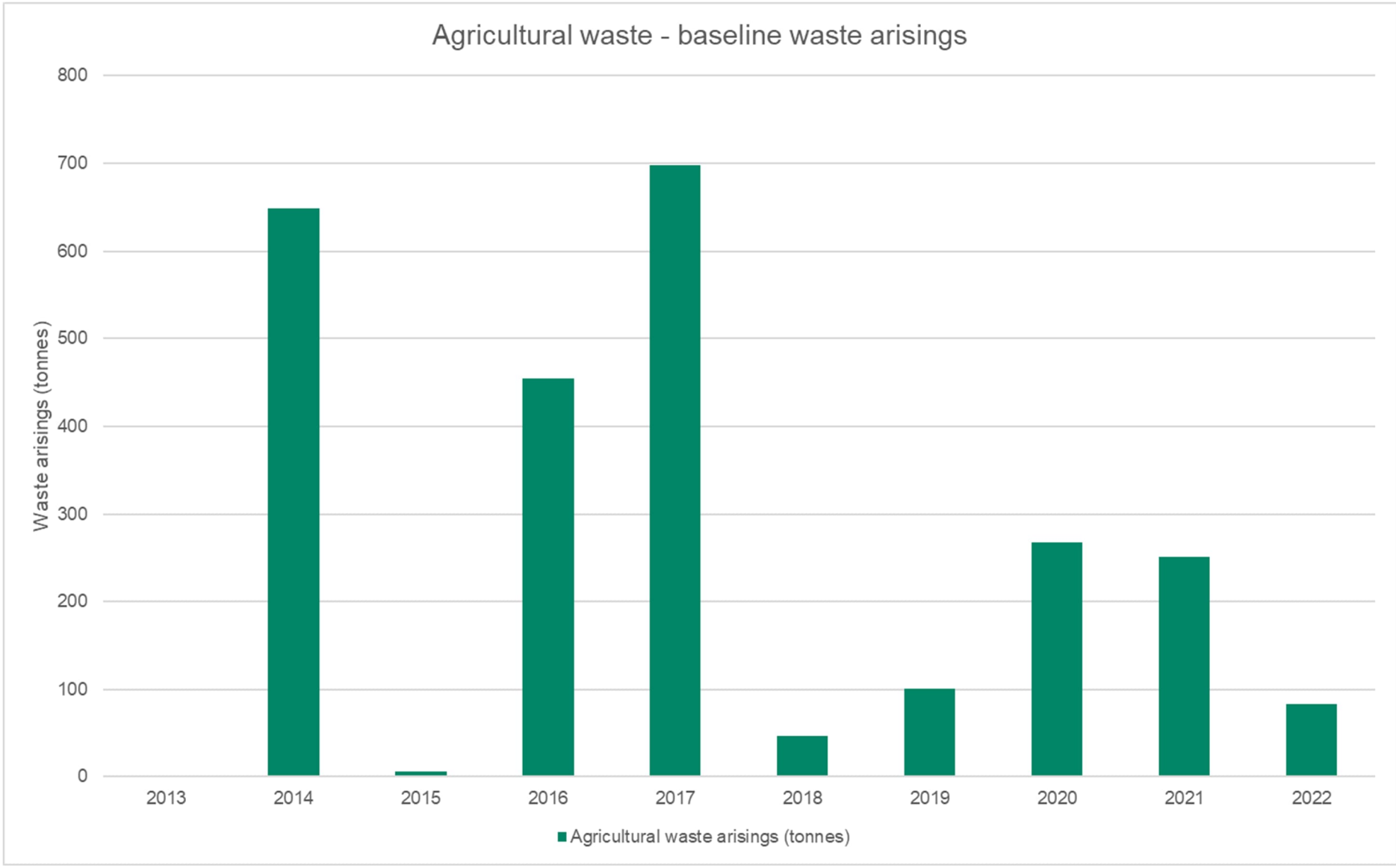

Figure 8-1 Agricultural waste baseline waste arisings (tonnes), 2013 – 2022

8.2 Mining waste

8.2.1 Introduction

Mining waste is defined in the Mining Waste Directive as waste produced through the prospecting, extraction, treatment and storage of mineral resources and the working of quarries. This can include waste solids or slurries left over after the minerals have been removed and treated, waste rock, and topsoil.

This section describes the baseline mining waste arisings produced within the Plan area, noting that only those wastes which are recorded as being managed at a permitted waste facility are included in the data.

8.2.2 Mining waste: Baseline waste arisings

Mining waste arisings managed at permitted waste facilities were estimated using the EA WDI, with mining waste identified as waste code chapter 01. Hazardous waste and waste received by transfer facilities and exempt sites were excluded. More information on the methodology to calculate mining waste arisings has been presented in Appendix C.

The assessment identified minimal (less than 1 tonne per annum) of mining waste arising in the Plan area that was managed via permitted waste facilities. Therefore, the identification of specific waste management capacity for this waste stream within the plan area is not considered to be required.

8.3 Low-level radioactive waste

8.3.1 Introduction

Radioactive waste can be described as any waste which falls within the scope of the Radioactive Substances Act 1993 (HMSO, 1993). Radioactive waste either contains radioactive material or has been contaminated by radioactivity. In the UK, radioactive wastes are classified according to the type and quantity of radioactivity they contain and how much heat is produced. Table 8-2 describes the four main classifications of radioactive waste.

Table 8-2 Radioactive waste classifications

Classification	Description
High Level Waste (HLW)	High Level Waste (HLW) accounts for less than 1% of all radioactive waste and is produced as a by-product of reprocessing spent nuclear reactor fuel. The temperature of HLW may rise significantly because of its radioactivity and the design of waste storage and disposal facilities has to take this into consideration
Intermediate Level Waste (ILW)	Intermediate Level Waste (IWL) accounts for around 6% of all radioactive waste and is mainly composed of components from nuclear reactors and sludges from the treatment of radioactive liquids. ILW does not generate significant amounts of heat, however it contains radioactivity at higher levels than in Low Level Waste (LLW).
Low Level Waste (LLW)	Low Level Waste (LLW) accounts for around 94% (by volume) of radioactive waste. Most LLW is generated from the operation and decommissioning of nuclear facilities, with smaller amounts arising from hospitals and universities. The wastes include items such as waste paper, clothing and contaminated tools. LLW generates minimal heat and contains relatively low levels of radioactivity, not exceeding 4 gigabecquerel (GBq) per tonne of alpha activity, or 12 GBq per tonne of beta/gamma activity.
Very Low Level Waste (VLLW)	Very Low Level Waste (VLLW) is a sub-category of LLW with specific limits on radioactivity. VLLW generally comprises demolition waste and soils arising from the decommissioning and demolition of nuclear plants. VLLW can be disposed of at permitted landfill facilities with non-radioactive wastes.

Source: NDA, 2024

In the UK, the majority of radioactive waste arises from the decommissioning of nuclear power reactors. Radioactive wastes are also produced as a by-product from many medical, industrial, research and defence activities.

8.3.2 Low-level radioactive waste: Baseline waste arisings

The UK Radioactive Waste Inventory (NDA, 2022) does not identify any major radioactive waste producers in the Plan area.

The EA Public Register for Environmental Permitting Regulations Radioactive Substances (EA, 2024a) identifies one facility permitted to keep and use radioactive materials and dispose of radioactive waste in the Plan area. This facility is:

- the Open University Walton Campus, located at Walton Drive, Milton Keynes, MK7 6AA.

The EA 2022 Pollution Inventory (EA, 2024b) does not identify any radioactive waste produced by facilities in the Plan area.

The need for future capacity for radioactive waste is not considered within this Waste Needs Assessment as radioactive waste is managed at the national level. While VLLW is not managed at the national level, it can be managed at conventional facilities and does not require specific provision to be made within this assessment.

8.4 Wastewater

The management of wastewater primarily falls under the jurisdiction of the regulated water utility companies, which for Milton Keynes is Anglian Water. The provision of wastewater treatment facilities is usually considered on a case-by-case basis in discussion with developers. Consequently, it is not considered necessary to make strategic provision for such facilities.

Specialist capacity for the management of sludges arising from wastewater treatment facilities together with other waste liquids and sludges is considered within the assessment, of the C&I waste stream.

9. Waste infrastructure capacity

9.1 Introduction

To understand whether Milton Keynes has sufficient waste infrastructure capacity to meet current and future need, it is necessary to first understand the availability of waste infrastructure capacity within the Milton Keynes administrative area.

This section identifies the existing waste management facilities located within the Plan area, the type of waste management activities or operations undertaken, and the capacity of each facility for managing waste.

Additional future waste management facilities with submitted / approved planning applications or environmental permits, which could potentially provide additional waste capacity between now and the end of the Plan period (i.e. 2050), are addressed, with further commentary provided in section 10.7.

The NPPG (Paragraph 002) considers the following to be a non-exhaustive list of the types of waste developments:

- *metal recycling sites*
- *energy from waste incineration and other waste incineration*
- *landfill and land raising sites (such as soils to re-profile golf courses)*
- *landfill gas generation plants*
- *pyrolysis / gasification*
- *material recovery / recycling facilities*
- *combined mechanical, biological and/or thermal treatment*
- *in-vessel composting*
- *open windrow composting*
- *anaerobic digestion*
- *household civic amenity sites*
- *transfer stations*
- *wastewater management*
- *dredging tips*
- *storage of waste*
- *recycling facilities for construction, demolition and excavation waste"*

The Environment Agency regulates facilities that handle, treat, manage and dispose of waste. The Environmental Permitting (England and Wales) Regulations 2016 (as amended), requires each facility to hold an environmental permit or an exemption for all activities that are undertaken.

Within this report, facilities operating under an environmental permit authorised by the Environment Agency are termed 'permitted facilities'. For the purpose of this report, this includes facilities that are authorised as a 'waste operation' as well as facilities authorised as an 'installation'. Facilities operating under an exemption from environmental permitting are termed 'exempt facilities' or 'exemptions'.

9.2 Waste infrastructure capacity: Methodology

Waste management facilities located within the Milton Keynes administrative area were identified using the following sources of information:

- Environment Agency Waste Data Interrogator, for the most recent five years (2018 to 2022)
- MKCC annual survey of waste sites (2019 to 2022)
- Environment Agency Waste Sites database (EA, 2024e)
- Environment Agency Public Registers Online (EA, 2024f)
- Discussions with MKCC planning officer

The available information was reviewed to identify any of the waste management facilities that are no longer operating, and such facilities were excluded from the capacity estimates. Facilities that received their permit or started operating since 2022 (for which no Waste Data Interrogator data is yet available) were identified through the Environment Agency Public Registers (EA, 2024f) and discussions with MKCC planning officer.

Permitted capacity verses operational capacity: The 'permitted capacity' of a facility is the uppermost capacity allowed to be received by that facility, as set out within the environmental permit. For some types of facility or permit, the permitted capacity is set in bandings and does not necessarily reflect the quantity of waste that can be physically handled and managed by that facility. The 'operational capacity' of a facility is the estimated throughput of waste that a facility can actually handle and manage in a single year.

For the purpose of this assessment, an estimate of 'operational capacity' has been used to define the existing annual capacity of each waste management facility. The 'operational capacity' for each facility was estimated using the Environment Agency Waste Data Interrogator waste received datasets for the last 5 years (2018 to 2022).

The waste received by each facility in each of the last 5 years (2018 to 2022) was extracted from the Environment Agency Waste Data Interrogator, in line with the baseline waste arisings assumptions and methodology. For each waste management facility the waste received was collated by waste stream as follows:

- household, industrial and commercial (HIC) waste: assumed to include LACW and C&I waste (Note: The Waste Data Interrogator does not enable the disaggregation of municipal waste arisings from household and non-household sources, and therefore the waste infrastructure capacity assessment is undertaken for total HIC)
- CD&E waste
- hazardous waste

Agricultural waste, mining waste, low-level radioactive waste and wastewater are excluded from the capacity assessment due to the reasons stated in the preceding sections.

The maximum reported annual input to each facility of each waste stream was adopted as the 'operational capacity'. This data was also compared to information gathered in the MKCC annual survey of waste sites (2019 to 2022) to ensure that the 'operational capacity' was not an overestimate.

Inputs to most types of waste management facilities (including waste transfer, treatment and energy recovery) are generally constrained by the annual 'operational capacity'. In addition, some types of waste management facilities are also limited by a 'total lifetime input capacity'. This generally applies to facilities where waste inputs use the available capacity on a permanent basis, and generally comprise landfill sites, deposit of waste on land for recovery, use of waste in construction and similar operations. These facilities have a 'total lifetime input capacity' in addition to an annual 'operational capacity' and when the 'total lifetime input capacity' has been used, the facility will no longer have any further capacity to receive waste. It is important to note that the 'total lifetime input capacity' of a facility is consumed by all waste inputs, regardless of the origin location of the waste. The Environment Agency's Remaining Landfill Capacity dataset (EA, 2024d) is published annually and provides an estimate of the remaining (total lifetime) capacity for each permitted landfill site in England.

The Environment Agency Waste Data Interrogator assigns each waste management facility to a 'site category' and a 'facility type' based on the type of activity or operation that is undertaken. The complete list of 'site categories' and 'facility types' used within the 2022 Waste Data Interrogator are set out in Appendix E. For the purpose of assessing the waste infrastructure capacity in Milton Keynes, the Waste Data Interrogator 'site category' descriptors have been used to collate capacity estimates, with each 'site category' assigned to a 'capacity assessment type' as set out in Appendix E.

9.3 Waste infrastructure capacity: Milton Keynes

Details of current waste management facilities in Milton Keynes and their estimated 'operational capacity' are set out in Appendix F, together with information on non-operational and recently closed facilities that have been excluded from the current capacity estimates.

A summary of the current 'operational capacity' of waste infrastructure in Milton Keynes, is provided in Table 9-1, for the 'site categories' that have an annual 'operational capacity' (transfer, treatment, metal recycling (MRS) and energy recovery). The 'site categories' are grouped into 'capacity assessment types' to apply in the capacity gap analysis in section 10 (further details provided in Appendix E).

Table 9-1 Current 'operational capacity' of waste infrastructure in Milton Keynes: Transfer, treatment, metal recycling sites (MRS) and energy recovery

Capacity assessment type	Site Category	Facility type	'Operational capacity' by waste stream (tonnes/annum)		
			HIC	CD&E	Hazardous
Transfer	Transfer	CA sites	33,313	189	0
		Other transfer	142,539	34,283	2
Recycling / composting / AD	Treatment		215,237	163,574	6,118
	Metal Recycling Site (MRS)		18,614	0	1,316
Energy recovery	Incineration		120,403	0	0

Source: Waste Data Interrogator (2018 to 2022); MKCC annual survey of waste sites (2019 to 2022); Environment Agency Waste Sites database (EA, 2024e); Environment Agency Public Registers Online (EA, 2024f); Discussions with MKCC planning officer

The Milton Keynes Waste Recovery Park (permit number EPR/HP3323PW) utilises mechanical, biological and thermal (gasification) treatment processes to manage residual LACW from Milton Keynes and other administrative areas. The process broadly comprises:

- mechanical treatment to segregate plastics and metals for recycling, and organic fines waste for anaerobic digestion, from the input residual waste stream
- anaerobic digestion of the segregated organic fines waste to create biogas used for onsite electricity generation, and, following further in-vessel composting, a compost-like output
- gasification of the remaining residual waste to produce a syngas which is combusted to heat water and generate steam used for electricity generation in the onsite steam turbines.

The Milton Keynes Waste Recovery Park has a permit type of Municipal Waste Incinerator and in the Waste Data Interrogator has a 'site category' of 'incineration'. Therefore, the total facility 'operational capacity' has been assigned to the 'energy recovery' capacity assessment type within Table 9-1 and the capacity gap assessment in section 10.

Table 9-1 identifies operational waste treatment capacity for HIC waste in Milton Keynes of approximately 215,000 tonnes per annum. Appendix G shows that this capacity is largely provided by the following two facilities that treat sewage sludge and other liquid and sludge wastes:

- Cotton Valley Sludge Treatment Centre (biological treatment), approximately 166,000 tonnes per annum
- Cotton Valley Waste Treatment Centre (waste transfer / treatment), approximately 47,000 tonnes per annum

The current waste management facilities in Milton Keynes (listed in Appendix F) include two facilities where the capacity is limited by the 'total lifetime input capacity' in addition to the annual 'operating capacity'. Further details are provided below.

Lathbury Quarry (permit number HB3101MPA25) operates under permit type A29 Deposit of waste to land as a recovery operation, which was granted in 2023. As the most recent Waste Data Interrogator is for the calendar year 2022, no 'operational capacity' information is

currently available. For the purpose of the assessment, it is assumed that the annual 'operational capacity' is 50,000 tonnes of CD&E waste (inert) and total 'remaining lifetime input capacity' in the baseline year is 250,000 tonnes of CD&E waste (inert), as set out in Table 9-2.

Table 9-2 Lathbury Quarry: Estimated 'operational capacity' and total 'remaining lifetime input capacity' (end of 2022)

Capacity assessment type	Site Category	Facility type	'Operational capacity' by waste stream (estimate) (tonnes/annum)	Total 'remaining lifetime input capacity' (estimate) (tonnes)
			CD&E	CD&E
Recovery	On/In Land	Deposit of waste to land (recovery)	50,000	250,000

Source: EA, 2024f

Bletchley Landfill Site (permit number: EPR/BM4635IH) operates under permit type L02: Non Haz (SNRHW) Landfill. Planning permission to extend the period of operation of Bletchley Landfill Site beyond the approved closure date of 2022, was granted, on appeal, in December 2021. The revised planning permission granted a 15-year extension for the landfilling of waste and requires the importation of waste materials to the site to cease by 6 February 2037. Site restoration and landscaping works are to be completed by 6 February 2039, or within 2 years of cessation of waste disposal whichever is the sooner.

At the end of 2022 Bletchley Landfill reported a remaining landfill capacity of 6.813 million m^3 (EA, 2024d), as shown in Table 9-3. This landfill capacity is of strategic importance across the wider southern and central England and London regions, and a high proportion of the waste received has originated from outside of the Milton Keynes administrative area.

Table 9-3 Bletchley Landfill Site: Baseline landfill capacity

Year (capacity at the end of)	Remaining landfill capacity, total ('000's m^3)	Change in capacity since previous year ('000's m^3)
2018	11,125	
2019	10,410	-716
2020	9,481	-929
2021	8,278	-1,203
2022	6,813	-1,465

Source: EA, 2024d

The Waste Data Interrogator identifies that Bletchley Landfill Site receives HIC, CD&E and small quantities of hazardous waste for landfill disposal. It also receives inert CD&E waste for use in onsite recovery operations such as landfill engineering and restoration works.

To include the remaining landfill capacity within the capacity gap assessment in section 10, it has been necessary to estimate the proportion of the remaining landfill capacity that is likely to be available for each waste stream (assumed to be HIC and CD&E wastes only, due to the very small quantities of hazardous waste now received) and also the respective proportion of the CD&E waste stream that is managed in the recovery or landfill operations.

To allow for differences in the density of HIC and CD&E waste when placed in landfill and to convert the landfill void volume (m^3) to an equivalent waste input tonnage, the following assumption have been applied:

- 1m^3 of landfill void volume can accommodate 1 tonne of non-hazardous HIC waste
- 1m^3 of landfill void volume can accommodate 1.5 tonnes of CD&E waste

When compared to the equivalent waste input tonnages reported in the Waste Data Interrogator, these assumptions broadly align with the annual change in volumetric landfill capacity shown in Table 9-3.

To apportion the 6.813 million m^3 of remaining landfill capacity between the HIC and CD&E waste streams and the recovery and landfill operations, the waste input tonnages and their fate (recovery or landfill) reported in the Waste Data Interrogator for the years 2018 to 2022 were collated and reviewed. The 'operational capacity' was converted to a percentage by volume of each waste stream, which was then applied to the remaining landfill capacity. For CD&E waste the average percentage to recovery or landfill fate was also applied. The calculated volumes were then converted to an equivalent remaining capacity tonnage for use in the capacity gap assessment in section 10. The estimated remaining landfill capacity, based on these assumptions, is summarised in Table 9-4.

Table 9-4 Bletchley Landfill Site: Estimated total 'remaining lifetime input capacity' (end of 2022)

Parameter	Unit of measurement	Total 'remaining lifetime input capacity' (estimate) ('000's)		
		Total	HIC	CD&E
Waste bulk density in landfill	tonnes/m^3		1.0	1.5
Remaining lifetime capacity, total, of which:	m^3	6,813	4,967	1,845
• landfill (disposal)	m^3		4,967	794
• recovery	m^3		0	1,051
Remaining lifetime capacity, total, of which:	tonnes	7,736	4,967	2,768
• landfill (disposal)	tonnes		4,967	1,191
• recovery	tonnes		0	1,577

Source: Waste Data Interrogator (2018 to 2022); EA, 2024d

10. Waste infrastructure capacity gap analysis

10.1 Introduction

Article 16 of the EU Waste Framework Directive (2008/98/EC) sets out the 'principles of proximity and self-sufficiency', generally referred to as the 'proximity principle'. The PPGW (MHCLG, 2015), at Annex 1, provides a summary of Article 16 and the associated delivery mechanism and actions on local planning authorities:

"Article 16: Principles of self-sufficiency and proximity:

Member States shall establish an integrated and adequate network of waste disposal installations and of installations for the recovery of mixed municipal waste collected from private households.

The network shall enable waste to be disposed of or recovered in one of the nearest appropriate installations, by means of the most appropriate methods and technologies, in order to ensure a high level of protection for the environment and public.

Delivery mechanism / Action:

Planning Authorities must have regard to the provisions of Article 16 when exercising planning functions to the extent that those functions relate to waste management.

Waste planning authorities should ensure that, as far as is practicable, sufficient waste disposal facilities and facilities for the recovery of mixed municipal waste collected from households exist within their Local Plan area.

Waste planning authorities should ensure that waste disposal facilities and facilities for the recovery of mixed municipal waste collected from households are appropriately sited to ensure compliance with the proximity principle. This can include joint working with other planning authorities to develop an extensive network of sites to enable effective waste management."

The PPGW (MHCLG, 2015), also provides further guidance on applying the 'principles of proximity and self-sufficiency' at paragraphs 006 and 007:

"What is the obligation on waste planning authorities towards implementing the proximity principle?

The principles of self-sufficiency and proximity (commonly referred to as the 'proximity principle') are set out in Article 16 of the Waste Framework Directive, Local planning authorities are required, under regulation 18 of the 2011 Regulations [The Waste (England and Wales) Regulations 2011, as amended, including by The Waste (Miscellaneous Amendments) (EU Exit) (No. 2) Regulations 2019 (S.I. 2019/188)] *which transposed the Directive, to have regard to these requirements when exercising their planning functions relating to waste management."*

"Do the self-sufficiency and proximity principles require each waste planning authority to manage all of its own waste?

Though this should be the aim, there is no expectation that each local planning authority should deal solely with its own waste to meet the requirements of the self-sufficiency and proximity principles. Nor does the proximity principle require using the absolute closest facility to the exclusion of all other considerations. There are clearly some wastes which are produced in small quantities for which it would be uneconomic to have a facility in each local authority. Furthermore, there could also be significant economies of scale for local authorities working together to assist with the development of a network of waste management facilities to enable waste to be handled effectively.

The ability to source waste from a range of locations/organisations helps ensure existing capacity is used effectively and efficiently, and importantly helps maintain local flexibility to increase recycling without resulting in local overcapacity."

The waste infrastructure capacity gap analysis, therefore, adopts the approach of assessing 'net self-sufficiency' in waste infrastructure capacity, which considers whether the Plan area has sufficient capacity to manage the equivalent waste management needs.

The waste infrastructure capacity gap analysis presented in this section, compares the forecast waste management needs profiles for each waste stream, to the waste infrastructure capacity available within Milton Keynes administrative area. This capacity gap analysis identifies the potential net surplus or deficit in waste infrastructure capacity in Milton Keynes over the Plan period to 2050.

10.2 Waste infrastructure capacity gap analysis: Methodology

The capacity gap analysis compares the forecast waste management needs profiles (as set out in Table 4-6 for LACW, Table 5-6 for C&I waste and Table 6-6 for CD&E waste) to the waste infrastructure capacity available within Milton Keynes administrative area.

For waste infrastructure capacity that is limited by the annual 'operational capacity' (Table 9-1), the assessment assumes that all capacity will remain operational throughout the Plan period. Annual monitoring will inform any changes to the 'operational capacity' assumptions over time, where new capacity becomes operational and existing capacity closes. The

capacity gap in ‘operational capacity’ is assessed by comparing it to the annual needs, with a deficit in ‘operational capacity’ indicating a net capacity gap.

For waste infrastructure capacity that is limited by the ‘remaining lifetime input capacity’ (recovery to land and landfill capacity, see Table 9-2 and Table 9-4), the assessment assumes that the ‘remaining lifetime input capacity’ will reduce over time in line with waste inputs. When the ‘remaining lifetime input capacity’ reaches zero, there is assumed to be no remaining capacity and a deficit in capacity will accumulate. This deficit in capacity indicates the likely capacity gap over time, to the end of the Plan period.

The capacity gap for the ‘remaining lifetime input capacity’ at non-hazardous and inert landfill is undertaken for the following two waste input scenarios:

1. assumes the landfill only receives waste that has arisen from within Milton Keynes administrative area, which indicates the net capacity gap
2. assumes the landfill receives waste that has arisen from any WPA, in line with recent trends (5-year maximum and 5-year average inputs (2018 to 2022)), which indicates the likely actual capacity gap - noting that the ‘total lifetime input capacity’ of a facility is consumed by all waste inputs, regardless of the origin location of the waste.

10.3 Capacity gap analysis: HIC waste (LACW and C&I waste)

As set out within the waste infrastructure capacity methodology (section 9.2), the Waste Data Interrogator does not enable the disaggregation of municipal waste arisings from household and non-household sources. Therefore, the waste infrastructure capacity assessment and the capacity gap analysis are undertaken for total HIC waste (comprising the combined LACW and C&I waste streams).

The capacity gap analysis compares the forecast waste management needs profiles (as set out in Table 4-6 for LACW and Table 5-6 for C&I waste) to the waste infrastructure capacity for HIC waste that is available within the Milton Keynes administrative area. The HIC waste capacity gap analysis, for each of the three waste management scenarios (low, medium and high recycling scenarios), is presented in the following tables:

- HIC waste to recycling / composting / anaerobic digestion (AD) – Table 10-1
- HIC waste to energy recovery - Table 10-2
- HIC waste to landfill (disposal, non-hazardous):
  - waste origin Milton Keynes only - Table 10-3
  - all waste origin WPAs - Table 10-4, (based on the 5-year maximum and 5-year average inputs (2018 to 2022))

The HIC waste capacity gap analysis for all Plan years is presented in Appendix G.

The estimate of HIC waste to landfill is a likely maximum for the purpose of ensuring a sufficient supply of landfill capacity. This does not preclude this waste from being managed higher up the waste hierarchy where viable.

Table 10-1 Capacity gap analysis: HIC waste to recycling / composting / anaerobic digestion (AD)

Year	HIC waste forecast to be managed via recycling / composting / AD ('000's tonnes)			HIC waste recycling / composting / AD capacity ('000's tonnes)	HIC waste recycling / composting / AD, net available capacity ('000's tonnes)		
	Low recycling scenario	Medium recycling scenario	High recycling scenario		Low recycling scenario	Medium recycling scenario	High recycling scenario
Baseline	163	163	163	234	71	71	71
2027	172	179	185	234	61	55	48
2035	189	208	214	234	45	25	20
2042	201	221	238	234	33	13	-4
2050	216	238	257	234	17	-5	-23

Table 10-2 Capacity gap analysis: HIC waste to energy recovery

Year	HIC waste forecast to be managed via energy recovery ('000's tonnes)			HIC waste energy recovery capacity ('000's tonnes)	HIC waste energy recovery, net available capacity ('000's tonnes)		
	Low recycling scenario	Medium recycling scenario	High recycling scenario		Low recycling scenario	Medium recycling scenario	High recycling scenario
Baseline	70	70	70	120	51	51	51
2027	74	75	70	120	47	45	51
2035	81	85	83	120	39	35	38
2042	86	93	76	120	34	27	44
2050	93	100	82	120	28	20	39

Table 10-3 Capacity gap analysis: HIC waste to non-hazardous landfill (disposal) (waste origin Milton Keynes only)

Year	HIC waste forecast to be managed at non-hazardous landfill ('000's tonnes)			HIC waste to non-hazardous landfill, cumulative remaining lifetime capacity ('000's tonnes)		
	Low recycling scenario	Medium recycling scenario	High recycling scenario	Low recycling scenario	Medium recycling scenario	High recycling scenario
Baseline	44	44	44	4,967	4,967	4,967
2027	46	38	37	4,742	4,766	4,768
2035	50	27	25	4,355	4,511	4,526
2042	53	26	26	3,990	4,326	4,347
2050	58	28	28	3,544	4,107	4,129

Table 10-4 Capacity gap analysis: HIC waste to non-hazardous landfill (disposal) (all waste origin WPAs)

Year	HIC waste forecast to be managed at non-hazardous landfill ('000's tonnes)		HIC waste to non-hazardous landfill, cumulative remaining lifetime capacity ('000's tonnes)	
	5-year maximum inputs	5-year average inputs	5-year maximum inputs	5-year average inputs
Baseline	919	718	4,967	4,967
2027	919	718	373	1,375
2035	919	718	-6,976	-4,372
2042	919	718	-13,407	-9,401
2050	919	718	-20,757	-15,147

10.3.1 Capacity gap analysis: HIC waste summary

The capacity gap analysis for recycling / composting / AD capacity for HIC waste is shown in Table 10-1. It identifies that:

- under the 'low recycling scenario' there is sufficient net capacity during the Plan period, although surplus capacity reduces over time due to the increasing quantity of waste to be managed via recycling / composting / AD
- under the 'medium recycling scenario', net surplus capacity reduces to zero by around 2048, with a deficit of approximately 5,000 tonnes per annum at the end of the Plan period
- Under the 'high recycling scenario', net surplus capacity reduces to zero by around 2041, with a deficit of approximately 23,000 tonnes per annum at the end of the Plan period

As noted in section 9.3, the recycling / composting / AD capacity for HIC waste in the Plan area largely comprises capacity for treating sewage sludge and other liquid and sludge wastes and therefore capacity availability for treating other waste types is a consideration in meeting future needs.

The capacity gap analysis for energy recovery capacity for HIC waste is shown in Table 10-2. It identifies that:

- under the 'low recycling scenario', 'medium recycling scenario' and 'high recycling scenario', there is sufficient energy recovery capacity during the Plan period, although surplus capacity reduces over time due to the increasing quantity of waste to be managed via energy recovery.

As noted in section 9.3, the energy recovery capacity for HIC waste in the Plan area is provided solely by the Milton Keynes Waste Recovery Park. Therefore, any changes in the future operation of this facility are a consideration in meeting future needs.

The capacity gap analysis for non-hazardous landfill (disposal) capacity for HIC waste is shown in Table 10-3 and Table 10-4. It identifies that:

- when only waste originating from Milton Keynes is included in the capacity gap analysis (Table 10-3), then, under the 'low recycling scenario', 'medium recycling scenario' and 'high recycling scenario', there is sufficient non-hazardous landfill (disposal) capacity during the Plan period

- when waste originating from any WPA is included in the capacity gap analysis (Table 10-4), then, based on recent (2018 to 2022) rates of waste input, the 'remaining lifetime input capacity' may be used up by around 2028 / 2029 if there is no change to the annual rate of waste input

As noted in section 9.3, the non-hazardous landfill capacity for HIC waste in the Plan area is provided solely by Bletchley Landfill Site. Although the Site has permission to operate until 2037, recent rates of waste input indicate that the remaining 'lifetime input capacity' may be used up prior to this date. Therefore, monitoring of inputs and remaining capacity will be a consideration as well as planning for future need as the Plan period progresses.

10.3.2 Capacity gap analysis: HIC waste transfer facilities

Table 9-1 identifies approximately 176,000 tonnes of waste transfer 'operational capacity' for HIC waste.

The 5-year average (2018 to 2022) proportion of HIC waste from the Plan area received by transfer facilities is approximately 65%, with the 3-year average (2020 to 2022) reducing to approximately 52%. By applying these proportions to the total HIC waste arisings estimated to be generated in the Plan area at the end of the Plan period in 2050, a total of approximately 190,000 to 238,000 tonnes per annum of waste transfer facility capacity may be required. This indicates that additional HIC waste transfer capacity of 14,000 to 62,000 tonnes per annum may be required by the end of the Plan period. However, the need for waste transfer capacity will depend on a range of factors including the proximity to and the type of waste management infrastructure being used.

10.4 Capacity gap analysis: CD&E waste

The capacity gap analysis compares the forecast waste management needs profiles (as set out in Table 6-6 for CD&E waste) to the waste infrastructure capacity for CD&E waste that is available within the Milton Keynes administrative area. The CD&E waste capacity gap analysis, for each of the three waste management scenarios (low, medium and high recycling scenarios), is presented in the following tables:

- CD&E waste to recycling / recovery – Table 10-5 – Note that the CD&E waste recycling / recovery capacity gap analysis assumes waste is managed at recycling capacity first, and any surplus waste is sent to recovery to land (and consumes the 'remaining lifetime capacity')
- CD&E waste to landfill (disposal, inert):
  - waste origin Milton Keynes only - Table 10-6
  - all waste origin WPAs - Table 10-7, (based on the 5-year maximum and 5-year average inputs (2018 to 2022))

The CD&E waste capacity gap analysis for all Plan years is presented in Appendix H.

The estimate of CD&E waste to landfill is a likely maximum for the purpose of ensuring a sufficient supply of landfill capacity. This does not preclude this waste from being managed higher up the waste hierarchy where viable.

Table 10-5 Capacity gap analysis: CD&E waste to recycling and recovery to land

Year	CD&E waste forecast to be managed via recycling or recovery ('000's tonnes)			CD&E waste recycling capacity ('000's tonnes)	CD&E waste recycling, net available capacity ('000's tonnes)			CD&E waste recovery to land, cumulative remaining lifetime capacity ('000's tonnes)		
	Low recycling scenario	Medium recycling scenario	High recycling scenario		Low recycling scenario	Medium recycling scenario	High recycling scenario	Low recycling scenario	Medium recycling scenario	High recycling scenario
Baseline	295	295	295	164	-132	-132	-132	1,827	1,827	1,827
2027	389	403	410	164	-225	-239	-247	700	659	636
2035	389	425	445	164	-225	-262	-281	-1,103	-1,356	-1,492
2042	389	445	500	164	-225	-281	-337	-2,681	-3,264	-3,681
2050	389	445	500	164	-225	-281	-337	-4,484	-5,512	-6,374

Note 1: The CD&E waste recycling / recovery capacity gap analysis assumes waste is managed at recycling capacity first, and any surplus waste is sent to recovery to land (and consumes the 'remaining lifetime capacity')

Table 10-6 Capacity gap analysis: CD&E waste to inert landfill (disposal) (waste origin Milton Keynes only)

Year	CD&E waste forecast to be managed at inert landfill ('000's tonnes)			CD&E waste to inert landfill, cumulative remaining lifetime capacity ('000's tonnes)		
	Low recycling scenario	Medium recycling scenario	High recycling scenario	Low recycling scenario	Medium recycling scenario	High recycling scenario
Baseline	126	126	126	1,191	1,191	1,191
2027	167	153	145	357	399	421
2035	167	131	111	-977	-724	-588
2042	167	111	56	-2,143	-1,560	-1,143
2050	167	111	56	-3,477	-2,449	-1,588

Table 10-7 Capacity gap analysis: CD&E waste to inert landfill (disposal) (all waste origin WPAs)

Year	CD&E waste forecast to be managed at inert landfill ('000's tonnes)		CD&E waste to inert landfill, cumulative remaining lifetime capacity ('000's tonnes)	
	5-year maximum inputs	5-year average inputs	5-year maximum inputs	5-year average inputs
Baseline	220	191	1,191	1,191
2027	220	191	90	234
2035	220	191	-1,672	-1,296
2042	220	191	-3,214	-2,635
2050	220	191	-4,976	-4,165

10.4.1 Capacity gap analysis: CD&E waste summary

The capacity gap analysis for recycling and recovery capacity for CD&E waste is shown in Table 10-5 and assumes waste is managed at recycling capacity first, and any surplus waste is sent to recovery to land (and consumes the 'remaining lifetime capacity'). It identifies that:

- under the 'low recycling scenario' the recovery to land 'remaining lifetime input capacity' may be used up by 2031
- under the 'medium recycling scenario' and 'high recycling scenario', the recovery to land 'remaining lifetime input capacity' may be used up by 2030

Table 10-5 shows that, if additional CD&E waste recycling capacity became available then the annual inputs to recovery to land may be reduced and the 'remaining lifetime input capacity' may be used over a longer period of time.

The capacity gap analysis for inert landfill (disposal) capacity for CD&E waste is shown in Table 10-6 and Table 10-7. It identifies that:

- when only waste originating from Milton Keynes is included in the capacity gap analysis (Table 10-6), then, under the 'low recycling scenario' and 'medium recycling scenario' the 'remaining lifetime input capacity' may be used up by around 2030, and under the 'high recycling scenario' the 'remaining lifetime input capacity' may be used up by around 2031
- when waste originating from any WPA is included in the capacity gap analysis (Table 10-7), then, based on recent (2018 to 2022) rates of waste input, the 'remaining lifetime input capacity' may be used up by around 2028 / 2029 if there is no change to the annual rate of waste input

As noted in section 9.3, the inert landfill capacity for CD&E waste in the Plan area is provided solely by Bletchley Landfill Site. Although the Site has permission to operate until 2037, recent rates of waste input indicate that the remaining 'lifetime input capacity' may be used up prior to this date. Therefore, monitoring of inputs and remaining capacity will be a consideration as well as planning for future need as the Plan period progresses.

10.4.2 Capacity gap analysis: CD&E waste transfer facilities

Table 9-1 identifies approximately 35,000 tonnes of waste transfer 'operational capacity' for CD&E waste.

The 5-year average (2018 to 2022) proportion of CD&E waste from the Plan area received by transfer facilities is less than 1%. Applying this proportion to the total CD&E waste arisings estimated to be generated in the Plan area during the Plan period to 2050, approximately 6,000 tonnes of waste transfer facility capacity may be required. This indicates that sufficient waste transfer capacity for CD&E waste is available in the Plan area. However, as CD&E waste management moves up the waste hierarchy and the demand for local landfill engineering and restoration materials at Bletchley Landfill Site ceases, then the need for CD&E waste transfer capacity may increase.

10.5 Hazardous waste

Planning for large-scale hazardous waste management capacity is undertaken at the regional and national scale. The principles of proximity and self-sufficiency for hazardous waste are included within the National Policy Statement for Hazardous Waste (Defra, 2013) as *"to ensure that sufficient disposal facilities are provided in the country as a whole to match expected arisings of all hazardous wastes, except those produced in very small quantities, and to enable hazardous waste to be disposed of in one of the nearest appropriate installations"*.

Table 9-1 identifies approximately 7,400 tonnes per annum of 'operational' hazardous waste treatment capacity in the Plan area and very limited 'operational capacity' for waste transfer and energy recovery for hazardous waste. Table 9-4 does not identify any landfill capacity for hazardous waste in the Plan area, Although Bletchley Landfill Site is permitted to receive Stable Non-Reactive Hazardous Waste (SNRHW) into dedicated cells, only very small quantities of SNRHW have been received at the site in recent years,(as reported in the Waste Data Interrogator), so this capacity has not been reported separately in Table 9-4.

Table 7-3 and Figure 7-2 forecast hazardous waste arisings in the Plan area to be around 12,000 to 15,000 tonnes per annum at the end of the Plan period. As planning for the provision of hazardous waste infrastructure capacity is undertaken at a regional and national scale, any additional waste infrastructure capacity requirements will be addressed in this wider geographic context through existing or proposed facilities to meet collective regional or national demand for the wide range of hazardous waste types generated across the country.

10.6 Exempt facilities

Facilities operating under an exemption from environmental permitting each contribute a relatively small capacity when compared to facilities operating under an environmental permit.

Although it is acknowledged that exempt facilities have an important role to play in the management of waste, capacity associated with exempt facilities has not been included in the consideration of waste management capacity in the Plan area since such facilities do not generally require specific planning requirements or considerations.

10.7 Future waste management facilities

Consideration of waste infrastructure capacity in the Plan area that currently has planning permission but has not yet been built out, has potential to contribute to future waste infrastructure capacity in the Plan area. This includes:

- Permission granted (permitted April 2016 - not yet operational) for Cotton Valley Waste Transfer Station (operated by Mick George) for the production of up to 80,000 tonnes per annum of recycled aggregates from waste. (Note: this permission has now expired, and is therefore not anticipated to deliver additional capacity in the immediate future)

As recommended in the PPGW, proposed waste infrastructure capacity has not been included within the capacity gap analysis, however, it may be a consideration when planning for any additional waste infrastructure capacity to meet any identified capacity gaps.

11. Cross boundary movements of waste

11.1 Introduction

The management of waste is not constrained by administrative boundaries and cross boundary movements of waste can align with the proximity principle (section 10.1).

The PPGW (MHCLG, 2015), provides guidance on applying the 'duty to cooperate' at paragraphs 015 and 016:

"Waste is a strategic issue which can be addressed effectively through close co-operation between waste planning authorities and other local planning authorities and public bodies to ensure a suitable and sustainable network of waste management facilities is in place."

"By the nature of the activity, waste planning policy requires a strategic, cross-boundary approach to ensure that waste is effectively managed and facilities are properly located. ……. While the duty to cooperate is not a duty to agree, waste planning authorities should make every effort to secure the necessary cooperation on waste matters."

This section provides supporting information on the cross boundary movement of waste by outlining the Plan area waste imports and exports, identifying strategic waste movements and reviewing waste infrastructure capacity available in proximity to the Milton Keynes administrative area.

It is important to note that, in order to identify all strategic movements of waste, this section includes waste received by all facility types, except for mobile plant. However, due to these differences in assumptions, the total quantities of waste received will not match the waste arisings estimates in earlier sections of this report and should not be directly compared. Double-counting of waste quantities may arise as waste moves between facilities. It should also be noted that the Waste Data Interrogator codes some waste with an origin of Milton Keynes as having an origin of Buckinghamshire, and therefore the data presented should be used appropriately.

11.2 Plan area waste imports and exports

Cross boundary movements of waste into and out of the Plan area are described as imports and exports:

- Imports refers to waste that originates outside of the Plan area but is received at waste management facilities located within the Plan area
- Exports refers to waste that originates within the Plan area but is received at waste management facilities located outside the Plan area

Figure 11-1 presents the 5-year average (2018 to 2022) waste imports and exports for the Plan area, noting that this represents total waste received by waste management facilities, and not total waste arisings. Double-counting of waste quantities may arise as waste moves between facilities.

Figure 11 1 indicates that:

- Average total waste imports received at waste management facilities in the Plan area total 1.47 million tonnes.
- Average waste imports are highest from the waste origin regions of the East of England (509,000 tonnes per annum), followed by the South East (471,000 tonnes per annum), London (425,000 tonnes per annum) and the East Midlands (62,000 tonnes per annum).
- Average waste imports mainly comprise HIC waste (1.01 million tonnes per annum), with lower quantities of CD&E waste (451,000 tonnes per annum).
- Average waste exports received at waste management facilities outside the Plan area total 451,000 tonnes per annum.
- Average waste exports are highest to the waste destination regions of the East of England (232,000 tonnes per annum), followed by the East Midlands (128,000 tonnes per annum).
- Average waste exports mainly comprise CD&E waste (312,000 tonnes per annum), with lower quantities of HIC waste (127,000 tonnes per annum).
- Waste imports are higher than waste exports, indicating that Milton Keynes is likely to be a net importer of waste.

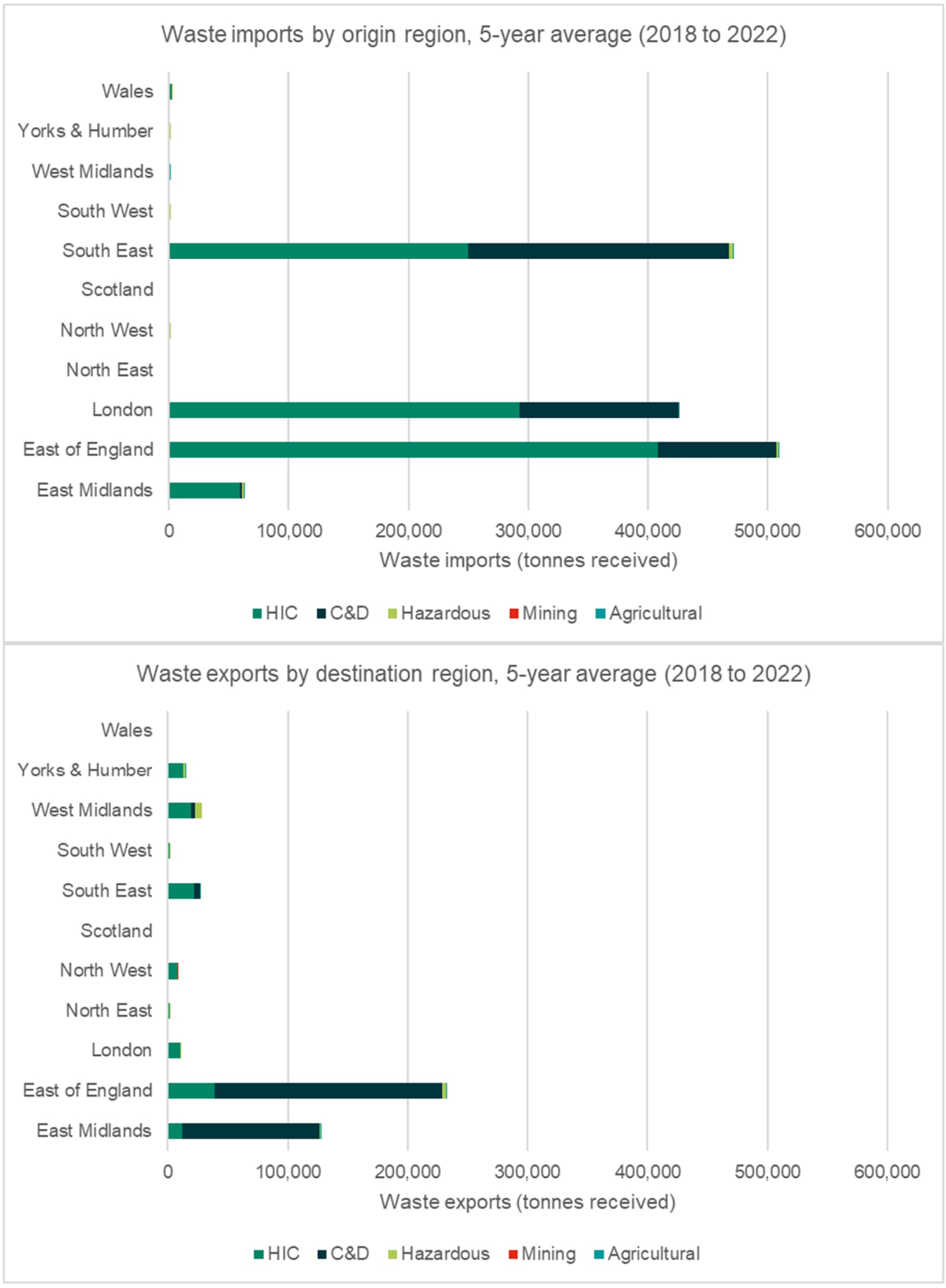

Figure 11-1 Plan area waste imports and exports by origin and destination region, 5-year average, 2018 -2022 (total waste received by waste management facilities)

11.3 Strategic waste movements

The Duty to Cooperate on Waste - Practice Guide for Waste Planning Authorities in England (NWTAB, 2021) states that

> *"Engagement between WPAs will take place where it is considered that a strategic level of movements is taking place on an ongoing basis."*

The guide (NWTAB, 2021) sets out guidelines for defining what constitutes a 'strategic' level of waste movement. It identifies that the levels set out in Table 11-1 below have been agreed in London, the south east and east of England as a starting point for considering whether dialogue is required with WPAs. It is noted that the guideline levels:

- are a guide and not a rule i.e. they are not thresholds
- relate to total quantum of movement to an area rather than to a single site
- relate to waste being exported from one WPA, or one joint waste planning area, to another.

Table 11-1 Guideline levels for strategic waste movements

Waste stream	Guideline levels for strategic waste movements (tonnes per annum)
Non-hazardous waste	5,000
Inert waste	10,000
Hazardous waste	100

Source: NWTAB, 2021

A review of waste exports from Milton Keynes for the last 5-years (2018 to 2022) has been used to identify potential strategic waste movements. Table 11-2 identifies where waste exports to individual WPAs have exceeded the guideline levels in Table 11-1 in two or more of the past 5 years. Further information on the receiving waste management facilities is provided in Appendix I.

Table 11-2 Strategic-level waste exports from the Plan area, 2018 -2022

Receiving facility region	Receiving facility sub region	Receiving facility WPA	5-year average waste received (tonnes per annum)	No. of years guideline level for strategic waste movements (Table 11-1) exceeded
HIC (assumed to comprise non-hazardous waste)				
East Midlands	Nottinghamshire	Nottinghamshire	7,919	4
East of England	Cambridgeshire	Cambridgeshire	27,008	5
London	South East London	Lewisham	7,161	2
South East	Buckinghamshire	Buckinghamshire	9,415	5
South East	Kent	Kent	5,153	4
West Midlands	West Midlands Met Districts	Birmingham City	6,960	2
West Midlands	Warwickshire	Warwickshire	7,714	4
Yorks & Humber	South Yorkshire	Sheffield	2,729	2

Receiving facility region	Receiving facility sub region	Receiving facility WPA	5-year average waste received (tonnes per annum)	No. of years guideline level for strategic waste movements (Table 11-1) exceeded
CD&E waste (assumed to comprise inert waste)				
East Midlands	Northamptonshire	Northamptonshire	113,454	5
East of England	Bedfordshire	Bedford	145,616	4
East of England	Bedfordshire	Central Bedfordshire	39,370	4
Hazardous waste				
East Midlands	Derbyshire	Derbyshire	197	4
East Midlands	Northamptonshire	Northamptonshire	728	4
East Midlands	Nottinghamshire	Nottinghamshire	398	5
East of England	Bedfordshire	Bedford	521	5
East of England	Cambridgeshire	Cambridgeshire	79	2
East of England	Hertfordshire	Hertfordshire	411	5
East of England	Cambridgeshire	Peterborough	263	5
East of England	Suffolk	Suffolk	2,346	5
South East	Kent	Medway	134	3
South West	Bath, Bristol and S Glo	Bristol City	310	4
West Midlands	West Midlands Met Districts	Birmingham City	2,147	4
West Midlands	West Midlands Met Districts	Sandwell	442	5
West Midlands	Staffordshire	Staffordshire	116	4
West Midlands	West Midlands Met Districts	Walsall	1,866	5
West Midlands	Worcestershire	Worcestershire	98	3
Yorks & Humber	West Yorkshire	Leeds	540	4
Yorks & Humber	South Yorkshire	Rotherham	519	4

Source: Waste Data Interrogator

In addition to the WPAs listed in Table 11-2, waste exports from Milton Keynes to the following individual WPAs (listed by receiving facility region) exceeded the guideline levels for strategic waste movements (Table 11-1) in just one of the past 5 years and are unlikely therefore to comprise strategic waste movements:

- HIC waste:
  - East Midlands: Leicestershire
  - East of England: Central Bedfordshire, Luton, Suffolk
  - London: Barking and Dagenham, Enfield
  - South East: Oxfordshire
  - West Midlands: Solihull
  - Yorkshire and Humber: Barnsley, Rotherham, Wakefield
- CD&E

  - East of England: Cambridgeshire
  - South East: Hampshire
- Hazardous:
  - London: Havering
  - North West: Cheshire, Cheshire West and Chester, Lancashire, Salford
  - South East: Oxfordshire
  - South West: Gloucestershire
  - West Midlands: Stoke-on-Trent City, Warwickshire, Wolverhampton
  - Yorkshire and Humber: Kingston Upon Hull City, Sheffield

11.4 Waste management facilities within 50 miles of Milton Keynes

To provide further understanding of waste infrastructure capacity available in proximity to the Milton Keynes administrative area, a review of permitted waste management facilities located within 50 miles of the approximate centre of Milton Keynes City (assumed eastings 486711, northings 236413) was undertaken using publicly available information.

The review identified over 1,000 permitted waste management facilities located within the search area. The findings are summarised as:

- Table 11-3 provides details of the number of recycling and recovery facilities including waste processing, transfer, treatment, metal recycling, on/in land and use of waste facilities. Data on the waste received by each facility type in 2022 is presented by waste stream.
- Table 11-4 summarises incineration capacity, including operational capacity (where waste is being received), non-operational capacity (permitted capacity but not receiving waste) and pre-operational capacity (permitted capacity currently under construction or commissioning). Further pre-operational capacity, where construction is yet to commence, is not shown in Table 11-4 as such capacity may not be realised. A full list of permitted incineration facilities in the search area and their associated status, type, permitted capacity and waste inputs is provided in Appendix J.
- Table 11-5 summarises landfill capacity at the end of 2022 and presents the number of operational landfill sites and the total remaining landfill capacity by landfill permit type. A full list of permitted landfill sites in the search area and their associated remaining capacity is provided in Appendix K.

Table 11-3 Number of waste management facilities (excluding incineration and landfill) located within approximately 50 miles of the centre of Milton Keynes City (excluding capacity within the Plan area (section 9.3))

Site category	No. of facilities receiving waste in 2022	Facility type	No. of facilities receiving waste in 2022	Waste received in 2022 ('000's tonnes)		
				HIC	CD&E	Haz
Processing	5	Animal and Food Waste	2	62	0	1
		Non-Ferrous Metal reprocessing	3	12	0	2
Transfer	384	CA Site	107	808	71	18
		Clinical Waste Transfer	20	188	0	6
		Haz Waste Transfer	50	932	289	40
		Inert Waste Transfer	16	13	829	0
		Non-Haz Waste Transfer	191	4,289	3,296	7
Treatment	384	Anaerobic Digestion	16	947	0	9
		Biological Treatment	24	1,476	37	92
		Chemical Treatment	5	1,457	0	5
		Clinical Waste Transfer / Treatment	1	5	0	8
		Composting	43	1,031	50	1
		Haz Waste Transfer / Treatment	12	134	174	53
		Inert Waste Transfer / Treatment	16	1	506	0
		Material Recycling Facility	35	1,370	955	0
		Non Haz Waste Transfer / Treatment	65	832	780	0
		Non-specified Treatment	2	6	0	13
		Physical Treatment	133	1,359	4,758	17
		Physical-Chemical Treatment	19	766	5,704	264
		Recovery of Waste	4	716	52	20
		WEEE treatment facility	9	13	0	5
Metal Recycling Site (MRS)	151	Car Breaker	43	218	81	59
		Metal Recycling	64	882	308	106
		Vehicle depollution facility	44	47	55	88
On/In Land	32	Deposit of waste to land (recovery)	32	49	2,492	655
Use of Waste	1	Timber Manufacturing	1	35	0	0

Source: Waste Data Interrogator 2022

Table 11-4 Incineration capacity within approximately 50 miles of the centre of Milton Keynes City (excluding capacity within the Plan area (section 9.3))

Status	Facility type	No. of facilities	Permitted capacity ('000's tonnes)	Waste incinerated ('000's tonnes)				
				2018	2019	2020	2021	2022
Operational	Animal By-Products	1	438	157	147	148	148	127
	Biomass/Waste Wood	3	194	111	113	141	155	145
	Clinical	4	31	15	11	13	8	8
	Co-Incineration of hazardous waste	1	461	86	96	99	112	120
	Co-Incineration of non hazardous waste	1	289	163	174	159	165	218
	Municipal and/or C&I	11	3,654	2,481	2,312	2,761	2,718	3,253
	Sewage Sludge	1	91	43	40	23	23	33
	TOTAL	**22**	**5,157**	**3,057**	**2,893**	**3,343**	**3,328**	**3,904**
Non-operational	Animal Carcasses	1	8	-	-	-	-	-
	Municipal and/or C&I	2	788	-	-	-	-	-
	TOTAL	**3**	**796**	-	-	-	-	-
Pre-operational (under construction or commissioning only)	Co-Incineration of non-hazardous waste	1	73	-	-	-	-	-
	Municipal and/or C&I	1	480	-	-	-	-	-
	TOTAL	**2**	**553**	-	-	-	-	-

Source: Waste Data Interrogator 2022, Waste Management 2022 in England Data Tables v4

Table 11-5 Remaining landfill capacity within approximately 50 miles of the centre of Milton Keynes City (excluding capacity within the Plan area (section 9.3))

Permit type	No. of sites with remaining landfill capacity, end of 2022	Remaining landfill capacity, end of 2022 ('000's m^3)
L01 - Hazardous Merchant Landfill	1	657
L02 - Non Hazardous Landfill With SNRHW cell	8	16,953
L04 - Non Hazardous	17	33,190
L05 - Inert Landfill	49	34,029
L06 - Hazardous Restricted Landfill	1	340
TOTAL	**76**	**85,169**

Source: Waste Data Interrogator 2022; EA, 2024d

12. Conclusions and recommendations

The conclusions and recommendations from the Waste Needs Assessment and Capacity Gap Analysis are set out below.

12.1 LACW and C&I waste (HIC waste)

The capacity gap analysis for **recycling / composting / AD capacity for HIC waste** identifies that:

- under the 'low recycling scenario' there is sufficient net capacity during the Plan period, although surplus capacity reduces over time due to the increasing quantity of waste to be managed via recycling / composting / AD
- under the 'medium recycling scenario', net surplus capacity reduces to zero by around 2048, with a deficit of approximately 5,000 tonnes per annum at the end of the Plan period
- Under the 'high recycling scenario', net surplus capacity reduces to zero by around 2041, with a deficit of approximately 23,000 tonnes per annum at the end of the Plan period

The recycling / composting / AD capacity for HIC waste in the Plan area largely comprises capacity for treating sewage sludge and other liquid and sludge wastes and therefore capacity availability for treating other waste types is a consideration in meeting future needs.

The capacity gap analysis for **energy recovery capacity for HIC waste** identifies that:

- under the 'low recycling scenario', 'medium recycling scenario' and 'high recycling scenario', there is sufficient energy recovery capacity during the Plan period, although surplus capacity reduces over time due to the increasing quantity of waste to be managed via energy recovery.

As the energy recovery capacity for HIC waste in the Plan area is provided solely by the Milton Keynes Waste Recovery Park, any changes in the future operation of this facility are a consideration in meeting future needs.

The capacity gap analysis for **non-hazardous landfill (disposal) capacity for HIC waste** identifies that:

- when only waste originating from Milton Keynes is included in the capacity gap analysis, then, under the 'low recycling scenario', 'medium recycling scenario' and 'high recycling scenario', there is sufficient non-hazardous landfill (disposal) capacity during the Plan period
- when waste originating from any WPA is included in the capacity gap analysis, then, based on recent (2018 to 2022) rates of waste input, the 'remaining lifetime input capacity' may be used up by around 2028 / 2029 if there is no change to the annual rate of waste input

The non-hazardous landfill capacity for HIC waste in the Plan area is provided solely by Bletchley Landfill Site. Although the Site has permission to operate until 2037, recent rates of waste input indicate that the remaining 'lifetime input capacity' may be used up prior to this date. Therefore, monitoring of inputs and remaining capacity will be a consideration as well as planning for future need as the Plan period progresses.

The capacity gap analysis for **waste transfer facility capacity for HIC waste** identifies that:

- additional HIC waste transfer capacity of 14,000 to 62,000 tonnes per annum may be required by the end of the Plan period.

The need for waste transfer capacity for HIC waste will depend on a range of factors including the proximity to and the type of waste management infrastructure being used and is a consideration in meeting future needs.

12.2 CD&E waste

The capacity gap analysis for **recycling and recovery capacity for CD&E waste** (which assumes waste is managed at recycling capacity first, and any surplus waste is sent to recovery to land) identifies that:

- under the 'low recycling scenario' the recovery to land 'remaining lifetime input capacity' may be used up by 2031
- under the 'medium recycling scenario' and 'high recycling scenario', the recovery to land 'remaining lifetime input capacity' may be used up by 2030

If additional CD&E waste recycling capacity became available then the annual inputs to recovery to land may be reduced and the use of the 'remaining lifetime input capacity' may be extended over a longer period of time.

The capacity gap analysis for **inert landfill (disposal) capacity for CD&E waste** identifies that:

- when only waste originating from Milton Keynes is included in the capacity gap analysis, then, under the 'low recycling scenario' and 'medium recycling scenario' the 'remaining lifetime input capacity' may be used up by around 2030, and under the 'high recycling scenario' the 'remaining lifetime input capacity' may be used up by around 2031
- when waste originating from any WPA is included in the capacity gap analysis, then, based on recent (2018 to 2022) rates of waste input, the 'remaining lifetime input capacity' may be used up by around 2028 / 2029 if there is no change to the annual rate of waste input

The inert landfill capacity for CD&E waste in the Plan area is provided solely by Bletchley Landfill Site. Although the Site has permission to operate until 2037, recent rates of waste input indicate that the remaining 'lifetime input capacity' may be used up prior to this date. Therefore, monitoring of inputs and remaining capacity will be a consideration as well as planning for future need as the Plan period progresses.

The capacity gap analysis for **waste transfer facility capacity for CD&E waste** identifies that:

- sufficient waste transfer capacity for CD&E waste may be available in the Plan area. However, as CD&E waste management moves up the waste hierarchy and the demand for local landfill engineering and restoration materials at Bletchley Landfill Site ceases, then the need for CD&E waste transfer capacity may increase above available capacity.

12.3 Hazardous waste

The **capacity gap analysis for hazardous waste** identifies that:

- a capacity gap of approximately 5,000 to 8,0000 tonnes per annum may arise by the end of the Plan period.

As planning for the provision of hazardous waste infrastructure capacity is undertaken at a regional and national scale, any additional waste infrastructure capacity requirements will be addressed in this wider geographic context through existing or proposed facilities to meet collective regional or national demand for the wide range of hazardous waste types generated across the country.

12.4 Other waste streams

The small quantity of **agricultural waste, mining waste and low-level radioactive waste** arising in the Plan area was not considered sufficient to require the consideration of any specific waste infrastructure provision.

12.5 Cross boundary movements of waste

Waste exports from the Plan area (2018 to 2022) that exceed the guideline levels for the definition of strategic waste movements include:

- For HIC waste: 8 no. WPAs
- For CD&E waste: 3 no. WPAs
- For hazardous waste: 17 no. WPAs

Considerable waste infrastructure capacity is available in the geographic areas surrounding the Milton Keynes administrative area and consultation with the relevant WPAs regarding strategic movements of waste is a consideration in developing the Waste Local Plan.

Waste imports into the Plan area also occur, particularly to the regionally important Bletchley Landfill Site and also to the Milton Keynes Waste Recovery Park and other waste management facilities.

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Appendix A Limitations and assumptions

A.1 Environment Agency, Waste Data Interrogator

The Waste Data Interrogator is reliant on the information the Environment Agency receives from waste facilities. It is therefore recognised that the quality of the data in the interrogator is dependent on the waste facility operators providing the correct information without error. Due to the limited intervention from the EA, limitations of the data assessed could include the possibility the movement of waste from one waste facility to another may not be recognised by the receiving facility due to error or miss-categorisation, or that some waste data is not captured or entered into the Waste Data Interrogator.

Some operators do not provide sufficient information on the origin of the waste, as a result some waste within the Waste Data Interrogator will be reported as ‘not codeable’ or ‘WPA not codeable (South East)’. There is the possibility that some of the not codeable waste originated within the Plan area but is not captured as such.

A.2 Double counting of waste arisings

Although the approach adopted has attempted to remove the double counting of waste arisings, the following have been acknowledged as potentially including a double counting of waste arisings:

- LACW reported by WasteDataFlow does not exclude hazardous waste arisings. There is a small risk of double counting waste arisings between the LACW stream and the hazardous waste stream.
- LACW reported by WasteDataFlow does not exclude waste with an EWC code of 20 02 02. There is a small risk of double counting waste arisings between the LACW stream and the CD&E waste stream.
- Where waste moves from one waste facility to another, the waste may be recorded in the Waste Data Interrogator as being received by more than one facility, depending on the type of receiving facility and the waste origin coding (see Appendix A.1) assigned by the facility operator.

Appendix B Policy and Legislation

B.1 EU Legislation

Historically waste management in the United Kingdom (UK) has been significantly driven by EU policy. EU waste policy aims to protect human health and the health of the environment, whilst helping member states transition to a circular economy. Embedded in EU policy are targets on recycling and limiting the amount of waste disposed of to landfill. Although the UK has left the EU, the EU's policies on waste have already been transposed into UK law and will therefore remain relevant.

Waste Framework Directive (2008)

The Waste Framework Directive (2008/98/EC) (WFD) (as amended, including by Commission Regulation (EU) No 1357/2014, Commission Directive (EU) 2015/1127, Council Regulation (EU) 2017/997, Directive (EU) 2018/851, Regulation (EU) 2023/1542) is the principal EU legislation for waste; setting out the basic concepts and definitions related to waste management.

The WFD is underpinned by the waste hierarchy, which ranks options for managing waste according to their impact on the environment. The waste hierarchy requires that member states manage waste as near to the top of the hierarchy (i.e. waste prevention) as possible, with disposal of waste being the last resort (as set out in Article 4 of the WFD and shown in Figure B-1). Article 4 states that the waste hierarchy shall apply as a priority order in waste prevention and management legislation and policy, and that member states shall take measures to encourage the options that deliver the best overall environmental outcome.

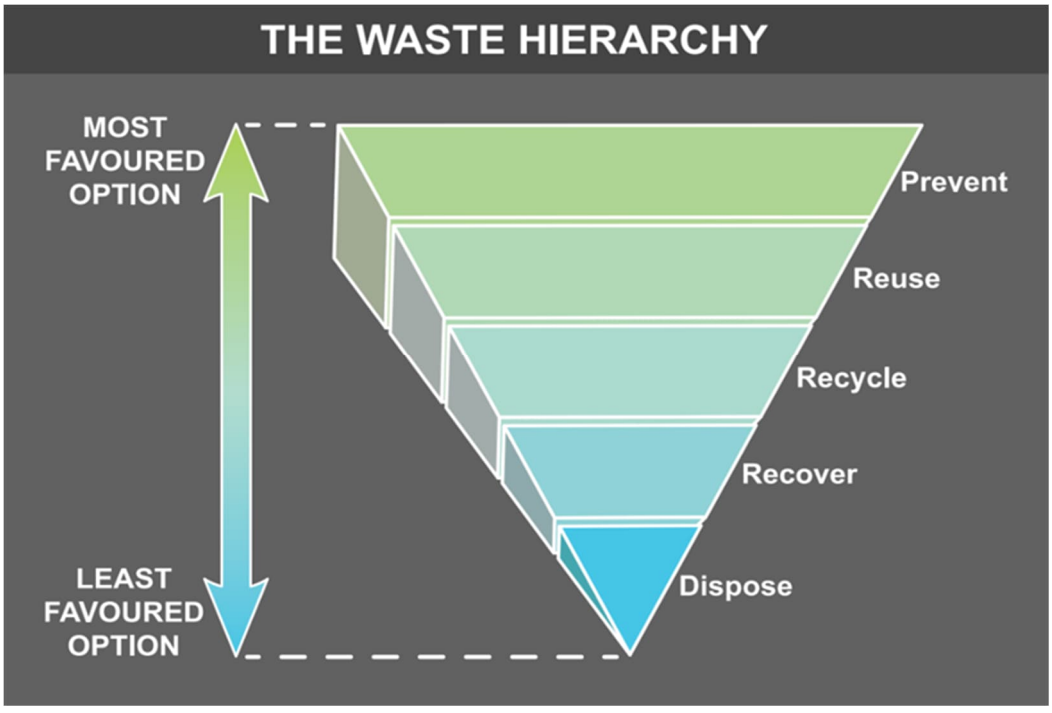

Figure B-1 The waste hierarchy

Other relevant articles from the WFD include:

Article 13: Protection of Human Health and the Environment: Requires that waste be managed by means which do not endanger human health or the environment – in particular, without risk to water, air, soil, plants or animals, without causing a nuisance through noise or odours, and without adversely affecting the countryside or places of special interest.

Article 16: Principles of Proximity and Self-Sufficiency: Requires that appropriate measures are taken to *"establish an integrated and adequate network of waste disposal installations and of installations for the recovery of mixed municipal waste collected from private households, including where such collection also covers such waste from other producers, taking into account best available techniques."*

States that this network shall be designed to enable the community as a whole to become self-sufficient in waste disposal.

Article 28: Waste Management Plans: Requires authorities to produce Waste Management Plans, which *"set out an analysis of the current waste management situation in the geographical entity concerned, as well as the measures to be taken to improve environmentally sound preparing for re-use, recycling, recovery and disposal of waste and an evaluation of how the plan will support the implementation of the objectives and provisions of this Directive".*

States that the Waste Management Plans must contain:

a) The type, quantity and source of waste generated within the territory, the waste likely to be shipped from or to the national territory, and an evaluation of the development of waste streams in the future;

b) Existing waste collection schemes and major disposal and recovery installations, including any special arrangements for waste oils, hazardous waste or waste streams addressed by specific community legislation;

c) An assessment of the need for new collection schemes, the closure of existing waste installations, additional waste installation infrastructure in accordance with Article 16, and, if necessary, the investments related thereto;

d) Sufficient information on the location criteria for site identification and on the capacity of future disposal or major recovery installations, if necessary; and

e) General waste management policies, including planned waste management technologies and methods, or policies for waste posing specific management problems.

Landfill Directive (1999)

The Landfill Directive (1999/31/EC) (brought into force in 1999 and implemented in 2001, as amended, including by Regulation (EC) No 1882/2003, Regulation (EC) No 1137/2008, Council Directive 2011/97/EU, Directive (EU) 2018/850, Directive (EU) 2024/1785), regulates waste management in landfills in the EU. The Directive's primary objective is to prevent, or minimise as far as possible, the negative effects on the environment from the landfilling of waste, in particular on surface water, groundwater, soil, air, and human health, by introducing stringent technical requirements for waste and landfills (relating to their location, design, construction and operation).

Directive (EU) 2018/850 amends the Landfill Directive and requires Member States to significantly reduce waste disposal by landfilling. This will prevent detrimental consequences for human health and the environment, and ensure that economically valuable waste materials are recovered through proper waste management and in line with the waste hierarchy. Member States will be required to ensure that, as of 2030, waste suitable for recycling or other recovery, in particular that which is contained in municipal waste, will not be permitted to be disposed of to landfill. Use of landfills should remain exceptional rather than the norm.

Furthermore, the Member States must take the necessary measures to ensure that by 2035, the amount of municipal waste disposed of in landfills is reduced to 10% or less of the total amount of municipal waste generated by 2035.

Circular Economy Package (2020)

The “circular economy” is an economic model in which waste is eliminated, and resources are kept in continual use. It aims to move away from a ‘take, make, dispose’ linear model towards an economy that is regenerative by design. The Circular Economy Package (CEP) (2020) identifies steps for reducing the amount of waste generated and establishes a long-term path for the management of waste and increasing the recycling rate. The measures introduced in the 2020 CEP have been transposed into UK legislation.

The CEP makes the following significant amendments:

- Amends the reuse and recycling rate for municipal waste, which must be a minimum of 55% by weight by 2025, 60% by 2030, and 65% by 2035.
- Introduces the landfill target of no more than 10% of municipal waste to landfill by 2035.

Also, as part of the CEP, the EU has implemented a new Action Plan in March 2020. The new Action Plan contains initiatives to promote circular economy processes along the whole life-cycle of products, and aims to keep resources in the economy for as long as possible. Measures include:

- Making sustainable products the norm in the EU.
- Empowering consumers and public-buyers.
- Focusing on sectors which use the most resources and have a high potential for circularity (i.e. IT, construction, batteries and vehicles).
- Generating less waste and more value.
- Making circularity work for people, regions and cities.
- Leading global efforts on circular economy.

B.2 National Planning Policy

The UK government has developed a series polices aimed at increasing recycling and reducing waste. This section summarises these policies and how they may impact planning of future waste management infrastructure.

National Planning Policy Framework (NPPF) (MHCLG,2023)

A revised National Planning Policy Framework (NPPF) was published in 2023. This sets out the Government’s planning policies for England and is a material consideration when preparing plans (including waste local plans).

With regard to Local Plan preparation, Paragraph 31 of the NPPF states that “the preparation and review of all policies should be underpinned by relevant and up-to-date evidence. This should be adequate and proportionate, focused tightly on supporting and justifying the policies concerned, and take into account relevant market signals”.

Paragraph 35 of the NPPF outlines the requirements against which Local Plans are examined. Plans are ‘sound’ if they are:

- *“Positively prepared – providing a strategy which, as a minimum, seeks to meet the area’s objectively assessed needs; and is informed by agreements with other authorities, so that unmet need from neighbouring areas is accommodated where it is practical to do so and is consistent with achieving sustainable development*
- *Justified – an appropriate strategy, taking into account the reasonable alternatives, and based on proportionate evidence*

- *Effective – deliverable over the plan period, and based on effective joint working on cross-boundary strategic matters that have been dealt with rather than deferred, as evidenced by the statement of common ground*
- *Consistent with national policy – enabling the delivery of sustainable development in accordance with the policies in this Framework and other statements of national planning policy, where relevant."*

National Planning Policy for Waste (NPPW) (MHCLG,2014)

The National Planning Policy for Waste (NPPW) (MHCLG, 2014) published in October 2014, sets out the UK government's detailed waste planning policies and should be read in conjunction with the National Planning Policy Framework (NPPF). It sets out the requirements for:

- Use of a proportionate evidence base in preparing Local Plans.
- Identifying the need for waste management facilities in preparing Local Plans.
- Identifying suitable sites and areas in preparing Local Plans.
- Determining planning applications.
- Monitoring and reporting, to inform Local Plan preparation and planning application determination.

Relevant paragraphs of the NPPW include:

Paragraph 2: Using a proportionate evidence base: Requires that waste planning authorities:

- Ensure that the planned provision of new waste management capacity and its spatial distribution is based on robust analysis of best available data and information, and an appraisal of options, avoiding spurious precision;
- Work jointly and collaboratively with other planning authorities to collect and share data and information on waste arisings, and take account of:
  - a) Waste arisings across neighbouring waste planning authority areas; and
  - b) Any waste management requirement identified nationally, including the Government's latest advice on forecasts of waste arisings and the proportion of waste that can be recycled; and
- Ensure that the need for waste management facilities is considered alongside other spatial planning concerns, recognising the positive contribution that waste management can bring to the development of sustainable communities.

Paragraph 3: Identify need for waste management facilities: States that:

- Waste planning authorities should prepare Local Plans which identify sufficient opportunities to meet the identified needs of their area for the management of waste streams.
- Waste planning authorities should consider the need for additional waste management capacity of more than local significance, and consider the extent to which the capacity of existing operational facilities would satisfy any identified needs.
- Highlights the requirement to work collaboratively with other waste planning authorities.

Paragraph 4: Identifying suitable sites and areas: States that waste planning authorities should identify in their Local Plans, sites and/or areas for new or enhanced waste management facilities in appropriate locations.

States that in preparing their Local Plans, the authorities should:

- Identify the broad type or types of waste management facility that would be appropriately located on the allocated site or in the allocated area in line with the waste hierarchy, taking care to avoid stifling innovation;
- Plan for the disposal of waste and the recovery of mixed municipal waste in line with the proximity principle, recognising that new facilities will need to serve catchment areas large enough to secure the economic viability of the plant;
- Consider opportunities for on-site management of waste where it arises;
- Consider a broad range of locations including industrial sites, looking for opportunities to co-locate waste management facilities together and with complementary activities. Where a low carbon energy recovery facility is considered as an appropriate type of development, waste planning authorities should consider the suitable siting of such facilities to enable the utilisation of the heat produced as an energy source in close proximity to suitable potential heat customers; and
- Give priority to the re-use of previously-developed land, sites identified for employment uses, and redundant agricultural and forestry buildings and their curtilages.

National Planning Practice Guidance: Waste (PPGW) (MHCLG,2015)

The NPPF sets out the government's planning policies for England for a wide range of topics including housing, business, economic development, transport and the natural environment. The National Planning Practice Guidance (NPPG) adds further context to the NPPF, is web-based and is updated whenever guidance is updated/amended. It is intended that the NPPF and NPPG are read together.

The PPGW was published in October 201. Relevant paragraphs of PPGW include:

- **Paragraph 004:** States that waste planning authorities play a role in implementing the following Articles of the EU Waste Framework Directive (2008/98/EC):
  - Article 4: Waste Hierarchy;
  - Article 13: Protection of human health and the environment;
  - Article 16: Principles of proximity and self-sufficiency;
  - Article 28: Waste Management Plans; and
  - Article 34: Periodic Inspections.
- **Paragraph 011:** States *"The Local Plan relating to waste should identify sufficient opportunities to meet the identified needs of an area for the management of waste, aiming to drive waste management up the Waste Hierarchy. It should ensure that suitable sites and areas for the provision of waste management facilities are identified in appropriate locations."*

B.3 National Waste Policy

A Green Future: Our 25 Year Plan to Improve the Environment (HM Government, 2018a)

In 2018, the Government published "A Green Future: Our 25 Year Plan to Improve the Environment". This Plan sets out government action to help the natural world regain and retain good health. It includes goals for using resources from nature more sustainably and efficiently and minimising waste. It states that:

"We will minimise waste, reuse materials as much as we can and manage materials at the end of their life to minimise the impact on the environment. We will do this by:

- *working towards our ambition of zero avoidable waste by 2050*
- *working to a target of eliminating avoidable plastic waste by end of 2042*
- *meeting all existing waste targets – including those on landfill, reuse and recycling – and developing ambitious new future targets and milestones*
- *seeking to eliminate waste crime and illegal waste sites over the lifetime of this Plan, prioritising those of highest risk. Delivering a substantial reduction in litter and littering behaviour.*
- *significantly reducing and where possible preventing all kinds of marine plastic pollution – in particular material that came originally from land.".*

Our Waste, Our Resources: A Strategy for England (HM Government, 2018b)

"Our Waste, Our Resources: A Strategy for England", published in December 2018, sets out how the Government plans to double resource productivity and eliminate avoidable waste of all kinds, including plastic waste, by 2050. It builds on the government's earlier policy document "A Green Future: Our 25 Year Plan to Improve the Environment" (January 2018) . The Strategy outlines how England will:

- *"preserve our stock of material resources by minimising waste, promoting resource efficiency and moving towards a circular economy;*
- *minimise the damage caused to our natural environment by reducing and managing waste safely and carefully; and*
- *deal with waste crime."*

The Strategy aims to prolong the lives of the materials and goods, moving away from the inefficient 'linear' economic model of 'take, make, use, throw' and moving towards a more circular economy. The Strategy commits to the following policy instruments:

- Extended Producer Responsibility: Extended Producer Responsibility (EPR) is *"a policy approach through which a producer's responsibility for a product is extended to the post-use stage. This incentivises producers to design their products to make it easier for them to be reused, dismantled and/or recycled at end of life".*
- Deposit Return Scheme: In a Deposit Return Scheme (DRS), a small deposit is added to the price of a drinks container brought to a store. Once the container has been used, the consumer disposes of it in a reverse vending machine and the deposit is returned to the consumer.
- Consistent Collections: Subject to consultation, legislation enforcing the government to *"specify a core set of materials to be collected by all local authorities and waste operators"* will be introduced. It is expected that specifying a consistent set of dry recyclable materials to be collected from all households and businesses will improve England's recycling rate.

Waste Management Plan for England (Defra, 2021)

The Waste Management Plan (WMP) for England (2021) (which supersedes the Waste Management Plan for England (2013)) was formally adopted on 27 January 2021.

The WMP is a high level document which provides an analysis of waste management in England, bringing current and planned waste management policies together into one place. The WMP also sets out how it will support the implementation of the objectives and provisions of the Waste (England and Wales) Regulations (2011) (as amended). Whilst Our Waste, Our Resources: A Strategy for England (2018) outlines the vision of a more circular

economy and policies to support the move towards it, the Waste Management Plan for England (2021) focuses upon waste arisings and their management.

The WMP does not introduce new waste management policies, or change the landscape of how waste is managed in England. It brings current waste management policies under the umbrella of one national plan.

The WMP states that waste planning authorities are responsible for producing local waste management plans which cover land use planning for waste management in their areas. It also states that waste planning authorities should have regard to the Waste Management Plan for England, as well as national planning policy on waste and the NPPF, when drawing up or revising their management plans.

Environmental Improvement Plan 2023 (HM Government, 2023)

In February 2023 the Government published "Environmental Improvement Plan 2023", the first revision of the 25 Year Environment Plan. This Plan continues to support the goals and targets originally set out within the 25 Year Environment Plan, and expands targets and commitments to include:

- eliminating avoidable waste by 2050 and doubling resource productivity by 2050
- exploring options for the near elimination of biodegradable municipal waste to landfill from 2028
- eliminating avoidable plastic waste by 2042
- seeking to eliminate waste crime by 2042

Table B-1 sets out the Environmental Improvement Plan 2023 commitments and quantitative targets for residual waste.

Table B-1 Environmental Improvement Plan 2023 targets and commitment

Government commitment	Stated target	
We will halve 'residual' waste (excluding major mineral waste) produced per person by 2042. For the purposes of the target, we define 'residual' waste as waste that is sent to landfill, put through incineration or used in energy recovery in the UK, or that is sent overseas to be used in energy recovery.	Long term target:	By 31 December 2042, the total mass of residual waste excluding major mineral wastes in a calendar year does not exceed 287 kg per capita.
The residual waste target is underpinned by the following interim targets, by 31January 2028:		
Reduce residual waste (excluding major mineral waste) produced per person by 24%.	Interim target 1:	By 31 January 2028, the total mass of residual waste excluding major mineral wastes in the most recent full calendar year does not exceed 437 kg per capita.
Reduce residual waste (excluding major mineral waste) in total tonnes by 21%.	Interim target 2:	By 31 January 2028, the total mass of residual waste excluding major mineral waste in the most recent full calendar year does not exceed 25.5 million tonnes.
Reduce municipal residual waste produced per person by 29%.	Interim target 3:	By 31 January 2028, the total mass of municipal residual waste in a year does not exceed 333 kg per capita.
Reduce residual municipal food waste produced per person by 50%.	Interim target 4:	By 31 January 2028, the total mass of residual municipal food waste in the most recent full calendar year does not exceed 64 kg per capita. This is equivalent to a 50% reduction from 2019 levels.

Government commitment	Stated target	
Reduce residual municipal plastic waste produced per person by 45%.	Interim target 5:	By 31 January 2028, the total mass of residual municipal plastic waste in the most recent full calendar year does not exceed 42 kg per capita. This is equivalent to a 45% reduction from 2019 levels.
Reduce residual municipal paper and card waste produced per person by 26%.	Interim target 6:	By 31 January 2028, the total mass of residual municipal paper and card waste in the most recent full calendar year does not exceed 74 kg per capita. This is equivalent to a 26% reduction from 2019 levels.
Reduce residual municipal metal waste produced per person by 42%.	Interim target 7:	By 31 January 2028, the total mass of residual municipal metal waste in the most recent full calendar year does not exceed 10 kg per capita. This is equivalent to a 42% reduction from 2019 levels.
Reduce residual municipal glass waste produced per person by 48%.	Interim target 8:	By 31 January 2028, the total mass of residual municipal glass waste in the most recent full calendar year does not exceed 7 kg per capita. This is equivalent to a 48% reduction from 2019 levels.

Source: HM Government, 2023

The Government proposes to deliver these targets by:

- *Implementing consistent recycling for households and businesses, to boost recycling rates*
- *Introducing a Deposit Return Scheme for plastic and metal drinks containers from October 2025 to drive very high recycling rates*
- *Implementing packaging Extended Producer Responsibility from 2024 to move the cost of dealing with household packaging waste from taxpayers and councils to the packaging producers*
- *Mandating recycling labelling for packaged products by 31 March 2026 (except for plastic films and flexible which we will mandate by 31 March 2027)*
- *Banning the supply of single-use plastics like plastic plates and cutlery from October 2023*
- *Introducing a mandatory digital waste tracking service to modernise existing waste record keeping and implement reforms to the waste carriers, brokers and dealers regime and bring forward legislation to tackle abuse of certain types of waste exemption*
- *Launching a call for evidence to support development of a plan to achieve the near elimination of biodegradable municipal waste going to landfill from 2028*

B.4 Key regulatory targets

The Waste (England and Wales) Regulations 2011

The Waste (England and Wales) Regulations 2011, were amended by the Waste (Circular Economy) (Amendment) Regulations 2020, Part 2 Matters which must be included in waste management plans, to update the *Preparing for re-use and recycling targets and landfill reduction targets* as follows:

- *11. Measures to be taken to ensure that—*
- *(a) the preparing for re-use and the recycling of municipal waste is a minimum of …….. (ii) in relation to any national waste management plan, 65% by weight by 2035; and*
- *(b) the amount of municipal waste landfilled is reduced to 10% or less of the total amount of municipal waste generated (by weight) by 2035*.

The Environmental Targets (Residual Waste) (England) Regulations 2023

The Environmental Targets (Residual Waste) (England) Regulations 2023 came into force on 30th January 2023 and apply in England. The Regulations set a long-term target within the area of resource efficiency and waste reduction, as required by the Environment Act 2021, and aligns with the residual waste long-term target set out in the Environmental Improvement Plan 2023 (HM Government, 2023).

The Environmental Targets (Residual Waste) (England) Regulations 2023 set out the residual waste long-term target as:

- *the total mass of residual waste for the calendar year 2042 does not exceed 287 kilograms per head of population in England.*

Regulation 2 defines 'residual waste' as any waste, other than 'excluded waste', which originated in England and is treated by one of the following methods:

- *(a) sent to landfill in the United Kingdom;*
- *(b) put through incineration in the United Kingdom;*
- *(c) used in energy recovery in the United Kingdom (where 'energy recovery' means any waste treatment, excluding anaerobic digestion, which generates energy such as electricity or heat or which converts the waste into other energy products such as fuels and substitute natural gas); or*
- *(d) sent outside the United Kingdom for energy recovery.*

'Excluded waste' is defined in Regulation 5 as:

- *(a) waste of a type set out in the table in the Schedule; or*
- *(b) ferrous metals removed from bottom ash, with the waste code 19 01 02, which have been put through incineration or used in energy recovery in the United Kingdom and then sent for recycling.*

The 'excluded waste' listed in the Schedule to the Regulations mainly comprises major mineral wastes, including inert waste from construction, demolition, excavation and mining activities and wastes from the incineration or pyrolysis of waste.

B.5 Local Policy: Milton Keynes

Milton Keynes Waste Development Plan Document 2007 – 2026 (MKCC, 2008)

The Milton Keynes Waste Development Plan Document (DPD) was adopted in February 2008 to replace the Waste Local Plan from March 1997 and become a Supplementary Planning Document. It sets out how the waste management requirements for the Milton Keynes administrative area will be achieved between 2007 and 2026. The Waste DPD also covers the long-term spatial vision for the area, strategic policies, allocations of sites for waste management facilities, and development control policies.

The central issues for Milton Keynes at the time of publication of the Waste DPD relate to a heavy reliance on landfill with little recovery of waste, significant expected focus on increasing housing and economic growth (and associated increases in municipal solid waste), constraints on area for facilities required to meet such growth, satisfying Policy D4 of the adopted Milton Keynes Local Plan regarding sustainable design and construction, and how the area may change as household size decreases and developments potentially become more compact.

Table B-2 Waste DPD recycling and composting target

Waste Type	2010 (%)	2015 (%)	2020 (%)	2025 (%)
MSW	40	50	55	60
C&I	50	55	60	65
C&D	50	50	60	60
All waste	50	55	60	65

The Waste DPD identified the following new facilities necessary to meet recycling and recovery targets and landfill allowances:

- Two community recycling centres
- A municipal waste treatment plant
- Waste transfer station
- Treatment/separation plant for bulky waste
- Composting plant for food waste
- Vehicle depot for waste collection vehicles
- Plant to enable separation of mechanical road sweeping to increase recovery.

It was also identified that further investment may be needed into wastewater treatment to meet future development needs, and demand for biomass may increase.

Plan:MK 2016 – 2031 (MKCC, 2019)

Milton Keynes' approach to local planning, setting out the vision and framework for the future development of the area from 2016 to 2031, adopted in March 2019. It lays out the Council's strategy for meeting Milton Keynes needs until 2031 with particular focus on supporting growth while maintaining the current accessibility and green spaces. While the Plan:MK document mainly discusses the housing and spatial strategy, this is key to understanding future waste arisings and management capacity requirements.

A large part of the Plan:MK document is the sustainable development strategy. This highlights the Council's plan to deliver at least 26,500 new homes with similar opportunities in employment. Specifically, Policy SC1 describes the following sustainable construction principles relating to Materials and Waste and relevant to this assessment:

- Reuse land and buildings wherever feasible and consistent with maintaining and enhancing local character and distinctiveness.
- Reuse and recycle materials that arise through demolition and refurbishment, including the reuse of excavated soil and hardcore within the site.
- Consider the lifecycle of the building and public spaces, including how they can be easily adapted and modified to meet changing social and economic needs and how materials can be recycled at the end of their lifetime.
- Space is provided and appropriately designed to foster greater levels of recycling of domestic and commercial waste.

In addition, Strategic Ambition 13 of Plan:MK seeks to mitigate the Borough's impact on climate change and reduce carbon dioxide emissions through reducing waste generation and increasing the amount of material recycled.

Plan:MK sets out a goal to work with public service and infrastructure providers (predominantly through the Local Investment Plan) to ensure facilitation of social and

economic growth by providing facilities including a residual waste treatment plant. It states that developments should make a proportionate contribution to an increase in the capacity of waste sites to satisfy increasing demands from residents.

Milton Keynes Strategy for 2050 (MKCC, 2021)

Published in January 2021, the Milton Keynes Strategy for 2050 summarises seven big ambitions for the area covering sustainability, community, health and safety, education, and economic growth. It describes the strategic framework for achieving these goals with embedded flexibility for innovation, regulatory changes, and environmental pressures.

The Milton Keynes Strategy for 2050 seeks to minimise construction waste as a function of the vision for sustainable neighbourhoods and buildings. This aligns with national objectives, but a specific reduction target for construction waste is still under consideration.

Appendix C Detailed methodology

C.1 LACW: Detailed methodology

LACW: Baseline waste arisings methodology

1. The baseline waste arisings data for LACW was extracted from WasteDataFlow (WDF) and from Defra's accredited official statistics for LACW (Defra 2024b).
2. Parameters for 'total household waste, 'total non-household waste', 'total LACW', 'population' and 'household waste per head of population (tonnes)' were extracted from the datasets for each of the past 10 years.
3. In September 2023, Milton Keynes City Council introduced a new containerised waste collection system for households and businesses, which replaced a previous bagged waste collection system. To enable the effect of introducing the new containerised collection system to be considered within the LACW baseline waste arisings, Milton Keynes City Council provided provisional data from WasteDataFlow for the first two quarters of operation of the new collection system (October to December 2023 and January to March 2024). This data was combined and used on a pro-rata basis to give an estimate of LACW under the new waste collection system. The calculation does not account for any seasonality in waste arisings and therefore should be used as a guide only.

C.2 C&I waste: Detailed methodology

C&I waste: Baseline waste arisings methodology

1. Baseline C&I waste arisings were calculated by adapting the Defra 'reconcile' methodology (Defra, 2014) for use at the WPA level. The 'reconcile' methodology is summarised as the following equation:

C&I waste=	∑ {(waste received by permitted facilities)
	+ (waste received by incineration facilities)
	+ (waste received by exempt facilities)}
	- ∑ {(LACW) + (CD&E waste) + (hazardous waste) + (agricultural waste) + (mining waste)}
	- (waste received by transfer facilities)

Step 1: Identify waste received by permitted facilities

2. The Environment Agency (EA) Waste Data Interrogator (WDI) ('Waste Received' dataset) (2013 to 2022) was used to extract waste received by facilities with a waste origin WPA of Milton Keynes.
3. To extract C&I (and LACW) arisings, the data was filtered to exclude the following waste codes: chapter 01 (mining waste), sub-chapter 02 01 (agricultural waste), chapter 17, 19 12 09 and 20 02 02 (CD&E waste), and all hazardous waste codes.
4. To reduce double counting of the waste received at waste transfer facilities and the waste received at end treatment/disposal facilities, the waste received by waste transfer facilities was excluded by filtering the EA WDI to exclude Site Category: Transfer.
5. Prior to 2019, Processing facilities, Storage facilities and Mobile Plant were not included within the EA WDI, and therefore, for consistency, waste received by these facility types was excluded when determining waste arisings for the years 2019 to 2022.

Step 2: Identify waste received by incineration facilities

6. Waste returns for incineration facilities are included in the EA WDI from 2019 onwards and, for these years, are captured in Step 1. Prior to 2019, data on waste received by incineration facilities was captured in the EA Incinerator Waste Returns ('Waste Received' dataset), which was used to identify waste with an origin WPA of Milton Keynes that was received by incineration facilities.
7. To identify C&I waste received by incineration facilities, the data was filtered to exclude the following waste codes: chapter 01 (mining waste), sub-chapter 02 01 (agricultural waste), chapter 17, 19 12 09 and 20 02 02 (CD&E waste), and all hazardous waste codes.
8. The EA Incinerator Waste Returns datasets are only available for years 2018, 2017 and 2016. Waste received by incineration facilities in the years 2013 to 2015 was assumed to be the same as in 2016.

Step 3: Identify waste received by exempt facilities

9. The Defra 2014 'reconcile' methodology includes consideration of C&I waste received by exempt facilities. The 2018 update to the national C&I methodology (Defra, 2018) excludes waste received by exempt facilities on the basis that there is considerable uncertainty when estimating the amount of waste received by each exempt site.
10. Taking into account that the purpose of a waste needs assessment is to assess the need for additional planned waste management capacity, it is unlikely that waste managed by exempt sites will require planned provision in the future. It is acknowledged that waste received by exempt facilities may add to the total C&I waste arisings, but it has not been taken into consideration for the purposes of this assessment.

Step 4: Deduct LACW arisings

11. To determine the baseline C&I waste arisings, LACW arisings (identified using WDF) are subtracted from the waste received by permitted facilities and the waste received by incineration facilities (calculated in Step 1 and Step 2). It should be noted that for Milton Keynes Waste Recovery Park the Waste Data Interrogator does not identify any inputs coded as having an origin WPA of Milton Keynes. Instead, the waste inputs from Milton Keynes have been coded with an origin WPA of Buckinghamshire and, as such, are not identified as waste arising from Milton Keynes. As inputs to the Milton Keynes Waste Recovery Park account for a significant proportion of the Milton Keynes LACW, a conservative approach was adopted and the quantities of LACW were not deducted during the estimation of C&I waste.

C.3 CD&E waste: Detailed methodology

CD&E waste: Baseline waste arisings methodology

1. Baseline CD&E waste arisings have been calculated by adapting the 'Methodology for estimating annual waste generation from the Construction, Demolition and Excavation (CD&E) Sectors in England' previously used by Defra (Defra, 2012), to the WPA level. The methodology can be summarised as the following equation:

CD&E waste=	∑ {(CD&E waste received by permitted facilities)
	+ (CD&E waste received by incineration facilities)
	+ (CD&E waste received by exempt facilities)
	+ (recycled aggregate)}
	- (CD&E waste received by transfer facilities)

Step 1: Identify CD&E waste received by permitted facilities

2. The EA WDI ('Waste Received' dataset) (2013 to 2022) was used to extract waste received by permitted facilities with a waste origin WPA of Milton Keynes.
3. To extract CD&E waste arisings, the data was filtered to only include waste codes: chapter 17, 19 12 09 and 20 02 02 (CD&E waste). The data was also filtered to exclude all hazardous waste codes.
4. To reduce double counting of the waste received at waste transfer facilities and the waste received at end treatment/disposal facilities, the waste received by waste transfer facilities was excluded by filtering the EA WDI to exclude Site Category: Transfer.
5. Prior to 2019, Processing facilities, Storage facilities and Mobile Plant were not included within the EA WDI, and therefore, for consistency, waste received by these facility types was excluded when determining waste arisings for the years 2019 to 2022.

Step 2: Identify CD&E waste received by incineration facilities

6. As with the methodology for baseline C&I waste arisings, waste returns for incineration facilities are included in the EA WDI from 2019 onwards and, for these years, are captured in Step 1. Prior to 2019, data on waste received by incineration facilities was captured in the EA Incinerator Waste Returns ('Waste Received' dataset), which was used to identify waste with an origin WPA of Milton Keynes that was received by incineration facilities.
7. To identify CD&E waste received by incineration facilities, the data was filtered to only include waste codes: chapter 17, 19 12 09 and 20 02 02 (CD&E waste). All hazardous waste codes were excluded.
8. It is worth noting that there may be occurrences where CD&E waste has been sent to other permitted facilities for treatment first and then sent on to incineration facilities and received as waste with a Chapter 19 code (waste and water treatment wastes). Where this is the case, the waste will be included within the C&I waste quantities.

Step 3: Identify recycled aggregate production

9. Information on the production of recycled and secondary aggregates in Milton Keynes is included within the Milton Keynes Local Aggregates Assessment (LAA) that is updated annually (MKCC, 2023), The LAA identifies two active sites for the production of recycled aggregates within Milton Keynes: Sherington Road, operated by Smith Construction Group Limited (located at Lathbury Quarry); and Smith Recycling (MK) Limited facility located at Chesney Wold, Bleak Hall. These sites are both permitted waste treatment facilities and the waste received and removed is reported within the EA WDI. As such, the CD&E wastes received by these facilities is already captured under Step 1. An additional facility for the production of recycled aggregate is authorised at Cotton Valley Waste Transfer Station but is not yet operational.

Step 4: Identify waste received by exempt facilities

10. Most CD&E waste managed under an exemption will be via U1 exemptions (Use of Waste in Construction), and therefore only U1 exemptions have been considered. A list of exempt sites located within the Plan area has been extracted from the EA Register of Waste Exemptions (EA, 2024), by using Office for National Statistics postcode data to identify sites located within the Milton Keynes administrative area. 52 active U1 exemptions were identified and, as exemptions are registered for a period of three years, new U1 exemptions are assumed to be 52/3 (i.e. 17.3) per year. As there are no requirements to report on the amount of waste received under exemptions, there is considerable uncertainty when estimating the amount of CD&E waste received by individual exempt sites. A study by Waste & Resources Action Programme (WRAP, 2013) identified that typically 600 tonnes of waste is managed at each U1 exemption site and this has been used to estimate CD&E waste managed at U1 exemptions.

C.4 Hazardous waste: Detailed methodology

Hazardous waste: Baseline waste arisings methodology

Step 1: Identify waste received by permitted facilities

1. The EA Hazardous WDI provides a summary of hazardous waste movements using information provided by a hazardous waste consignment note. The EA WDI provides a summary of waste received by and removed from permitted waste management facilities. The EA WDI ('Waste Received' dataset) (2013 to 2022) was used to extract waste received by permitted facilities with a waste origin WPA of Milton Keynes.
2. To extract hazardous waste arisings, the data was filtered to include all hazardous waste codes.
3. To reduce double counting of the waste received at waste transfer facilities and the waste received at end treatment/disposal facilities, the waste received by waste transfer facilities was excluded by filtering the EA WDI to exclude Site Category: Transfer.
4. Prior to 2019, Processing facilities, Storage facilities and Mobile Plant were not included within the EA WDI, and therefore, for consistency, waste received by these facility types was excluded when determining waste arisings for the years 2019 to 2022.

Step 2: Identify waste received by exempt facilities

5. There is considerable uncertainty when estimating the amount of hazardous waste received by each exempt site.
6. Taking into account that the purpose of a waste needs assessment is to assess the need for additional planned waste management capacity, it is unlikely that waste managed by exempt sites will require planned provision in the future. It is acknowledged that waste received by exempt facilities may add to the total hazardous waste arisings, but it has not been taken into consideration for the purposes of this assessment.

C.5 Agricultural waste: Detailed methodology

Agricultural waste: Baseline waste arisings methodology

Step 1: Identify waste received by permitted facilities

1. The EA WDI ('Waste Received' dataset) (2013 to 2022) was used to extract waste received by permitted facilities with a waste origin WPA of Milton Keynes.
2. To extract agricultural waste arisings, the data was filtered to only include waste sub-chapter code 02 01 (agricultural waste). The data was also filtered to exclude all hazardous waste codes.
3. To reduce double counting of the waste received at waste transfer facilities and the waste received at end treatment/disposal facilities, the waste received by waste transfer facilities was excluded by filtering the EA WDI to exclude Site Category: Transfer.
4. Prior to 2019, Processing facilities, Storage facilities and Mobile Plant were not included within the EA WDI, and therefore, for consistency, waste received by these facility types was excluded when determining waste arisings for the years 2019 to 2022.
5. To avoid double counting the waste arising at waste transfer facilities and the waste arising at end treatment/disposal destinations, the waste received by waste transfer facilities has been excluded by filtering the data to exclude Site Category: Transfer.
6. Previous to 2019, Processing facilities, Storage facilities and Mobile Plants were not included within the EA WDI, therefore for consistency these have been excluded when calculating waste arisings in 2019 to 2021.

Step 2: Identify waste received by exempt facilities

7. There is considerable uncertainty when estimating the amount of agricultural waste received by each exempt site.
8. Taking into account that the purpose of a waste needs assessment is to assess the need for additional planned waste management capacity, it is unlikely that waste managed by exempt sites will require planned provision in the future. It is acknowledged that waste received by exempt facilities may add to the total agricultural waste arisings, but it has not been taken into consideration for the purposes of this assessment.

C.6 Mining waste: Detailed methodology

Mining waste: Baseline waste arisings methodology

Step 1: Identify waste received by permitted facilities

1. The EA WDI ('Waste Received' dataset) (2013 to 2022) was used to extract waste received by permitted facilities with a waste origin WPA of Milton Keynes.
2. To extract mining waste arisings, the data was filtered to only include waste code chapter 01 (mining waste). The data was also filtered to exclude all hazardous waste codes.
3. To reduce double counting of the waste received at waste transfer facilities and the waste received at end treatment/disposal facilities, the waste received by waste transfer facilities was excluded by filtering the EA WDI to exclude Site Category: Transfer.
4. Prior to 2019, Processing facilities, Storage facilities and Mobile Plant were not included within the EA WDI, and therefore, for consistency, waste received by these facility types was excluded when determining waste arisings for the years 2019 to 2022.

Step 2: Identify waste received by exempt facilities

5. There is considerable uncertainty when estimating the amount of mining waste received by each exempt site.
6. Taking into account that the purpose of a waste needs assessment is to assess the need for additional planned waste management capacity, it is unlikely that waste managed by exempt sites will require planned provision in the future. It is acknowledged that waste received by exempt facilities may add to the total mining waste arisings, but it has not been taken into consideration for the purposes of this assessment.

Appendix D Forecast waste arisings

Forecast waste arisings for the Plan period 2023 to 2050.

Table D-3 LACW: forecast waste arisings ('000's tonnes), 2023 - 2050

Year	Low waste arisings scenario ('000's tonnes)	Medium waste arisings scenario ('000's tonnes)	High waste arisings scenario ('000's tonnes)
2023	127	127	128
2024	127	128	129
2025	128	129	131
2026	128	129	132
2027	128	130	133
2028	129	131	135
2029	130	132	137
2030	131	133	139
2031	132	135	141
2032	133	136	144
2033	134	137	145
2034	134	138	147
2035	135	139	149
2036	135	139	150
2037	135	140	152
2038	136	140	153
2039	136	140	154
2040	136	141	155
2041	136	141	157
2042	136	141	158
2043	137	142	159
2044	138	143	160
2045	139	145	162
2046	140	146	163
2047	141	147	164
2048	142	148	166
2049	143	149	167
2050	144	150	168

Table D-4 C&I waste: forecast waste arisings ('000's tonnes), 2023 - 2050

Year	Low waste arisings scenario ('000's tonnes)	Medium waste arisings scenario ('000's tonnes)	High waste arisings scenario ('000's tonnes)
2023	151	151	152
2024	151	152	154
2025	151	153	156
2026	151	154	157
2027	151	155	159
2028	151	156	161
2029	151	156	162
2030	151	157	164
2031	151	158	166
2032	151	158	167
2033	151	159	169
2034	151	160	170
2035	150	161	172
2036	150	161	174
2037	150	162	175
2038	150	162	177
2039	150	163	178
2040	150	164	180
2041	149	164	181
2042	149	165	183
2043	150	166	185
2044	151	168	187
2045	152	169	189
2046	153	171	191
2047	154	172	193
2048	155	174	195
2049	156	175	197
2050	158	177	199

Table D-5 CD&E waste: forecast waste arisings ('000's tonnes), 2023 - 2050

Year	Low waste arisings scenario ('000's tonnes)	High waste arisings scenario ('000's tonnes)
2023	375	556
2024	375	556
2025	375	556
2026	375	556
2027	375	556
2028	375	556
2029	375	556
2030	375	556
2031	375	556
2032	375	556
2033	375	556
2034	375	556
2035	375	556
2036	375	556
2037	375	556
2038	375	556
2039	375	556
2040	375	556
2041	375	556
2042	375	556
2043	375	556
2044	375	556
2045	375	556
2046	375	556
2047	375	556
2048	375	556
2049	375	556
2050	375	556

Table D-6 Hazardous waste: forecast waste arisings (tonnes), 2023 - 2050

Year	Low waste arisings scenario ('000's tonnes)	Medium waste arisings scenario ('000's tonnes)	High waste arisings scenario ('000's tonnes)
2023	11	11	11
2024	11	11	11
2025	11	11	11
2026	11	11	12
2027	11	11	12
2028	11	11	12
2029	11	12	12
2030	11	12	12
2031	11	12	12
2032	11	12	12
2033	11	12	13
2034	11	12	13
2035	11	12	13
2036	11	12	13
2037	11	12	13
2038	11	12	13
2039	11	12	13
2040	11	12	13
2041	11	12	13
2042	11	12	14
2043	11	12	14
2044	12	12	14
2045	12	13	14
2046	12	13	14
2047	12	13	14
2048	12	13	14
2049	12	13	15
2050	12	13	15

Appendix E Waste Data Interrogator: Site category and facility type

The Environment Agency Waste Data Interrogator assigns each waste management facility to a ‘site category’ and a ‘facility type’ based on the type of activity or operation that is undertaken. The complete list of ‘site categories’ and ‘facility types’ used within the 2022 Waste Data Interrogator are set out below. It is noted that not all of these ‘site categories’ and ‘facility types’ are represented in Milton Keynes.

Table E-7 Waste Data Interrogator: Site category and facility type

Site Category	Facility Type	Capacity gap analysis ‘capacity assessment type’
Transfer	CA Site	Transfer
	Clinical Waste Transfer	
	Haz Waste Transfer	
	Inert Waste Transfer	
	Non-Haz Waste Transfer	
Treatment	Anaerobic Digestion	Recycling / composting / AD
	Biological Treatment	
	Chemical Treatment	
	Clinical Waste Transfer / Treatment	
	Composting	
	Haz Waste Transfer / Treatment	
	Inert Waste Transfer / Treatment	
	Material Recycling Facility	
	Mechanical Biological Treatment	
	Non Haz Waste Transfer / Treatment	
	Non-specified Treatment	
	Organic Chemicals	
	Physical Treatment	
	Physical-Chemical Treatment	
	Recovery of Waste	
	WEEE treatment facility	
Metal Recycling Sites (MRS)	Car Breaker	Recycling / composting / AD
	Metal Recycling	
	Vehicle depollution facility	
Use of Waste	Construction	Not used in Milton Keynes
	Timber Manufacturing	
Combustion	Combustion	Not used in Milton Keynes
	Gas Engine	
Incineration	Animal By-Products Incinerator	Energy recovery / incineration
	Clinical Waste Incinerator	

Site Category	Facility Type	Capacity gap analysis 'capacity assessment type'
	Co-Incinerator	
	Co-Incinerator (Haz)	
	EFW Incinerator	
	Hazardous Waste Incinerator	
	Incineration	
	Municipal Waste Incinerator	
	Pet Crematorium	
On/In Land	Deposit of waste to land (recovery)	Recovery to land
	Lagoon	
Landfill	Hazardous Merchant LF	Landfill (disposal) (where 'fate' is 'recovery', assumptions have been applied on the proportion for disposal and recovery)
	Hazardous Restricted LF	
	Inert LF	
	Non Haz (SNRHW) LF	
	Non Hazardous LF	
	Restricted LF	
Burial	Pet Cemetery	Not used
Mining	Mining Waste Management	
Storage	In-House storage	
	Storage - A/D	
	Storage - Incinerator	
	Storage - Metal Reprocessing	
	Storage - oils	
	Temporary storage installation	
Processing	Animal and Food Waste	
	Ferrous Metal re-processing	
	Metal Reprocessing	
	Non-Ferrous Metal reprocessing	
	Paper and Pulp Reprocessing	
	Paper Recycling	
Mobile Plant	Mobile Plant - Landspreading	
	Mobile Plant - Treatment	
	Mobile Plant - Unknown	

Source: Waste Data Interrogator 2022

Appendix F Milton Keynes waste management facilities

Table F-8 Operational waste infrastructure capacity in Milton Keynes: Transfer, treatment, metal recycling sites (MRS), energy recovery, on / in land and landfill

Site category	Facility type	Site name	Operator	Site address	Site post code	Easting	Northing	Permit type	Permit number	Licence No.	Operational capacity by waste stream (tonnes/annum)		
											HIC	CD&E	Hazardous
Transfer (CA sites)													
Transfer	CA Site	Bleak Hall H W R C	H W Martin Waste Ltd	Chesney Wold, Bleak Hall, Milton Keynes	MK6 1LY	485670	236495	A13 : Household Waste Amenity Site	LP3091EG	70099	12,967	0	0
Transfer	CA Site	New Bradwell H W R C	H W Martin Waste Ltd	Newport Road, New Bradwell, Milton Keynes	MK6 0AA	483602	241790	A13 : Household Waste Amenity Site	LP3092ET	70096	10,433	0	0
Transfer	CA Site	North Crawley Road	H W Martin Waste Ltd	Newport Pagnell	MK16 9HG	489813	243520	A13 : Household Waste Amenity Site	LP3093VM	75190	9,913	189	0
Transfer	**CA Sites**	**TOTAL**									**33,313**	**189**	**0**
Transfer (excluding CA sites)													
Transfer	Non-Haz Waste Transfer	Bletchley Waste Processing Facility	F C C Waste Services (U K) Limited	Guernsey Road, Bletchley, Milton Keynes	MK3 5JU	486995	232218	A11 : Household, Commercial & Industrial Waste Transfer Stn	FB3530RC	103957	39,815 (Note 1)	0	2

Site category	Facility type	Site name	Operator	Site address	Site post code	Easting	Northing	Permit type	Permit number	Licence No.	Operational capacity by waste stream (tonnes/annum)		
											HIC	CD&E	Hazardous
Transfer	Non-Haz Waste Transfer	Chesney Wold Transfer Station	Biffa Waste Services Ltd	Bleak Hall Industrial Estate, Chesney Wold, Milton Keynes	MK6 1NE	485700	236400	A11 : Household, Commercial & Industrial Waste Transfer Stn	BB3100LE	70082	45,201	1,531	0
Transfer	Non-Haz Waste Transfer	Cotton Valley Waste Transfer Station	Mick George Limited	Tongwell Street, Pineham, Milton Keynes	MK15 9PA	488281	240848	A11 : Household, Commercial & Industrial Waste Transfer Stn	CB3300HV	401939	6,828	26,881	0
Transfer	Non-Haz Waste Transfer	F & R Cawley Ltd - Haversham Bank Sidings	F & R Cawley Ltd	Haversham Bank Sidings, Old Wolverton Road, Wolverton, Milton Keynes	MK12 5TJ	481800	241700	A11 : Household, Commercial & Industrial Waste Transfer Stn	KP3890NU	70079	6,032	5,870	0
Transfer	Non-Haz Waste Transfer	Milton Keynes M R F	Syracuse Waste Ltd (Note: previously Viridor Waste Management Ltd)	53 Milton Keynes M R F, Colts Holm Road, Old Wolverton	MK12 5QD	481212	241838	A11 : Household, Commercial & Industrial Waste Transfer Stn	KB3605GE	70101	44,663	0	0
Transfer	**(exc. CA sites)**	**TOTAL**									**142,539**	**34,283**	**2**
Treatment													
Treatment	Biological Treatment	Cotton Valley Sludge Treatment Centre	Anglian Water Services Limited	Pineham, Milton Keynes	MK15 9PA	488610	240684	S0819 : Sewage sludge treatment	KP3092EK	101791	166,376	0	0

Site category	Facility type	Site name	Operator	Site address	Site post code	Easting	Northing	Permit type	Permit number	Licence No.	Operational capacity by waste stream (tonnes/annum)		
											HIC	CD&E	Hazardous
Treatment	Non Haz Waste Transfer / Treatment	Smith Recycling (M K) Limited (Note: previously Bleak Hall Transfer Station)	Smith Recycling (Milton Keynes) Limited	Bleak Hall Industrial Estate, Chesney Wold, Bleak Hall, Milton Keynes	MK6 1NE	485601	236582	S0803 : HCl Waste TS + treatment	HB3107TR	100855	1,085	99,281	0
Treatment	Physical Treatment	Bleak Hall Depot	Ringway Infrastructure Services Limited	Synergy Park, Bleak Hall, Milton Keynes	MK6 1LY	485378	236746	A16 : Physical Treatment Facility	GB3909XA	405904	402	4,495	0
Treatment	Physical Treatment	Sherington Road	Smith Construction Group Limited	Newport Pagnell	MK16 8NL	488220	245004	SR2010 No12 : Treatment of waste to produce soil <75,000 tpy	EB3901XP	403857	0	59,799 (Note 2)	0
Treatment	Haz Waste Transfer / Treatment	Cotton Valley Waste Treatment Centre EPR/PP3434 ML	Alpheus Environmental Limited	Pineham, Milton Keynes	MK15 9PA	488440	240570	T10 : Haz waste treatment installation	PP3434ML	PP3434ML	47,373	0	6,118
Treatment		**TOTAL**									**215,237**	**163,574**	**6,118**
Metal Recycling Sites (MRS)													
MRS	Metal Recycling	A Goodman & Son	Gainreward Ltd	Tavistock Street, Bletchley, Milton Keynes	MK2 2PP	487401	234253	A20 : Metal Recycling Site (mixed MRS's)	KP3290NW	70083	17,623	0	390

Site category	Facility type	Site name	Operator	Site address	Site post code	Easting	Northing	Permit type	Permit number	Licence No.	Operational capacity by waste stream (tonnes/annum)		
											HIC	CD&E	Hazardous
MRS	Vehicle depollution facility	A2 Plus Limited	A2 PLUS LIMITED	9, Bond Avenue, Bletchley, Milton Keynes	MK1 1SW	487901	234568	S1517 No 17: Vehicle Depollution Facility	KB3803LD	408047	0	0	79
MRS	Vehicle depollution facility	Global Auto Recycling	Global Auto Recycling Ltd	146, Newport Road, New Bradwell, Milton Keynes	MK13 0AA	482836	241543	SR2011 No3 : Vehicle Depollution Facility <5000 tps	FB3903KV	101479	991	0	848
MRS		**TOTAL**									**18,614**	**0**	**1,316**
Incineration / energy recovery													
Incineration	Municipal Waste Incinerator	Milton Keynes Waste Recovery Park EPR/UP3937 ZZ	THALIA WASTE MANAGEMENT LIMITED	Dickens Road, Old Wolverton, Milton Keynes	MK12 5QF	481290	241650	B06 : Municipal Waste Incinerator	EPR/HP3323PW	UP3937ZZ	120,403	0	0
Incineration / energy recovery		**TOTAL**									**120,403**	**0**	**0**
On/In Land													
On/In Land	Deposit of waste to land (recovery)	Lathbury Quarry	SMITH AGGREGATES & BUILDERS MERCHANTS LIMITED	Land North And East Of Lathbury, Off Northampton Lane, Lathbury	MK16 8LE	487635	245677	A25 : Deposit of waste to land as a recovery operation	HB3101MP	406000	0	50,000 (Note 3)	0

Site category	Facility type	Site name	Operator	Site address	Site post code	Easting	Northing	Permit type	Permit number	Licence No.	Operational capacity by waste stream (tonnes/annum)		
											HIC	CD&E	Hazardous
On/In Land		**TOTAL**									**0**	**50,000**	**0**
Landfill													
Landfill	Non Haz (SNRHW) Landfill	BLETCHLEY LANDFILL SITE	FCC Waste Services (UK) Limited	Bletchley Landfill Site, Guernsey Road, Bletchley, Milton Keynes	MK3 5JU	486600	232090	L02 : Non Haz (SNRHW) LF	EPR/BM4635IH	BM4635IH	918,691	511,969	168
Landfill											**918,691**	**511,969**	**168**

Note 1: This facility is understood to no longer be accepting waste. The site may be proposed for use as a waste processing facility for landfill restoration materials.
Note 2: The operator confirmed annual capacity of 50,000tpa.
Note 3: Estimate as no operational capacity data is currently available in Waste Data Interrogator.

Source: Waste Data Interrogator (2018 to 2022); MKCC annual survey of waste sites (2019 to 2022); Environment Agency Waste Sites database (EA, 2024e); Environment Agency Public Registers Online (EA, 2024f); Discussions with MKCC planning officer

Table F-9 Waste infrastructure capacity in Milton Keynes where operations have recently ceased or been suspended

Site category	Facility type	Site name	Operator	Site address	Site post code	Easting	Northing	Permit type	Permit number	Licence No.	Operational capacity by waste stream (tonnes/annum)		
											HIC	CD&E	Hazardous
Transfer	Non-Haz Waste Transfer	Home Farm	Mr Luke Stacey & Mrs Christine Stacey	Home Farm, Castlethorpe, Milton Keynes	MK19 7HD	479830	245360	S0801 : HCI Waste Transfer Station	CP3991EV	100975	24,060	0	0

Site category	Facility type	Site name	Operator	Site address	Site post code	Easting	Northing	Permit type	Permit number	Licence No.	Operational capacity by waste stream (tonnes/annum)		
											HIC	CD&E	Hazardous
Treatment	Composting	Home Farm Green Waste Recycling Site	Mr Luke Stacey And Mrs Christine Stacey	Castlethorpe, Milton Keynes	MK19 7HD	479833	245365	A22 : Composting Facility	HB3630DS	104340	4,943	26	0
Treatment	Inert Waste Transfer / Treatment	19 Hollin Lane, Stacey Bushes, Milton Keynes, MK12 6HT	GRANEMORE GROUP LTD.	19 Hollin Lane, Stacey Bushes, Milton Keynes	MK12 6HT	482482	239930	S0811 : Inert & excavation Waste TS + treatment	WE4684AA	120114	0	137,183	0
Treatment	WEEE treatment facility	Weee Stop	Pro Innovation Solutions Limited		MK11 3HB	480770	239379	S1515: 75kte WEEE	DB3709FW	403024	1,123	0	575
MRS	Metal Recycling	F W Cox Metals Ltd - Bleak Hall Ind Est	F W Cox Metals Ltd	Unit E Bleak Hall Industrial Estate, Chesney Wold, Milton Keynes	MK6 1LS	486000	236200	A20 : Metal Recycling Site (mixed MRS's)	TP3290NS	70093	940	466	2,330
On/In Land	Deposit of waste to land (recovery)	Willen Road Quarry (site2)	Smith Construction Group Limited		MK16 0JJ	487982	242140	A25 : Deposit of waste to land as a recovery operation	EB3807HA	403829	0	63,326	0

Source: Waste Data Interrogator (2018 to 2022); MKCC annual survey of waste sites (2019 to 2022); Environment Agency Waste Sites database (EA, 2024e); Environment Agency Public Registers Online (EA, 2024f); Discussions with MKCC planning officer

Table F-10 Permitted facilities in Milton Keynes that provide capacity for specific or specialist sites / operations only

Site name	Operator	Site address	Site postcode	Easting	Northing	Permit type	Permit number	Licence No.
Cottonvalley C H P	ANGLIAN WATER SERVICES LIMITED	Cottonvalley Wastewater Treatment Works, Pineham, Milton Keynes	MK15 9PA	488590	240700	A29: Landfill Gas Engine (<3 mW)	RP3331XK	400038
Lathbury Wash Plant	SMITHS AGGREGATES SOLUTIONS LIMITED	Land North Of Lathbury, Northampton Road - Off Sherrington Road, Lathbury, Milton Keynes	MK16 8LE	487500	245600	S0908 No 8: Management of inert or extractive waste at mine	HB3101MP	406000

Source: Environment Agency Public Registers Online (EA, 2024f)

Appendix G Capacity gap analysis tables: HIC (LACW and C&I waste)

Table G-11 Capacity gap analysis: HIC waste to recycling / composting / AD

Year	HIC waste forecast to be managed via recycling / composting / AD ('000's tonnes)			HIC waste recycling / composting / AD capacity ('000's tonnes)	HIC waste recycling / composting / AD, net available capacity ('000's tonnes)		
	Low recycling scenario	Medium recycling scenario	High recycling scenario		Low recycling scenario	Medium recycling scenario	High recycling scenario
Baseline	163	163	163	234	71	71	71
2023	165	166	169	234	69	67	65
2024	167	170	174	234	67	64	60
2025	169	173	180	234	65	61	54
2026	171	176	182	234	63	58	51
2027	172	179	185	234	61	55	48
2028	175	183	189	234	59	51	45
2029	177	186	192	234	57	48	42
2030	179	190	196	234	55	44	38
2031	181	194	200	234	53	40	34
2032	183	198	203	234	51	36	31
2033	185	201	207	234	49	33	27
2034	187	205	210	234	47	29	24
2035	189	208	214	234	45	25	20
2036	191	211	217	234	43	23	17
2037	193	212	221	234	41	21	13
2038	194	214	224	234	39	20	10
2039	196	216	228	234	38	18	6
2040	198	218	231	234	36	16	3
2041	199	220	235	234	35	14	-1
2042	201	221	238	234	33	13	-4
2043	203	223	241	234	31	10	-7
2044	205	226	243	234	29	8	-9
2045	207	228	245	234	27	6	-11
2046	209	230	248	234	25	4	-14
2047	211	232	250	234	23	2	-16
2048	213	234	252	234	21	0	-18
2049	215	236	255	234	19	-3	-21
2050	216	238	257	234	17	-5	-23

Table G-12 Capacity gap analysis: HIC waste to energy recovery

Year	HIC waste forecast to be managed via energy recovery ('000's tonnes)			HIC waste energy recovery capacity ('000's tonnes)	HIC waste energy recovery, net available capacity ('000's tonnes)		
	Low recycling scenario	Medium recycling scenario	High recycling scenario		Low recycling scenario	Medium recycling scenario	High recycling scenario
Baseline	70	70	70	120	51	51	51
2023	71	71	69	120	50	50	52
2024	71	72	68	120	49	48	52
2025	72	73	67	120	48	47	53
2026	73	74	68	120	48	46	52
2027	74	75	70	120	47	45	51
2028	75	76	71	120	46	44	49
2029	76	78	73	120	45	43	48
2030	77	79	74	120	44	41	46
2031	78	80	76	120	43	40	44
2032	79	82	78	120	42	39	43
2033	80	83	79	120	41	37	41
2034	81	84	81	120	40	36	39
2035	81	85	83	120	39	35	38
2036	82	87	82	120	38	34	39
2037	83	88	81	120	37	33	39
2038	84	89	80	120	37	32	40
2039	84	90	79	120	36	31	41
2040	85	91	78	120	35	30	42
2041	86	92	77	120	35	28	43
2042	86	93	76	120	34	27	44
2043	87	94	77	120	33	26	44
2044	88	95	77	120	32	26	43
2045	89	96	78	120	32	25	42
2046	90	97	79	120	31	24	41
2047	90	97	80	120	30	23	41
2048	91	98	80	120	29	22	40
2049	92	99	81	120	28	21	39
2050	93	100	82	120	28	20	39

Table G-13 Capacity gap analysis: HIC waste to non-hazardous landfill (disposal) (Milton Keynes waste only)

Year	HIC waste forecast to be managed at non-hazardous landfill ('000's tonnes)			HIC waste to non-hazardous landfill, cumulative remaining lifetime capacity ('000's tonnes)		
	Low recycling scenario	Medium recycling scenario	High recycling scenario	Low recycling scenario	Medium recycling scenario	High recycling scenario
Baseline	44	44	44	4,967	4,967	4,967
2023	44	42	42	4,923	4,924	4,924
2024	45	41	41	4,878	4,883	4,883
2025	45	40	40	4,833	4,843	4,844
2026	46	39	38	4,788	4,804	4,805
2027	46	38	37	4,742	4,766	4,768
2028	47	37	36	4,695	4,730	4,733
2029	47	35	34	4,648	4,694	4,699
2030	48	34	33	4,601	4,660	4,666
2031	48	33	31	4,552	4,628	4,635
2032	49	31	30	4,504	4,596	4,605
2033	49	30	28	4,454	4,567	4,577
2034	50	28	26	4,405	4,538	4,551
2035	50	27	25	4,355	4,511	4,526
2036	51	27	25	4,304	4,484	4,501
2037	51	27	25	4,253	4,458	4,476
2038	52	27	25	4,201	4,431	4,451
2039	52	27	26	4,149	4,405	4,425
2040	52	26	26	4,097	4,378	4,400
2041	53	26	26	4,044	4,352	4,374
2042	53	26	26	3,990	4,326	4,347
2043	54	26	26	3,937	4,299	4,321
2044	54	27	27	3,882	4,273	4,294
2045	55	27	27	3,827	4,246	4,267
2046	55	27	27	3,772	4,218	4,240
2047	56	27	27	3,716	4,191	4,213
2048	57	28	28	3,659	4,163	4,185
2049	57	28	28	3,602	4,135	4,157
2050	58	28	28	3,544	4,107	4,129

Table G-14 Capacity gap analysis: HIC waste to non-hazardous landfill (disposal) (all waste origin WPAs)

Year	HIC waste forecast to be managed at non-hazardous landfill ('000's tonnes)		HIC waste to non-hazardous landfill, cumulative remaining lifetime capacity ('000's tonnes)	
	5-year maximum inputs	5-year average inputs	5-year maximum inputs	5-year average inputs
Baseline	919	718	4,967	4,967
2023	919	718	4,048	4,248
2024	919	718	3,129	3,530
2025	919	718	2,211	2,812
2026	919	718	1,292	2,093
2027	919	718	373	1,375
2028	919	718	-545	657
2029	919	718	-1,464	-62
2030	919	718	-2,383	-780
2031	919	718	-3,301	-1,498
2032	919	718	-4,220	-2,217
2033	919	718	-5,139	-2,935
2034	919	718	-6,057	-3,654
2035	919	718	-6,976	-4,372
2036	919	718	-7,895	-5,090
2037	919	718	-8,814	-5,809
2038	919	718	-9,732	-6,527
2039	919	718	-10,651	-7,245
2040	919	718	-11,570	-7,964
2041	919	718	-12,488	-8,682
2042	919	718	-13,407	-9,401
2043	919	718	-14,326	-10,119
2044	919	718	-15,244	-10,837
2045	919	718	-16,163	-11,556
2046	919	718	-17,082	-12,274
2047	919	718	-18,000	-12,992
2048	919	718	-18,919	-13,711
2049	919	718	-19,838	-14,429
2050	919	718	-20,757	-15,147

Appendix H Capacity gap analysis tables: CD&E waste

Table H-15 Capacity gap analysis: CD&E waste to recycling and recovery to land

Year	CD&E waste forecast to be managed via recycling or recovery ('000's tonnes)			CD&E waste recycling capacity ('000's tonnes)	CD&E waste recycling, net available capacity ('000's tonnes)			CD&E waste recovery to land, cumulative remaining lifetime capacity ('000's tonnes)		
	Low recycling scenario	Medium recycling scenario	High recycling scenario		Low recycling scenario	Medium recycling scenario	High recycling scenario	Low recycling scenario	Medium recycling scenario	High recycling scenario
Baseline	295	295	295	164	-132	-132	-132	1,827	1,827	1,827
2023	389	392	393	164	-225	-228	-230	1,602	1,599	1,598
2024	389	395	398	164	-225	-231	-234	1,376	1,368	1,364
2025	389	397	402	164	-225	-234	-238	1,151	1,134	1,125
2026	389	400	406	164	-225	-237	-243	926	898	883
2027	389	403	410	164	-225	-239	-247	700	659	636
2028	389	406	415	164	-225	-242	-251	475	416	385
2029	389	408	419	164	-225	-245	-255	249	172	130
2030	389	411	423	164	-225	-248	-260	24	-76	-130
2031	389	414	427	164	-225	-250	-264	-201	-326	-394
2032	389	417	432	164	-225	-253	-268	-427	-580	-662
2033	389	420	436	164	-225	-256	-272	-652	-836	-934
2034	389	422	440	164	-225	-259	-277	-878	-1,094	-1,211
2035	389	425	445	164	-225	-262	-281	-1,103	-1,356	-1,492
2036	389	428	452	164	-225	-264	-289	-1,328	-1,620	-1,781
2037	389	431	460	164	-225	-267	-297	-1,554	-1,887	-2,078
2038	389	433	468	164	-225	-270	-305	-1,779	-2,157	-2,383
2039	389	436	476	164	-225	-273	-313	-2,005	-2,430	-2,695
2040	389	439	484	164	-225	-275	-321	-2,230	-2,705	-3,016
2041	389	442	492	164	-225	-278	-329	-2,456	-2,983	-3,345
2042	389	445	500	164	-225	-281	-337	-2,681	-3,264	-3,681
2043	389	445	500	164	-225	-281	-337	-2,906	-3,545	-4,018
2044	389	445	500	164	-225	-281	-337	-3,132	-3,826	-4,354
2045	389	445	500	164	-225	-281	-337	-3,357	-4,107	-4,691
2046	389	445	500	164	-225	-281	-337	-3,583	-4,388	-5,027
2047	389	445	500	164	-225	-281	-337	-3,808	-4,669	-5,364
2048	389	445	500	164	-225	-281	-337	-4,033	-4,950	-5,700
2049	389	445	500	164	-225	-281	-337	-4,259	-5,231	-6,037
2050	389	445	500	164	-225	-281	-337	-4,484	-5,512	-6,374

Note 1: The CD&E waste recycling / recovery capacity gap analysis assumes waste is managed at recycling capacity first, and any surplus waste is sent to recovery to land (and consumes the 'remaining lifetime capacity')

Table H-16 Capacity gap analysis: CD&E waste to inert landfill (disposal) (Milton Keynes waste only)

Year	CD&E waste forecast to be managed at inert landfill ('000's tonnes)			CD&E waste to inert landfill, cumulative remaining lifetime capacity ('000's tonnes)		
	Low recycling scenario	Medium recycling scenario	High recycling scenario	Low recycling scenario	Medium recycling scenario	High recycling scenario
Baseline	126	126	126	1,191	1,191	1,191
2023	167	164	162	1,024	1,027	1,028
2024	167	161	158	857	866	870
2025	167	158	154	691	707	716
2026	167	156	150	524	552	567
2027	167	153	145	357	399	421
2028	167	150	141	190	249	280
2029	167	147	137	24	102	143
2030	167	144	133	-143	-43	11
2031	167	142	128	-310	-185	-117
2032	167	139	124	-476	-324	-241
2033	167	136	120	-643	-460	-361
2034	167	133	115	-810	-593	-476
2035	167	131	111	-977	-724	-588
2036	167	128	103	-1,143	-851	-691
2037	167	125	95	-1,310	-977	-786
2038	167	122	87	-1,477	-1,099	-873
2039	167	119	79	-1,643	-1,218	-953
2040	167	117	71	-1,810	-1,335	-1,024
2041	167	114	64	-1,977	-1,449	-1,088
2042	167	111	56	-2,143	-1,560	-1,143
2043	167	111	56	-2,310	-1,671	-1,199
2044	167	111	56	-2,477	-1,782	-1,254
2045	167	111	56	-2,644	-1,893	-1,310
2046	167	111	56	-2,810	-2,005	-1,366
2047	167	111	56	-2,977	-2,116	-1,421
2048	167	111	56	-3,144	-2,227	-1,477
2049	167	111	56	-3,310	-2,338	-1,532
2050	167	111	56	-3,477	-2,449	-1,588

Table H-17 Capacity gap analysis: CD&E waste to inert landfill (disposal) (all waste origin WPA)

Year	CD&E waste forecast to be managed at inert landfill ('000's tonnes)		CD&E waste to inert landfill, cumulative remaining lifetime capacity ('000's tonnes)	
	5-year maximum inputs	5-year average inputs	5-year maximum inputs	5-year average inputs
Baseline	220	191	1,191	1,191
2023	220	191	970	999
2024	220	191	750	808
2025	220	191	530	617
2026	220	191	310	426
2027	220	191	90	234
2028	220	191	-131	43
2029	220	191	-351	-148
2030	220	191	-571	-340
2031	220	191	-791	-531
2032	220	191	-1,012	-722
2033	220	191	-1,232	-913
2034	220	191	-1,452	-1,105
2035	220	191	-1,672	-1,296
2036	220	191	-1,893	-1,487
2037	220	191	-2,113	-1,679
2038	220	191	-2,333	-1,870
2039	220	191	-2,553	-2,061
2040	220	191	-2,774	-2,252
2041	220	191	-2,994	-2,444
2042	220	191	-3,214	-2,635
2043	220	191	-3,434	-2,826
2044	220	191	-3,654	-3,018
2045	220	191	-3,875	-3,209
2046	220	191	-4,095	-3,400
2047	220	191	-4,315	-3,591
2048	220	191	-4,535	-3,783
2049	220	191	-4,756	-3,974
2050	220	191	-4,976	-4,165

Appendix I Strategic-level waste exports from the Plan area, 2018 -2022

Table I-18 Strategic-level HIC waste exports from the Plan area, (by receiving WPA and waste management facility), 2018 -2022

Facility RPA	Facility Sub Region	Facility WPA	Facility District	Site Name	Operator	Post Code	Easting	Northing	Permit Type	Site Category	Facility Type	Permit	Household, industrial and commercial (HIC) waste from the Plan area (tonnes per annum)						
													2018	2019	2020	2021	2022	Average	Max
East Midlands	Nottinghamshire	Nottinghamshire	Newark and Sherwood	Briggs Metals Ltd	BRIGGS METALS LIMITED	NG24 1DP	479161	354936	A20 : Metal Recycling Site (mixed MRS's)	MRS	Metal Recycling	100409	0	0	0	0	3	1	3
East Midlands	Nottinghamshire	Nottinghamshire	Newark and Sherwood	Bilsthorpe Oil Treatment Plant	Oakwood Fuels Ltd	NG22 8UA	495260	360650	A9 : Hazardous Waste Transfer Station	Transfer	Haz Waste Transfer	100314	2	3	0	0	0	1	3
East Midlands	Nottinghamshire	Nottinghamshire	Rushcliffe	Bunny Hill - EPR/EP3734WK	Johnsons Aggregates and Recycling Limited	NG11 6QN	458150	328770	TR5 : Non-Haz Waste Transfer	Transfer	Non-Haz Waste Transfer	EP3734WK	0	10,491	10,422	4,039	0	4,990	10,491
East Midlands	Nottinghamshire	Nottinghamshire	Gedling	Colwick Transfer Station	BIFFA WASTE SERVICES LIMITED	NG4 2JR	461883	340103	A9 : Hazardous Waste Transfer Station	Transfer	Haz Waste Transfer	43677	1,430	1,105	0	0	89	525	1,430
East Midlands	Nottinghamshire	Nottinghamshire	Newark and Sherwood	Bilsthorpe Oil Treatment Plant - EPR/DP3331MG	ENVA ENGLAND SPECIALIST WASTE LIMITED	NG22 8UA	465220	360610	T05 : Physico-chemical treatment installation	Treatment	Physical-Chemical Treatment	DP3331MG	0	0	0	0	1	0	1
East Midlands	Nottinghamshire	Nottinghamshire	Bassetlaw	Boynton Bros & Hallam (Ranskill) Limited	BOYNTON BROS & HALLAM (RANSKILL) LIMITED	DN22 8LW	466524	387481	A16 : Physical Treatment Facility	Treatment	Physical Treatment	43160	39	31	40	17	12	28	40
East Midlands	Nottinghamshire	Nottinghamshire	Gedling	Stoke Bardolph Sewage Treatment Works - EPR/ZP3898EL	SEVERN TRENT WATER LIMITED	NG14 5HL	463550	341930	T02 : AD installation	Treatment	Anaerobic Digestion	KP3536WN	0	93	0	4,323	7,454	2,374	7,454
TOTAL		**Nottinghamshire**											**1,472**	**11,723**	**10,462**	**8,379**	**7,558**	**7,919**	**19,421**

Facility RPA	Facility Sub Region	Facility WPA	Facility District	Site Name	Operator	Post Code	Easting	Northing	Permit Type	Site Category	Facility Type	Permit	Household, industrial and commercial (HIC) waste from the Plan area (tonnes per annum)						
													2018	2019	2020	2021	2022	Average	Max
East of England	Cambridgeshire	Cambridgeshire	Huntingdonshire	Buckden North Landfill EPR/RP3732SZ	ANTI-WASTE LIMITED	PE18 9UH	521000	269300	L04 : Non Hazardous LF	Landfill	Non Hazardous LF	RP3732SZ	3,524	3,054	3,228	1,588	156	2,310	3,524
East of England	Cambridgeshire	Cambridgeshire	South Cambridgeshire	Vetspeed, Thriplow EPR/MP3930BE	VETSPEED LIMITED	SG8 7RR	544400	244700	TR3 : Haz Waste Transfer	Transfer	Haz Waste Transfer	MP3930BE	1	1	0	0	0	0	1
East of England	Cambridgeshire	Cambridgeshire	Fenland	Computer Displays U K Ltd	COMPUTER DISPLAYS (UK) LIMITED	CB6 2AY	542298	283324	S0823 : WEEE treatment facility	Treatment	WEEE treatment facility	100628	0	0	0	1	0	0	1
East of England	Cambridgeshire	Cambridgeshire	Huntingdonshire	Envar Composting Facility EPR/GP3930DF	ENVAR COMPOSTING LIMITED	PE28 3BS	533620	275400	T01 : Composting installation	Treatment	Composting	GP3930DF	21,082	21,771	23,533	22,055	20,475	21,783	23,533
East of England	Cambridgeshire	Cambridgeshire	Fenland	Plasgran Limited	PLASGRAN LIMITED	PE15 0PE	542400	291815	A16 : Physical Treatment Facility	Treatment	Physical Treatment	404083	69	194	430	273	154	224	430
East of England	Cambridgeshire	Cambridgeshire	South Cambridgeshire	Waterbeach Waste Management Park EPR/LP3593LM	Thalia WB ODC Limited	CB25 9PG	547920	276860	T01 : Composting installation	Treatment	Composting	LP3032WY	1,391	8,399	0	1,784	0	2,315	8,399
East of England	Cambridgeshire	Cambridgeshire WPA	South Cambridgeshire	Ely Road Landfill Site - EPR/BK5037IQ	AmeyCespa (East) Limited	CB25 9PG	268340	268340	L04 : Non Hazardous LF	Landfill	Non Hazardous LF	BK5037IQ	1,468	0	0	0	0	294	1,468
East of England	Cambridgeshire	Cambridgeshire WPA	Huntingdonshire	Buckden Recycling Centre	Invixon Limited	PE18 9UH	269300	269300	A13 : Household Waste Amenity Site	Transfer	CA Site	CB3205KL (70257)	410	0	0	0	0	82	410
TOTAL		**Cambridgeshire**											**27,944**	**33,418**	**27,191**	**25,700**	**20,785**	**27,008**	**37,765**
London	South East London	Lewisham	Lewisham	Deptford Recycling Centre	S S S I Limited	SE14 5RS	535791	178044	A11 : Household, Commercial & Industrial Waste Transfer Stn	Transfer	Non-Haz Waste Transfer / Treatment	83378	28,516	7,288	0	0	0	7,161	28,516
TOTAL		**Lewisham**											**28,516**	**7,288**	**0**	**0**	**0**	**7,161**	**28,516**
South East	Buckinghamshire	Buckinghamshire	Buckinghamshire	Greatmoor Waste Facility EPR/UP3734HT	FCC RECYCLING (UK) LIMITED	HP18 0QN	470290	222390	B06 : Municipal Waste Incinerator	Incineration	Municipal Waste Incinerator	UP3734HT	0	5,601	11,915	11,665	4,762	6,789	11,915

Facility RPA	Facility Sub Region	Facility WPA	Facility District	Site Name	Operator	Post Code	Easting	Northing	Permit Type	Site Category	Facility Type	Permit	Household, industrial and commercial (HIC) waste from the Plan area (tonnes per annum)						
													2018	2019	2020	2021	2022	Average	Max
South East	Buckinghamshire	Buckinghamshire	Buckinghamshire	Calvert Landfill (Pits 4&5) - EPR/BS8605IQ	FCC WASTE SERVICES (UK) LIMITED	MK18 2HF	469210	223320	L02 : Non Haz (SNRHW) LF	Landfill	Non Haz (SNRHW) LF	BS8605IQ	6,223	131	8	322	60	1,349	6,223
South East	Buckinghamshire	Buckinghamshire	Buckinghamshire	A S M Metal Recycling Ltd	A S M METAL RECYCLING LIMITED	HP19 8BB	480500	214300	A19 : Metal Recycling Site (Vehicle Dismantler)	MRS	Car Breaker	86046	1,269	812	696	647	578	801	1,269
South East	Buckinghamshire	Buckinghamshire	Buckinghamshire	Hawes Skip Hire Ltd	HAWES SKIP HIRE LIMITED	HP12 3RP	484790	192080	A11 : Household, Commercial & Industrial Waste Transfer Stn	Transfer	Non-Haz Waste Transfer	101449	0	0	0	1	1	0	1
South East	Buckinghamshire	Buckinghamshire	Buckinghamshire	A Weatherhead Ltd	A WEATHERHEAD LIMITED	HP22 6QQ	486998	205451	S0819 : Sewage sludge treatment	Treatment	Biological Treatment	403099	22	39	171	178	24	87	178
South East	Buckinghamshire	Buckinghamshire	Buckinghamshire	Aylesbury Dairy EPR/EP3335RY	Olleco	HP22 5WJ	487790	213510	T03 : Other Biological Treatment installation	Treatment	Biological Treatment	EP3335RY	0	0	74	59	0	27	74
South East	Buckinghamshire	Buckinghamshire	Buckinghamshire	Land Adj To Unit 2, Lowr Rectory Farm	P B Tyres U K Llp	MK17 9AF	489114	230411	A15 : Material Recycling Treatment Facility	Treatment	Material Recycling Facility	101178	0	0	0	21	0	4	21
South East	Buckinghamshire	Buckinghamshire	Buckinghamshire	Waste King Ltd	Waste King Ltd	HP23 4QR	491506	216163	S0803 : HCI Waste TS + treatment	Treatment	Non Haz Waste Transfer / Treatment	402839	12	0	0	0	0	2	12
South East	Buckinghamshire	Buckinghamshire WPA	South Bucks	Springfield Farm Landfill EPR/WP3438KV	Veolia ES Landfill Ltd	HP9 1XD	489290	189290	L04 : Non Hazardous LF	Landfill	Non Hazardous LF	WP3438KV	1,723	0	0	0	0	345	1,723
South East	Buckinghamshire	Buckinghamshire WPA	Aylesbury Vale	Aylesbury Transfer Station	H & H Waste Management Limited	HP19 8BP	214235	214235	A11 : Household, Commercial & Industrial Waste T Stn	Transfer	Non-Haz Waste Transfer	GB3100CF (86205)	61	0	0	0	0	12	61
TOTAL		**Buckinghamshire**											**9,309**	**6,584**	**12,864**	**12,893**	**5,425**	**9,415**	**21,477**
South East	Kent	Kent	Maidstone	Allington Incinerator - EPR/BR4551IC	Kent Enviropower Ltd	ME16 0LE	574160	157910	B06 : Municipal Waste Incinerator	Incineration	Municipal Waste Incinerator	BR4551IC	0	66	1,800	0	0	373	1,800

Facility RPA	Facility Sub Region	Facility WPA	Facility District	Site Name	Operator	Post Code	Easting	Northing	Permit Type	Site Category	Facility Type	Permit	Household, industrial and commercial (HIC) waste from the Plan area (tonnes per annum)						
													2018	2019	2020	2021	2022	Average	Max
South East	Kent	Kent	Swale	Kemsley Generating Station - EPR/JP3135DK	ENFINIUM K3 CHP OPERATIONS LIMITED	ME10 2FP	591810	166400	B06 : Municipal Waste Incinerator	Incineration	Municipal Waste Incinerator	JP3135DK	0	0	405	0	75	96	405
South East	Kent	Kent	Swale	Ridham Dock Biomass Facility - EPR/TP3536CL	MVV ENVIRONMENT RIDHAM LIMITED	ME9 8FQ	592260	168220	B07 : EFW Incinerator	Incineration	EFW Incinerator	TP3536CL	0	0	0	0	87	17	87
South East	Kent	Kent	Swale	Kemsley Paper Mill EPR/BJ7468IC	DS Smith Paper Limited	ME10 2TD	591810	166370	Paper, pulp & board manufacturing activities	Processing	Paper Recycling	BJ7468IC	0	197	866	1,479	0	508	1,479
South East	Kent	Kent	Tonbridge and Malling	Snodland Paper Mill EPR/BJ7433IQ	SMURFIT KAPPA UK LIMITED	ME6 5AX	570860	161610	Paper, pulp & board manufacturing activities	Processing	Paper Recycling	BJ7433IQ	0	5,212	5,222	5,053	5,204	4,138	5,222
South East	Kent	Kent	Swale	Sims Sheerness Metals Recycling Facility	Sims Group U K Ltd	ME12 1RS	590879	175594	S0907 : Storage of furnace ready scrap metal for recovery	Storage	Storage - Metal Reprocessing	404294	0	0	0	11	0	2	11
South East	Kent	Kent	Canterbury	Merton Farm	SYNERGY ASSET SERVICES LIMITED	CT4 7BA	615054	155108	A9 : Hazardous Waste Transfer Station	Transfer	Haz Waste Transfer	404350	0	0	0	3	3	1	3
South East	Kent	Kent	Tonbridge and Malling	CSG Aylesford Treatment Plant EPR/UP3033UX/V007	CLEANSING SERVICE GROUP LIMITED	ME20 7NA	572050	157380	T05 : Physico-chemical treatment installation	Treatment	Physical-Chemical Treatment	UP3033UX	0	0	1	2	0	1	2
South East	Kent	Kent	Swale	Sweeep Kuusakoski Ltd - EPR/GP3498HL	SWEEEP KUUSAKOSKI LIMITED	ME10 2QB	590680	164440	T08 : MRF Treatment installation	Treatment	Material Recycling Facility	QP3835CM	26	36	5	0	1	14	36
South East	Kent	Kent WPA	Dartford	Long Reach Sewage Treatment Works Waste Import Facility	Thames Water Utilities Limited	DA1 5PP	176494	176494	A16 : Physical Treatment Facility	Treatment	Physical Treatment	DB3538RS (103630)	12	0	0	0	0	2	12
TOTAL		**Kent**											**38**	**5,511**	**8,298**	**6,547**	**5,370**	**5,153**	**9,056**

Facility RPA	Facility Sub Region	Facility WPA	Facility District	Site Name	Operator	Post Code	Easting	Northing	Permit Type	Site Category	Facility Type	Permit	Household, industrial and commercial (HIC) waste from the Plan area (tonnes per annum)						
													2018	2019	2020	2021	2022	Average	Max
West Midlands	Warwickshire	Warwickshire	Rugby	Ling Hall Landfill EPR/BU2381IE	VEOLIA ES LANDFILL LIMITED	CB23 9HH	444500	273500	L02 : Non Haz (SNRHW) LF	Landfill	Non Haz (SNRHW) LF	BU2381IE	1,173	1,042	1,320	17,788	2,314	4,727	17,788
West Midlands	Warwickshire	Warwickshire	Nuneaton and Bedworth	A A Battery Recycling Ltd	A A BATTERY RECYCLING LIMITED	CV11 6RS	437404	291169	S1503 No 3: MRS + WEEE Treatment Facility - <75ktpa	MRS	Metal Recycling	403469	0	0	0	2	1	1	2
West Midlands	Warwickshire	Warwickshire	North Warwickshire	Atherstone Transfer Station EPR/BP3130RM	BIFFA WASTE SERVICES LIMITED	CV9 1JG	431470	297960	TR3 : Haz Waste Transfer	Transfer	Haz Waste Transfer	BP3130RM	0	1	0	1	0	0	1
West Midlands	Warwickshire	Warwickshire	North Warwickshire	Bentley Sawmill	A & A RECYCLING SERVICES LIMITED	CV9 2HJ	428594	296238	A16 : Physical Treatment Facility	Treatment	Physical Treatment	103758	559	180	0	0	172	182	559
West Midlands	Warwickshire	Warwickshire	Nuneaton and Bedworth	Circom Fibres Ltd	CIRCOM FIBRES LIMITED	CV7 9ES	436148	285549	S1506 No 6: 75kte HCl Waste TS + treatment	Treatment	Non Haz Waste Transfer / Treatment	404188	111	82	205	237	186	164	237
West Midlands	Warwickshire	Warwickshire	North Warwickshire	Coleshill Roadsweepings And Grit Separation Plant	SUEZ RECYCLING AND RECOVERY UK LTD	B46 1NK	419500	291540	A16 : Physical Treatment Facility	Treatment	Physical Treatment	404874	0	0	841	816	366	405	841
West Midlands	Warwickshire	Warwickshire	Nuneaton and Bedworth	CSG Coventry Treatment Plant - EPR/HP3331SW	CLEANSING SERVICE GROUP LIMITED	CV7 9NW	435790	286010	T05 : Physico-chemical treatment installation	Treatment	Physical-Chemical Treatment	HP3331SW	0	0	0	0	42	8	42
West Midlands	Warwickshire	Warwickshire	North Warwickshire	Packington Wood Recycling Facility	Suez Recycling And Recovery U K Ltd	CV7 7HN	421200	285600	A15 : Material Recycling Treatment Facility	Treatment	Material Recycling Facility	102631	0	912	2,119	72	0	621	2,119
West Midlands	Warwickshire	Warwickshire	Rugby	Rugby Solid Recovered Fuel Facility EPR/EP3033EJ	SUEZ Recycling and Recovery UK Ltd	CV21 1AT	449040	276040	T04 : Non-Haz waste physical treatment installation	Treatment	Physical Treatment	EP3033EJ	4,228	3,070	708	0	0	1,601	4,228
West Midlands	Warwickshire	Warwickshire	Stratford-on-Avon	The Filta Group Ltd	THE FILTA GROUP LIMITED	CV35 0ED	434952	247243	A16 : Physical Treatment Facility	Treatment	Physical Treatment	405985	0	2	5	5	9	4	9
West Midlands	Warwickshire	Warwickshire WPA	Warwick	Eaton Works	Grease Management Ltd	CV31 2AU	265011	265011	A16 : Physical Treatment Facility	Treatment	Physical Treatment	KP3998CC (48249)	2	0	0	0	0	0	2
TOTAL		**Warwickshire**											**6,073**	**5,289**	**5,199**	**18,919**	**3,090**	**7,714**	**25,828**

Facility RPA	Facility Sub Region	Facility WPA	Facility District	Site Name	Operator	Post Code	Easting	Northing	Permit Type	Site Category	Facility Type	Permit	Household, industrial and commercial (HIC) waste from the Plan area (tonnes per annum)						
													2018	2019	2020	2021	2022	Average	Max
West Midlands	West Midlands Met Districts	Birmingham City	Birmingham	Tyseley Energy from Waste Plant EPR/WP3239SJ	VEOLIA ES BIRMINGHAM LIMITED	B11 2BA	410850	284510	B06 : Municipal Waste Incinerator	Incineration	Municipal Waste Incinerator	WP3239SJ	0	59	38	1,742	33	374	1,742
West Midlands	West Midlands Met Districts	Birmingham City	Birmingham	Nechells Paper Mill EPR/ZP3437GZ	Smurfit Kappa UK Limited	B7 5RE	409370	288760	Paper, pulp & board manufacturing activities	Processing	Paper Recycling	ZP3437GZ	0	765	2,834	2,773	0	1,275	2,834
West Midlands	West Midlands Met Districts	Birmingham City	Birmingham	Landor Street IRRC EPR/FP3335RJ	SUEZ Recycling and Recovery UK Ltd	B8 1AE	408520	287180	TR3 : Haz Waste Transfer	Transfer	Haz Waste Transfer	FP3335RJ	0	0	18	2,387	0	481	2,387
West Midlands	West Midlands Met Districts	Birmingham City	Birmingham	Alma Crescent Facility EPR/CP3796FQ	Environmental Concern Limited	B7 4RH	408960	287660	T05 : Physico-chemical treatment installation	Treatment	Physical-Chemical Treatment	EP3032WN	6	1	0	1	0	2	6
West Midlands	West Midlands Met Districts	Birmingham City	Birmingham	Armoury Road Waste Management Centre - EPR/CB3404XA	VEOLIA ES (UK) LIMITED	B11 2RH	410080	246800	T08 : MRF Treatment installation	Treatment	Material Recycling Facility	UP3931WJ	0	0	0	31	4	7	31
West Midlands	West Midlands Met Districts	Birmingham City	Birmingham	Minworth S T W	SEVERN TRENT WATER LIMITED	B76 9DP	416700	292475	A23 : Biological Treatment Facility	Treatment	Biological Treatment	40061	0	27	13,587	10,209	223	4,809	13,587
West Midlands	West Midlands Met Districts	Birmingham City	Birmingham	Secure I T Disposals Limited (Trading As Restore Technology Limited)	SECURE I T DISPOSALS LIMITED	B32 3DB	400161	282495	A15 : Material Recycling Treatment Facility	Treatment	Material Recycling Facility	100220	33	9	3	6	0	10	33
West Midlands	West Midlands Met Districts	Birmingham City WPA	Birmingham	Sims Group U K Limited	Sims Group U K Ltd	B21 0RW	289193	289193	A20 : Metal Recycling Site (mixed MRS's)	MRS	Metal Recycling	AB3700HJ (400791)	3	0	0	0	0	1	3
West Midlands	West Midlands Met Districts	Birmingham City WPA	Birmingham	Minworth Sludge Digestion & CHP Plant EPR/BP3631SW	Severn Trent Water Limited	B76 9DP	292690	292690	Other Biological Treatment installation	Treatment	Biological Treatment	BP3631SW	2	0	0	0	0	0	2

Facility RPA	Facility Sub Region	Facility WPA	Facility District	Site Name	Operator	Post Code	Easting	Northing	Permit Type	Site Category	Facility Type	Permit	Household, industrial and commercial (HIC) waste from the Plan area (tonnes per annum)						
													2018	2019	2020	2021	2022	Average	Max
TOTAL		**Birmingham City**											**45**	**862**	**16,481**	**17,150**	**260**	**6,960**	**20,627**
Yorks & Humber	South Yorkshire	Sheffield	Sheffield	Salmon Pastures Waste Transfer Station	Syracuse Waste Limited	S4 7WT	436956	388185	A11 : Household, Commercial & Industrial Waste Transfer Stn	Transfer	Non-Haz Waste Transfer	65040	0	0	5,992	2,653	0	1,729	5,992
Yorks & Humber	South Yorkshire	Sheffield	Sheffield	Tinsley Park Road Secure Storage Facility	VEOLIA ENVIRONMENTAL SERVICES (UK) LIMITED	S9 5DL	438791	389187	A11 : Household, Commercial & Industrial Waste Transfer Stn	Transfer	Non-Haz Waste Transfer	100007	60	14	25	22	11	26	60
Yorks & Humber	South Yorkshire	Sheffield	Sheffield	Beeley Wood Sustainable Business Park	WASTE RECYCLING AND DESTRUCTION LIMITED	S6 1QT	432187	392013	A17 : Physico-Chemical Treatment Facility	Treatment	Physical-Chemical Treatment	101374	2	2	4	8	4	4	8
Yorks & Humber	South Yorkshire	Sheffield	Sheffield	Blackburn Meadows Waste Treatment Facility - EPR/MP3131SA	FCC RECYCLING (UK) LIMITED	S9 1HL	439490	391640	T10 : Haz waste treatment installation	Treatment	Haz Waste Transfer / Treatment	MP3131SA	0	0	0	7	6	3	7
Yorks & Humber	South Yorkshire	Sheffield	Sheffield	S G S Sheffield Glass Recycling Facility	SIBELCO GREEN SOLUTIONS (UK) LIMITED	S4 7WT	436885	388179	A15 : Material Recycling Treatment Facility	Treatment	Material Recycling Facility	407740	0	0	0	2,609	1,731	868	2,609
Yorks & Humber	South Yorkshire	Sheffield	Sheffield	Sheffield WM Centre EPR/TP3039RN	Biffa Waste Services Limited	S20 3FG	443960	381520	T06 : Chemical Treatment installation	Treatment	Chemical Treatment	TP3039RN	1	2	0	0	0	1	2
Yorks & Humber	South Yorkshire	Sheffield WPA	Sheffield	8 Grange Mill Lane - EPR/BB3307LT	Mettalis Recycling Limited	S9 1HW	392870	392870	Metal Recycling installation	MRS	Metal Recycling	JP3631AG	493	0	0	0	0	99	493
TOTAL		**Sheffield**											**555**	**18**	**6,021**	**5,298**	**1,752**	**2,729**	**9,171**

Table I-19 Strategic-level CD&E waste exports from the Plan area, (by receiving WPA and waste management facility), 2018 -2022

Facility RPA	Facility Sub Region	Facility WPA	Facility District	Site Name	Operator	Post Code	Easting	Northing	Permit Type	Site Category	Facility Type	Permit	Construction, demolition and excavation (CD&E) waste from the Plan area (tonnes per annum)						
													2018	2019	2020	2021	2022	Average	Max
East Midlands	Northamptonshire	Northamptonshire	West Northamptonshire	Passenham Quarry	GRS (ROADSTONE) LIMITED	MK19 6JT	477500	239100	L05 : Inert LF	Landfill	Inert LF	75204	115,602	135,651	49,659	128,804	121,843	110,312	135,651
East Midlands	Northamptonshire	Northamptonshire	East Northamptonshire	Ringstead Grange Quarry	Mick George Limited	NN14 4DT	498206	274086	L05 : Inert LF	Landfill	Inert LF	104536	0	0	1,656	0	0	331	1,656
East Midlands	Northamptonshire	Northamptonshire	West Northamptonshire	Great Billing II WTS EPR/SP3935AX	MICK GEORGE LIMITED	NN3 5HQ	482130	262230	TS : Temporary storage installation	Storage	Temporary storage installation	SP3935AX	0	314	114	19	0	89	314
East Midlands	Northamptonshire	Northamptonshire	Kettering	Rushton Waste Transfer Station EPR/CP3995SN	Mick George Limited	NN14 1RS	484840	283470	T01 : Composting installation	Treatment	Composting	MP3032ZB	0	0	16	0	0	3	16
East Midlands	Northamptonshire	Northamptonshire	North Northamptonshire	Select Stone Recycling	DAVID BRIGHT AND VICTORIA JEFFREYS	PE8 5SA	503824	285191	SR2010 No12 : Treatment of waste to produce soil <75,000 tpy	Treatment	Physical Treatment	406097	0	3,437	3,717	1,800	461	1,883	3,717
East Midlands	Northamptonshire	Northamptonshire	West Northamptonshire	Units 17 18 And 19 Martins Yard	BAKERS WASTE SERVICES LIMITED	NN5 7DU	474700	261600	A16 : Physical Treatment Facility	Treatment	Physical Treatment	73116	0	0	0	28	7	7	28
East Midlands	Northamptonshire	Northamptonshire	North Northamptonshire	V E K A Recycling Limited	VEKA RECYCLING LIMITED	NN8 4PE	490029	270046	A17 : Physico-Chemical Treatment Facility	Treatment	Physical-Chemical Treatment	405770	0	26	8	7	104	29	104
East Midlands	Northamptonshire	Northamptonshire WPA	Corby	Weldon Landfill Site EPR/BV4525IB	FCC Waste Services (UK) Limited	NN17 3JG	288700	288700	L02 : Non Haz (SNRHW) LF	Landfill	Non Haz (SNRHW) LF	BV4525IB	3,997	0	0	0	0	799	3,997
TOTAL		**Northamptonshire**											**119,599**	**139,428**	**55,170**	**130,659**	**122,414**	**113,454**	**145,483**
East of England	Bedfordshire	Bedford	Bedford	Stewartby Landfill EPR/BV4576IK	FCC WASTE SERVICES (UK) LIMITED	MK43 9LY	501330	242860	L04 : Non Hazardous LF	Landfill	Non Hazardous LF	BV4576IK	46,916	65,065	536,159	77,662	1,273	145,415	536,159
East of England	Bedfordshire	Bedford	Bedford	Building 18, Twinwoods Business Park - EPR/KP3196NL	B & W WASTE MANAGEMENT SERVICES LIMITED	MK44 1FD	503240	256000	TR3 : Haz Waste Transfer	Transfer	Haz Waste Transfer	HP3931HA	0	0	2	1	0	1	2

Facility RPA	Facility Sub Region	Facility WPA	Facility District	Site Name	Operator	Post Code	Easting	Northing	Permit Type	Site Category	Facility Type	Permit	Construction, demolition and excavation (CD&E) waste from the Plan area (tonnes per annum)						
													2018	2019	2020	2021	2022	Average	Max
East of England	Bedfordshire	Bedford	Bedford	Safetykleen U K	SAFETY-KLEEN U.K. LIMITED	MK42 0LQ	507300	248200	A9 : Hazardous Waste Transfer Station	Transfer	Haz Waste Transfer	70002	0	12	0	9	0	4	12
East of England	Bedfordshire	Bedford	Bedford	C and Co Grab Hire	C & CO GRAB HIRE LTD	MK44 3LH	513549	252474	SR2010 No12 : Treatment of waste to produce soil <75,000 tpy	Treatment	Physical Treatment	120675	0	0	0	0	80	16	80
East of England	Bedfordshire	Bedford	Bedford	Keysoe Road	C Jackson And Sons Bedford Limited	MK44 2EA	505779	259771	A16 : Physical Treatment Facility	Treatment	Physical Treatment	400200	127	144	0	0	0	54	144
East of England	Bedfordshire	Bedford	Bedford	Keysoe Road	C JACKSON & SONS BEDFORD LIMITED	MK44 2EA	505779	259771	A16 : Physical Treatment Facility	Treatment	Physical Treatment	400200	0	0	205	43	372	124	372
East of England	Bedfordshire	Bedford	Bedford	Stewartby Treatment Plant	VEOLIA ENVIRONMENTAL SERVICES (UK) LIMITED	MK43 9LY	501500	243500	A21 : Chemical Treatment Facility	Treatment	Chemical Treatment	75018	5	2	1	0	0	2	5
TOTAL		**Bedford**											**47,047**	**65,224**	**536,367**	**77,715**	**1,725**	**145,616**	**536,773**
East of England	Bedfordshire	Central Bedfordshire	CENTRAL BEDFORDSHIRE (UA)	Reach Lane Quarry Landfill	L B Silica Sand Ltd		492800	228200	L05 : Inert LF	Landfill	Inert LF	210134	0	28,080	0	0	0	5,616	28,080
East of England	Bedfordshire	Central Bedfordshire	Central Bedfordshire	Reach Lane Quarry Landfill	L B Silica Sand Limited	0	492800	228200	L05 : Inert LF	Landfill	Inert LF	210134	0	0	52,399	31,271	0	16,734	52,399
East of England	Bedfordshire	Central Bedfordshire	Central Bedfordshire	Stone Lane Quarry	FOX (OWMBY) LIMITED	LU7 0AP	492659	229030	L05 : Inert LF	Landfill	Inert LF	101312	3,040	8,000	33,940	13,680	16,280	14,988	33,940
East of England	Bedfordshire	Central Bedfordshire	CENTRAL BEDFORDSHIRE (UA)	Totternhoe Metal Recycling Limited	Totternhoe Metal Recycling Limited	LU6 2BU	497958	222541	A20 : Metal Recycling Site (mixed MRS's)	MRS	Metal Recycling	400192	4	3	0	0	0	1	4
East of England	Bedfordshire	Central Bedfordshire	Central Bedfordshire	Totternhoe Metal Recycling Limited	Totternhoe Metal Recycling Limited	LU6 2BU	497958	222541	A20 : Metal Recycling Site (mixed MRS's)	MRS	Metal Recycling	400192	0	0	0	2	0	0	2

Facility RPA	Facility Sub Region	Facility WPA	Facility District	Site Name	Operator	Post Code	Easting	Northing	Permit Type	Site Category	Facility Type	Permit	Construction, demolition and excavation (CD&E) waste from the Plan area (tonnes per annum)						
													2018	2019	2020	2021	2022	Average	Max
East of England	Bedfordshire	Central Bedfordshire	Central Bedfordshire	Gypsum Recovery Facility, Totternhoe	PLASTERBOARD RECYCLING SOLUTIONS LIMITED	LU6 2BU	498110	222344	A16 : Physical Treatment Facility	Treatment	Physical Treatment	101959	0	0	0	220	167	77	220
East of England	Bedfordshire	Central Bedfordshire	Central Bedfordshire	Tempsford Airfield Farm	M I PARROTT LIMITED	SG19 2JW	518848	252275	SR2010 No12 : Treatment of waste to produce soil <75,000 tpy	Treatment	Physical Treatment	407021	0	0	331	895	905	426	905
East of England	Bedfordshire	Central Bedfordshire	Central Bedfordshire	Unit 16 Harmill Industrial Estate	Ashvale Haulage Limited	LU7 4FF	492200	224000	S0803 : HCI Waste TS + treatment	Treatment	Non Haz Waste Transfer / Treatment	400928	0	0	6,336	1,296	0	1,526	6,336
TOTAL		**Central Bedfordshire**											**3,044**	**36,083**	**93,006**	**47,364**	**17,351**	**39,370**	**121,886**

Table I-20 Strategic-level hazardous waste exports from the Plan area, (by receiving WPA and waste management facility), 2018 -2022

Facility RPA	Facility Sub Region	Facility WPA	Facility District	Site Name	Operator	Post Code	Easting	Northing	Permit Type	Site Category	Facility Type	Permit	Hazardous waste from the Plan area (tonnes per annum)						
													2018	2019	2020	2021	2022	Average	Max
East Midlands	Derbyshire	Derbyshire	Chesterfield	Viaduct Auto Recovery Ltd	P Rodgers	S43 1AF	440103	373134	A19a : ELV Facility	MRS	Car Breaker	65341	0	0	0	0	1	0	1
East Midlands	Derbyshire	Derbyshire	Erewash	Ailkeston Healthcare Waste Transfer Station	SRCL LIMITED	DE7 8EF	445738	342526	A12 : Clinical Waste Transfer Station	Transfer	Clinical Waste Transfer	401880	33	33	31	28	39	33	39
East Midlands	Derbyshire	Derbyshire	Derbyshire Dales	H M P Sudbury	Recycling Lives (Social Enterprises) Limited	DE6 5HW	415893	332937	S1515 No 15: 75kte WEEE Treatment Facility	Treatment	Physical Treatment	405621	0	3	0	0	0	1	3
East Midlands	Derbyshire	Derbyshire	Erewash	Ilkeston Waste Treatment and Transfer Facility EPR/AP3337SJ	CASTLE WASTE SERVICES LIMITED	DE7 4BG	447510	339460	T05 : Physico-chemical treatment installation	Treatment	Physical-Chemical Treatment	AP3337SJ	0	31	0	0	0	6	31
East Midlands	Derbyshire	Derbyshire	North East Derbyshire	Norwood Recycling Centre EPR/CB3805KE	VEOLIA ES (UK) LIMITED	S21 2DR	446210	381890	T11 : Haz waste transfer/treatment installation	Treatment	Haz Waste Transfer / Treatment	FP3337WG	0	265	140	161	223	158	265
TOTAL		**Derbyshire**											**33**	**332**	**171**	**189**	**263**	**197**	**339**

Facility RPA	Facility Sub Region	Facility WPA	Facility District	Site Name	Operator	Post Code	Easting	Northing	Permit Type	Site Category	Facility Type	Permit	Hazardous waste from the Plan area (tonnes per annum)						
													2018	2019	2020	2021	2022	Average	Max
East Midlands	Northamptonshire	Northamptonshire	East Northamptonshire	East Northants Resource Management Facility - EPR/TP3430GW	Augean South Limited	PE8 6XX	500560	300110	L01 : Hazardous Merchant LF	Landfill	Hazardous Merchant LF	TP3430GW	928	1,857	0	0	0	557	1,857
East Midlands	Northamptonshire	Northamptonshire	Wellingborough	Earls Barton Fridge Recycling Facility	Davis Commercial Services Limited	NN6 0JE	485514	264571	S1503 No 3: MRS + WEEE Treatment Facility - <75ktpa	MRS	Metal Recycling	403231	0	0	37	0	0	7	37
East Midlands	Northamptonshire	Northamptonshire	North Northamptonshire	Platinum International Limited	PLATINUM INTERNATIONAL LIMITED	NN17 4JN	489181	290404	S1516 No 16: Metal Recycling Site	MRS	Metal Recycling	402981	13	0	6	0	6	5	13
East Midlands	Northamptonshire	Northamptonshire	Wellingborough	R M Parts	Pozdzik Mariusz	NN8 6UW	486551	268955	SR2011 No3 : Vehicle Depollution Facility <5000 tps	MRS	Vehicle depollution facility	402360	0	1	0	0	0	0	1
East Midlands	Northamptonshire	Northamptonshire	North Northamptonshire	Clearwater D C 2001 Ltd	CLEARWATER D C 2001 LIMITED	NN17 5JE	491582	290444	A9 : Hazardous Waste Transfer Station	Transfer	Haz Waste Transfer	404435	0	0	0	0	5	1	5
East Midlands	Northamptonshire	Northamptonshire	North Northamptonshire	Oracle Solutions Asbestos Ltd - Head Office	ORACLE SOLUTIONS ASBESTOS LIMITED	NN16 8PX	485909	280082	S0809 : Asbestos Waste Transfer Station	Transfer	Haz Waste Transfer	120281	0	0	2	4	3	2	4
East Midlands	Northamptonshire	Northamptonshire	North Northamptonshire	Pro - Active Asbestos Control Ltd	PRO - ACTIVE ASBESTOS CONTROL LIMITED	NN8 4HB	489334	270288	S0809 : Asbestos Waste Transfer Station	Transfer	Haz Waste Transfer	404171	8	2	2	7	6	5	8
East Midlands	Northamptonshire	Northamptonshire	North Northamptonshire	Earls Barton Fridge Recycling Facility - EPR/EB3100HN	DAVIS COMMERCIAL SERVICES LIMITED	NN6 0JE	485510	264560	Disposal of waste other than by incineration or landfill inc	Treatment	Non-specified Treatment	YP3800PC	0	0	0	0	158	32	158
East Midlands	Northamptonshire	Northamptonshire	North Northamptonshire	East Northants RM Facility EPR/YP3138XB	AUGEAN SOUTH LIMITED	PE8 6XX	0	0	T05 : Physico-chemical treatment installation	Treatment	Physical-Chemical Treatment	YP3138XB	29	16	46	232	265	117	265
East Midlands	Northamptonshire	Northamptonshire	Northampton	New Duston Oil & Solvent Reclamation Works - EPR/XP3237MZ	Page	NN5 6NL	471270	263000	T05 : Physico-chemical treatment installation	Treatment	Physical-Chemical Treatment	XP3237MZ	2	5	0	0	0	1	5
TOTAL		**Northamptonshire**											**980**	**1,882**	**93**	**242**	**444**	**728**	**2,354**

Facility RPA	Facility Sub Region	Facility WPA	Facility District	Site Name	Operator	Post Code	Easting	Northing	Permit Type	Site Category	Facility Type	Permit	Hazardous waste from the Plan area (tonnes per annum)						
													2018	2019	2020	2021	2022	Average	Max
East Midlands	Nottinghamshire	Nottinghamshire	Newark and Sherwood	Bilsthorpe Oil Treatment Plant	Oakwood Fuels Ltd	NG22 8UA	495260	360650	A9 : Hazardous Waste Transfer Station	Transfer	Haz Waste Transfer	100314	69	60	10	0	0	28	69
East Midlands	Nottinghamshire	Nottinghamshire	Newark and Sherwood	Bilsthorpe Oil Treatment Plant - EPR/DP3331MG	ENVA ENGLAND SPECIALIST WASTE LIMITED	NG22 8UA	465220	360610	T05 : Physico-chemical treatment installation	Treatment	Physical-Chemical Treatment	DP3331MG	472	471	422	247	238	370	472
TOTAL		**Nottinghamshire**											**541**	**532**	**433**	**247**	**238**	**398**	**541**
East of England	Bedfordshire	Bedford	Bedford	Building 18, Twinwoods Business Park - EPR/KP3196NL	B & W WASTE MANAGEMENT SERVICES LIMITED	MK44 1FD	503240	256000	TR3 : Haz Waste Transfer	Transfer	Haz Waste Transfer	HP3931HA	285	258	243	290	217	259	290
East of England	Bedfordshire	Bedford	Bedford	Safetykleen U K	SAFETY-KLEEN U.K. LIMITED	MK42 0LQ	507300	248200	A9 : Hazardous Waste Transfer Station	Transfer	Haz Waste Transfer	70002	123	90	150	159	161	137	161
East of England	Bedfordshire	Bedford	Bedford	Stewartby Treatment Plant	VEOLIA ENVIRONMENTAL SERVICES (UK) LIMITED	MK43 9LY	501500	243500	A21 : Chemical Treatment Facility	Treatment	Chemical Treatment	75018	1	0	0	0	0	0	1
East of England	Bedfordshire	Bedford	Bedford	Stewartby Waste Management Facility EPR/QP3237SC	VEOLIA ES (UK) LIMITED	MK43 9LY	501330	242860	T06 : Chemical Treatment installation	Treatment	Chemical Treatment	QP3237SC	188	155	100	101	82	125	188
TOTAL		**Bedford**											**597**	**503**	**493**	**550**	**461**	**521**	**640**
East of England	Cambridgeshire	Cambridgeshire	Fenland	Lodge Farm	GOLD STAR METAL TRADERS LIMITED	PE15 0YN	538203	294062	S0820 : Vehicle depollution facility	MRS	Vehicle depollution facility	104799	1	1	0	0	0	0	1
East of England	Cambridgeshire	Cambridgeshire	South Cambridgeshire	Vetspeed, Thriplow EPR/MP3930BE	VETSPEED LIMITED	SG8 7RR	544400	244700	TR3 : Haz Waste Transfer	Transfer	Haz Waste Transfer	MP3930BE	1	0	0	241	144	77	241

Facility RPA	Facility Sub Region	Facility WPA	Facility District	Site Name	Operator	Post Code	Easting	Northing	Permit Type	Site Category	Facility Type	Permit	Hazardous waste from the Plan area (tonnes per annum)						
													2018	2019	2020	2021	2022	Average	Max
East of England	Cambridgeshire	Cambridgeshire	South Cambridgeshire	A11 Worsted Lodge	DOCKERILL GROUNDWORKS LIMITED	CB22 3AX	552747	251517	A16 : Physical Treatment Facility	Treatment	Physical Treatment	400776	0	0	0	0	10	2	10
TOTAL		**Cambridgeshire**											**2**	**1**	**0**	**241**	**154**	**79**	**251**
East of England	Hertfordshire	Hertfordshire	East Hertfordshire	Westmill II Waste Management Facility EPR/DP3431PC	Biffa Waste Services Ltd	SG12 0ES	534700	215500	L04 : Non Hazardous LF	Landfill	Non Hazardous LF	DP3431PC	0	0	8	0	0	2	8
East of England	Hertfordshire	Hertfordshire	St Albans	Factory Unit Y	BLANCOMET RECYCLING UK LIMITED	AL4 0LB	519256	207203	A20 : Metal Recycling Site (mixed MRS's)	MRS	Metal Recycling	405737	0	9	4	7	12	6	12
East of England	Hertfordshire	Hertfordshire	Stevenage	Leyden Road HWTS EPR/SP3130RY	BIFFA WASTE SERVICES LIMITED	SG1 2BP	523770	223040	TR3 : Haz Waste Transfer	Transfer	Haz Waste Transfer	SP3130RY	0	0	0	0	1	0	1
East of England	Hertfordshire	Hertfordshire	North Hertfordshire	Electronic Waste Recycling Ltd	Electronic Waste Recycling Ltd	SG6 1LA	522900	233000	S0823 : WEEE treatment facility	Treatment	WEEE treatment facility	100752	0	0	8	0	0	2	8
East of England	Hertfordshire	Hertfordshire	St Albans	Redbournbury Treatment Plant - EPR/BW3281IA	VEOLIA ES (UK) LIMITED	AL3 6RP	512290	210290	T10 : Haz waste treatment installation	Treatment	Haz Waste Transfer / Treatment	BW3281IA	324	342	608	430	302	401	608
TOTAL		**Hertfordshire**											**324**	**351**	**629**	**437**	**314**	**411**	**637**
East of England	Cambridgeshire	Peterborough	Peterborough	Thornhaugh Landfill Site - EPR/RP3133PP	AUGEAN SOUTH LIMITED	PE8 6NH	504930	300030	L02 : Non Haz (SNRHW) LF	Landfill	Non Haz (SNRHW) LF	RP3133PP	42	26	24	48	730	174	730
East of England	Cambridgeshire	Peterborough	Peterborough	Sims Group U K Limited	SIMS GROUP UK LIMITED	PE1 5UR	521719	299100	A19 : Metal Recycling Site (Vehicle Dismantler)	MRS	Car Breaker	100413	99	100	79	102	66	89	102
TOTAL		**Peterborough**											**142**	**126**	**103**	**150**	**796**	**263**	**832**
East of England	Suffolk	Suffolk	West Suffolk	The Carrops	SCRAPCO [RED LODGE] LIMITED	IP28 8LD	569597	269526	A19 : Metal Recycling Site	MRS	Car Breaker	100301	0	0	0	0	2	0	2

Facility RPA	Facility Sub Region	Facility WPA	Facility District	Site Name	Operator	Post Code	Easting	Northing	Permit Type	Site Category	Facility Type	Permit	Hazardous waste from the Plan area (tonnes per annum)						
													2018	2019	2020	2021	2022	Average	Max
									(Vehicle Dismantler)										
East of England	Suffolk	Suffolk	Mid Suffolk	Safetykleen U K	Safety Kleen U K Ltd	IP30 9HN	600209	264846	A9 : Hazardous Waste Transfer Station	Transfer	Haz Waste Transfer	70796	0	0	1	0	0	0	1
East of England	Suffolk	Suffolk	West Suffolk	Brandon Aggregate Manufacturing Facility - EPR/JP3332FK	O.C.O TECHNOLOGY LIMITED	IP27 0AX	578330	287060	T05 : Physico-chemical treatment installation	Treatment	Physical-Chemical Treatment	JP3332FK	1,608	2,999	2,980	2,699	1,404	2,338	2,999
East of England	Suffolk	Suffolk	Ipswich	Hollywell Waste Oil Treatment Facility EPR/CB3906FN	SLICKER RECYCLING LIMITED	IP3 0BE	617060	243010	T05 : Physico-chemical treatment installation	Treatment	Physical-Chemical Treatment	DP3438AF	2	0	29	1	5	7	29
TOTAL		**Suffolk**											**1,610**	**2,999**	**3,010**	**2,700**	**1,411**	**2,346**	**3,030**
South East	Kent	Medway	Medway	Kingsnorth Oil TP EPR/QP3138AA	SLICKER RECYCLING LIMITED	ME3 9ND	580840	173450	A9 : Hazardous Waste Transfer Station	Transfer	Haz Waste Transfer	19396	36	28	20	35	3	25	36
South East	Kent	Medway	Medway	Rochester Clinical Waste Treatment Facility	Tradebe Healthcare National Limited	ME2 4LY	575000	169590	TR2 : Clinical Waste Transfer	Transfer	Clinical Waste Transfer	WP3036ZR	0	0	0	67	0	13	67
South East	Kent	Medway	Medway	Kingsnorth Oil TP EPR/QP3138AA	SLICKER RECYCLING LIMITED	ME3 9ND	580840	173450	T05 : Physico-chemical treatment installation	Treatment	Physical-Chemical Treatment	QP3138AA	230	179	54	4	13	96	230
TOTAL		**Medway**											**266**	**207**	**74**	**107**	**17**	**134**	**334**
South West	Bath, Bristol and S Glo	Bristol City	Bristol, City of	Pure Clean Enironmental Ltd	Pure Clean Environmental Ltd	BS11 9HD	351878	178576	A9 : Hazardous Waste Transfer Station	Transfer	Haz Waste Transfer	26057	13	96	41	11	0	32	96
South West	Bath, Bristol and S Glo	Bristol City	Bristol, City of	Augean Waste Treatment Plant EA/EPR/RP3735XP/V002	AUGEAN TREATMENT LIMITED	BS11 0YA	352490	180620	T06 : Chemical Treatment installation	Treatment	Chemical Treatment	RP3735XP	34	176	322	316	516	273	516
South West	Bath, Bristol and S Glo	Bristol City	Bristol, City of	CSG Bristol Treatment Plant EPR/AP3336SD	CLEANSING SERVICE	BS5 0TQ	360000	173800	T05 : Physico-chemical treatment installation	Treatment	Physical-Chemical Treatment	AP3336SD	2	1	4	4	2	2	4

Facility RPA	Facility Sub Region	Facility WPA	Facility District	Site Name	Operator	Post Code	Easting	Northing	Permit Type	Site Category	Facility Type	Permit	Hazardous waste from the Plan area (tonnes per annum)						
													2018	2019	2020	2021	2022	Average	Max
					GROUP LIMITED														
South West	Bath, Bristol and S Glo	Bristol City	Bristol, City of	E Recycling Ltd	E RECYCLING LIMITED	BS11 8AG	352665	180162	S0823 : WEEE treatment facility	Treatment	WEEE treatment facility	101256	0	0	0	0	10	2	10
TOTAL		**Bristol City**											**49**	**273**	**367**	**331**	**528**	**310**	**627**
West Midlands	Staffordshire	Staffordshire	South Staffordshire	Four Ashes Clinical Waste Treatment Plant and Transfer Station - EPR/JP3733UT	SRCL Limited	WV10 7DG	391990	308560	TR2 : Clinical Waste Transfer	Transfer	Clinical Waste Transfer	JP3733UT	4	4	3	0	0	2	4
West Midlands	Staffordshire	Staffordshire	Cannock Chase	S C I Central Ltd Transfer Station	S C I CENTRAL LIMITED	WS15 1UY	405828	316759	S0809 : Asbestos Waste Transfer Station	Transfer	Haz Waste Transfer	406848	0	0	0	7	3	2	7
West Midlands	Staffordshire	Staffordshire	Cannock Chase	Cannock Hazardous Waste Treatment Site - EPR/WP3638JR	AXIL INTEGRATED SERVICES LIMITED	WS11 0LN	397840	308280	T05 : Physico-chemical treatment installation	Treatment	Physical-Chemical Treatment	WP3638JR	39	106	90	82	74	78	106
West Midlands	Staffordshire	Staffordshire	Cannock Chase	P R M Green Technologies Ltd	P R M GREEN TECHNOLOGIES LIMITED	WS11 9XG	402404	306693	S0823 : WEEE treatment facility	Treatment	WEEE treatment facility	104852	6	11	22	2	2	8	22
West Midlands	Staffordshire	Staffordshire	Stafford	Stone Technologies Limited	STONE TECHNOLOGIES LIMITED	ST18 9AA	392529	319274	S0823 : WEEE treatment facility	Treatment	WEEE treatment facility	101474	2	6	12	38	52	22	52
West Midlands	Staffordshire	Staffordshire	South Staffordshire	Unit 4a - EPR/XP3992FV	AQUA FORCE SPECIAL WASTE LIMITED	WV10 7DB	391700	308640	T05 : Physico-chemical treatment installation	Treatment	Physical-Chemical Treatment	KP3437WN	4	1	5	2	0	2	5
West Midlands	Staffordshire	Staffordshire WPA	Stafford	Blancomet Recycling - EPR/KP3439JU	Blancomet Recycling UK Limited	ST15 0SS	331980	331980	Hazardous waste transfer/treatment installation	Treatment	Haz Waste Transfer / Treatment	KP3439JU	2	0	0	0	0	0	2
TOTAL		**Staffordshire**											**57**	**127**	**131**	**132**	**133**	**116**	**198**

Facility RPA	Facility Sub Region	Facility WPA	Facility District	Site Name	Operator	Post Code	Easting	Northing	Permit Type	Site Category	Facility Type	Permit	Hazardous waste from the Plan area (tonnes per annum)						
													2018	2019	2020	2021	2022	Average	Max
West Midlands	West Midlands Met Districts	Birmingham City	Birmingham	Tyseley Energy from Waste Plant EPR/WP3239SJ	VEOLIA ES BIRMINGHAM LIMITED	B11 2BA	410850	284510	B06 : Municipal Waste Incinerator	Incineration	Municipal Waste Incinerator	WP3239SJ	0	0	2	4	3	2	4
West Midlands	West Midlands Met Districts	Birmingham City	Birmingham	M I C Group	M I C GROUP LIMITED	B33 0TD	415411	286047	S0809 : Asbestos Waste Transfer Station	Transfer	Haz Waste Transfer	402318	0	1	1	2	0	1	2
West Midlands	West Midlands Met Districts	Birmingham City	Birmingham	Murphy Midland Group Limited	MURPHY MIDLAND GROUP LIMITED	B7 4SL	0	0	S0809 : Asbestos Waste Transfer Station	Transfer	Haz Waste Transfer	404615	0	0	0	0	4	1	4
West Midlands	West Midlands Met Districts	Birmingham City	Birmingham	Alma Crescent Facility EPR/CP3796FQ	Environmental Concern Limited	B7 4RH	408960	287660	T05 : Physico-chemical treatment installation	Treatment	Physical-Chemical Treatment	EP3032WN	5	0	0	0	0	1	5
West Midlands	West Midlands Met Districts	Birmingham City	Birmingham	Minworth S T W	SEVERN TRENT WATER LIMITED	B76 9DP	416700	292475	A23 : Biological Treatment Facility	Treatment	Biological Treatment	40061	0	1,751	2,820	3,959	2,176	2,141	3,959
West Midlands	West Midlands Met Districts	Birmingham City	Birmingham	S C C National Distribution Centre	SPECIALIST COMPUTER CENTRES PLC	B11 2LE	409915	283998	S0823 : WEEE treatment facility	Treatment	WEEE treatment facility	400713	0	0	0	0	1	0	1
West Midlands	West Midlands Met Districts	Birmingham City	Birmingham	Secure I T Disposals Limited (Trading As Restore Technology Limited)	SECURE I T DISPOSALS LIMITED	B32 3DB	400161	282495	A15 : Material Recycling Treatment Facility	Treatment	Material Recycling Facility	100220	0	0	0	4	2	1	4
TOTAL		**Birmingham City**											**6**	**1,753**	**2,823**	**3,969**	**2,186**	**2,147**	**3,978**
West Midlands	West Midlands Met Districts	Sandwell	Sandwell	Exchange Works - EPR/HP3709MK	VALGROVE LIMITED	B70 7JW	399720	290310	A10 : In-House Storage Facility	Storage	In-House storage	HP3709MK	0	0	0	0	6	1	6
West Midlands	West Midlands Met Districts	Sandwell	Sandwell	Tipton Waste Oil Transfer Facility - EPR/YP3236LF	ELIMPIC LIMITED	WV14 8UB	395210	294560	TS : Temporary storage installation	Storage	Temporary storage installation	YP3236LF	0	0	0	3	0	1	3

Facility RPA	Facility Sub Region	Facility WPA	Facility District	Site Name	Operator	Post Code	Easting	Northing	Permit Type	Site Category	Facility Type	Permit	Hazardous waste from the Plan area (tonnes per annum)						
													2018	2019	2020	2021	2022	Average	Max
West Midlands	West Midlands Met Districts	Sandwell	Sandwell	Bullock Street EPR/ZP3537SL	ROBERT HOPKINS ENVIRONMENTAL SERVICES LIMITED	B70 7HE	400490	290030	TR3 : Haz Waste Transfer	Transfer	Haz Waste Transfer	ZP3537SL	4	15	6	14	11	10	15
West Midlands	West Midlands Met Districts	Sandwell	Sandwell	Wednesbury WM Resource Centre EPR/XP3631SE	BIFFA WASTE SERVICES LIMITED	WS10 7NR	398550	294560	A9 : Hazardous Waste Transfer Station	Transfer	Haz Waste Transfer	XP3631SE	330	437	219	196	182	273	437
West Midlands	West Midlands Met Districts	Sandwell	Sandwell	ERQ - STC, EPR/HP3632RP/V003	WASTE RECYCLING GROUP (CENTRAL) LIMITED	B65 9BT	396960	288570	T05 : Physico-chemical treatment installation	Treatment	Physical-Chemical Treatment	HP3632RP	0	278	309	162	17	153	309
West Midlands	West Midlands Met Districts	Sandwell WPA	Sandwell	Exchange Works EPR/KP3433UM	Arrow Environemntal Services Ltd.	B70 7JW	290310	290310	MRF Treatment installation	Treatment	Material Recycling Facility	KP3433UM	19	0	0	0	0	4	19
TOTAL		**Sandwell**											**353**	**731**	**534**	**374**	**217**	**442**	**789**
West Midlands	West Midlands Met Districts	Walsall	Walsall	Walsall Oil Treatment Plant - EPR/QP3137MM	CENTRAL WASTE OIL COLLECTIONS LIMITED	WS2 9NT	400630	298160	TS : Temporary storage installation	Storage	Temporary storage installation	QP3137MM	0	0	0	1	21	4	21
West Midlands	West Midlands Met Districts	Walsall	Walsall	Brownhills Environmental Management Facility - EPR/KP3409PK	RED INDUSTRIES (BROWNHILLS) LTD	WS8 7EU	403500	305200	TR3 : Haz Waste Transfer	Transfer	Haz Waste Transfer	KP3409PK	0	306	233	345	447	266	447
West Midlands	West Midlands Met Districts	Walsall	Walsall	Brownhills Environmental Management Facility - EPR/MP3530GC	Envirosol Ltd	WS8 7EU	403500	305200	TR3 : Haz Waste Transfer	Transfer	Haz Waste Transfer	MP3530GC	393	86	0	0	0	96	393
West Midlands	West Midlands Met Districts	Walsall	Walsall	Unit 5 Heath Road	ALL CLEAR SERVICES LIMITED	WS10 8LS	398450	297434	S0809 : Asbestos Waste Transfer Station	Transfer	Haz Waste Transfer	402483	3	0	0	1	0	1	3

Facility RPA	Facility Sub Region	Facility WPA	Facility District	Site Name	Operator	Post Code	Easting	Northing	Permit Type	Site Category	Facility Type	Permit	Hazardous waste from the Plan area (tonnes per annum)						
													2018	2019	2020	2021	2022	Average	Max
West Midlands	West Midlands Met Districts	Walsall	Walsall	Watling Waste Services	ARK ENVIRONMENTAL SERVICES LIMITED	WS8 6JZ	405487	306140	S0809 : Asbestos Waste Transfer Station	Transfer	Haz Waste Transfer	101153	1	1	7	1	2	2	7
West Midlands	West Midlands Met Districts	Walsall	Walsall	Empire Treatment Works - EPR/XP3037SE	VEOLIA ES (UK) LIMITED	WS9 8BL	404300	302300	T05 : Physico-chemical treatment installation	Treatment	Physical-Chemical Treatment	XP3037SE	1,435	1,527	1,754	1,272	1,494	1,496	1,754
TOTAL		**Walsall**											**1,833**	**1,920**	**1,994**	**1,621**	**1,965**	**1,866**	**2,626**
West Midlands	Worcestershire	Worcestershire	Wychavon	R & C Metals	Huckfield Robin	WR11 7QF	411649	242046	A19a : ELV Facility	MRS	Car Breaker	48268	0	0	1	1	0	0	1
West Midlands	Worcestershire	Worcestershire	Wyre Forest	Stourport Oil Treatment Plant - EPR/GP3030EA	SLICKER RECYCLING LIMITED	DY13 9RW	382020	269900	TS : Temporary storage installation	Storage	Temporary storage installation	GP3030EA	0	0	78	107	173	72	173
West Midlands	Worcestershire	Worcestershire	Worcester	CSG Worcester EPR/FP3532NV	CLEANSING SERVICE GROUP LIMITED	WR4 9FE	387940	257330	TR3 : Haz Waste Transfer	Transfer	Haz Waste Transfer	FP3532NV	0	15	21	5	56	20	56
West Midlands	Worcestershire	Worcestershire	Wychavon	Unit 231-232, Ikon Industrial Estate	SAFELINE ENVIRONMENTAL LIMITED	DY10 4EU	385810	272457	S0809 : Asbestos Waste Transfer Station	Transfer	Haz Waste Transfer	403265	7	3	2	8	12	6	12
West Midlands	Worcestershire	Worcestershire	Wychavon	Midlands Distribution Centre EPR/QP3934YS	W.H. Bowker Limited	WR9 0NS	387800	269940	T05 : Physico-chemical treatment installation	Treatment	Physical-Chemical Treatment	QP3934YS	1	0	0	0	0	0	1
West Midlands	Worcestershire	Worcestershire	Wychavon	Unit 145 Elm Drive	Chloros Environmental Ltd	DY10 4JB	385840	269550	T11 : Haz waste transfer/treatment installation	Treatment	Haz Waste Transfer / Treatment	AP3031JR	0	0	0	1	0	0	1
TOTAL		**Worcestershire**											**8**	**18**	**101**	**123**	**241**	**98**	**244**
Yorks & Humber	West Yorkshire	Leeds	Leeds	Bathie	Viaduct Metals Ltd	LS28 6AT	421960	434320	A20 : Metal Recycling Site (mixed MRS's)	MRS	Metal Recycling	65147	0	0	1	0	0	0	1

Facility RPA	Facility Sub Region	Facility WPA	Facility District	Site Name	Operator	Post Code	Easting	Northing	Permit Type	Site Category	Facility Type	Permit	Hazardous waste from the Plan area (tonnes per annum)						
													2018	2019	2020	2021	2022	Average	Max
Yorks & Humber	West Yorkshire	Leeds	Leeds	Unit 197, Avenue B	Zixtel Ltd	LS23 7BJ	444732	446841	S1503 No 3: MRS + WEEE Treatment Facility - <75ktpa	MRS	Metal Recycling	406229	0	0	0	3	0	1	3
Yorks & Humber	West Yorkshire	Leeds	Leeds	J W Hinchliffe Ltd	J W HINCHLIFFE LIMITED	LS24 2AU	427892	434229	A9 : Hazardous Waste Transfer Station	Transfer	Haz Waste Transfer	65133	0	0	0	8	1	2	8
Yorks & Humber	West Yorkshire	Leeds	Leeds	Aggregates Manufacturing Facility (Leeds) EPR/TP3737YG	O.C.O TECHNOLOGY LIMITED	LS9 0NX	432840	432020	T10 : Haz waste treatment installation	Treatment	Haz Waste Transfer / Treatment	TP3737YG	0	292	454	278	1,645	534	1,645
Yorks & Humber	West Yorkshire	Leeds	Leeds	C. O' Donovan And Son	Clifford O' Donovan	LS11 9RD	428769	432185	A17 : Physico-Chemical Treatment Facility	Treatment	Physical-Chemical Treatment	65145	0	0	0	5	6	2	6
Yorks & Humber	West Yorkshire	Leeds	Leeds	Carr Crofts Waste Treatment Facility EPR/YP3832WS	OATES ENVIRONMENTAL LIMITED	LS12 3AL	426790	433140	T05 : Physico-chemical treatment installation	Treatment	Physical-Chemical Treatment	YP3832WS	0	4	0	1	3	1	4
TOTAL		**Leeds**											**0**	**296**	**456**	**295**	**1,654**	**540**	**1,667**
Yorks & Humber	South Yorkshire	Rotherham	Rotherham	T/a Universal Recycling Company	Remet Processing Ltd	S64 5SY	446300	397970	A20 : Metal Recycling Site (mixed MRS's)	MRS	Metal Recycling	61546	776	796	194	0	0	353	796
Yorks & Humber	South Yorkshire	Rotherham	Rotherham	AMA - Rotherham - EPR/PP3398ZM	AMA (Storage and Distribution) Limited	S60 1RZ	442970	393640	Storage of hazardous waste	Storage	In-House storage	LP3731JD	0	0	5	0	0	1	5
Yorks & Humber	South Yorkshire	Rotherham	Rotherham	The New Depot EPR/AP3095EM	Woodland Oil Limited	S62 6BP	443760	395350	A11 : Household, Commercial & Industrial Waste Transfer Stn	Transfer	Non-Haz Waste Transfer	FP3030KQ	125	134	148	347	0	151	347
Yorks & Humber	South Yorkshire	Rotherham	Rotherham	Woodham Oils	Woodland Oils Ltd	S62 6BP	443893	395263	A9 : Hazardous Waste Transfer Station	Transfer	Haz Waste Transfer	100131	0	55	12	0	0	13	55
Yorks & Humber	South Yorkshire	Rotherham WPA	Rotherham	A M A Storage	A M A (Storage And Distribution) Limited	S60 1RZ	393646	393646	A20 : Metal Recycling Site (mixed MRS's)	MRS	Metal Recycling	PP3398ZM (61617)	5	0	0	0	0	1	5
TOTAL		**Rotherham**											**906**	**986**	**359**	**347**	**0**	**519**	**1,207**

Appendix J Energy recovery capacity within approximately 50 miles of the centre of Milton Keynes City (listed by operational status, then distance)

Table J-21 Incineration capacity within approximately 50 miles of the centre of Milton Keynes City (excluding capacity within the Plan area (section 9.3))

Type	Original Permit Number	Date First Permitted	Operator Name	Site Name	Site Address	Former Planning Region	Former Planning Sub-Region	Eastings	Northings	Distance from Milton Keynes City centre (miles)	Incinerated in 2022 (tonnes)	Permitted capacity ('000's tonnes)
Operational												0
Municipal and/or C&I	WP3234DY	26/01/2018	Covanta Energy Ltd	Rookery Pit Energy Recovery Facility	Rookery South, Stewartby, Bedfordshire MK43 9LY	East of England	Bedfordshire	501310	241370	9.6	497,767	585
Municipal and/or C&I	UP3734HT	09/05/2012	FCC Recycling (UK) Limited	Greatmoor EfW	Greatmoor EfW, Edgcott, AYLESBURY, Buckinghamshire HP18 0QN	South East	Buckinghamshire	470290	222390	13.4	297,448	345
Biomass /Waste Wood	SP3638KV	25/05/2010	Twinwoods Heat and Power Limited	Twinwoods Co-incinerator	Unit 16, Twinwoods Business Park, Thurleigh Road, Milton Ernest, MK41 6BJ,	South East	Buckinghamshire	503100	256600	16.2	21,023	30
Animal By-Products	NP3338SZ	01/12/2005	Ancillary Components Ltd	Rushden	Goosey Lodge, Wymington Lane, Wymington, Rushden, Northamptonshire LN10 9LU	East of England	Bedfordshire	496060	263740	17.9	127,020	438
Municipal and/or C&I	UP3005LJ	27/09/2010	Viridor Oxfordshire Limited	Ardley EFW Plant	Ardley Landfill, Ardley Fields Farm, Ardley, BICESTER, Oxfordshire OX27 7PH	South East	Oxfordshire	454240	225370	21.3	308,906	326
Municipal and/or C&I	AP3432QC	19/01/2018	Wellend Operations Limited	Pebble Hall Timber Resource Recovery Plant	Pebble Hall Farm, Theddingworth, Lutterworth, Leicestershire LE17 6NJ	East Midlands	Northamptonshire	466075	285131	32.9	56,301	72
Co-Incineration of non haz waste	BL7248IH	08/10/2003	Cemex UK Cement Ltd	Rugby, Warwickshire	Rugby Works, Lawford Road, Rugby, Warwickshire CV21 2RY	West Midlands	Warwickshire	448680	275690	34.0	218,148	289

Type	Original Permit Number	Date First Permitted	Operator Name	Site Name	Site Address	Former Planning Region	Former Planning Sub-Region	Eastings	Northings	Distance from Milton Keynes City centre (miles)	Incinerated in 2022 (tonnes)	Permitted capacity ('000's tonnes)
Biomass/Waste Wood	CP3031SX	21/12/2006	Slough Heat & Power Ltd	Slough Heat & Power Station	Slough Heat & Power Station, 342, Edinburgh Avenue, Trading Estate, Slough, Berkshire SL4 6BP	South East	Berkshire	495460	181440	34.6	102,767	120
Clinical	LP3037UU	16/12/2005	SRCL Ltd	Hillingdon Clinical Waste Incinerator	The Incinerator, Pield Heath Road, Hillingdon Hospital, Uxbridge, Middlesex UB8 3NN	London	West London	506850	181918	36.1	0	8
Clinical	BT2866IG	01/12/2003	Grundon Waste Management Ltd	Colnbrook Incinerator, Slough	LAKESIDE ROAD, COLNBROOK, SLOUGH, SL3 0EG	South East	Berkshire	503780	177410	38.2	4,489	10
Municipal and/or C&I	BT7116IW	21/06/2004	Lakeside Energy From Waste Limited	Slough	LAKESIDE ROAD, COLNBROOK, SLOUGH, SL3 0EG	South East	Berkshire	503880	177320	38.2	425,327	400
Clinical	WP3935SM	09/12/2005	Cambridge University Hospital NHS Foundation Trust	Incinerator, Addenbrooke's Hospital, Cambridge	Addenbrookes Hospital, Hills Road, CAMBRIDGE, Cambridgeshire CB2 2QQ	East of England	Cambridgeshire	546540	255140	39.0	2,523	5
Municipal and/or C&I	YP3033BE	01/08/2005	London Energy Ltd	Edmonton EFW, Edmonton	Edmonton EfW, Advent Way, LONDON, N18 3AG	London	North London	535760	192640	40.8	488,730	675
Municipal and/or C&I	NP3739PD	20/12/2005	The Coventry & Solihull Waste Disposal Company Ltd	Coventry	CSWDC Limited, Bar Road, COVENTRY, West Midlands CV3 4AN	West Midlands	West Midlands Met Districts	434700	277670	41.3	297,821	315
Biomass/ Waste Wood	CP3030JR	24/07/2019	Yelo Enterprises Ltd	Yelo Enterprises Ltd	Alscot Estate, Atherstone Airfield, Atherstone on Stour, Stratford-Upon-Avon CV37 8BH	West Midlands	Warwickshire	421405	251502	41.6	21,403	44
Co-Incineration of haz waste	BM0486IT	18/12/2002	Castle Cement Limited	Ketton Works, Stamford	KETTON WORKS, KETTON, STAMFORD, LINCOLNSHIRE PE9 3SX	East Midlands	Lincolnshire	498450	305680	43.7	120,389	461

Type	Original Permit Number	Date First Permitted	Operator Name	Site Name	Site Address	Former Planning Region	Former Planning Sub-Region	Eastings	Northings	Distance from Milton Keynes City centre (miles)	Incinerated in 2022 (tonnes)	Permitted capacity ('000's tonnes)
Municipal and/or C&I	VP3997NK	08/10/2012	SUEZ Recycling and Recovery Surrey Ltd	Charlton Lane Eco Park	Charlton Lane Eco Park, Charlton Lane, Sunbury, Surrey TW17 8QA	South East	Surrey	508533	168306	44.4	27,036	60
Municipal and/or C&I	NP3638ZS	29/10/2010	Viridor Peterborough Limited	Viridor Peterborough Energy	Fourth Drove, Fengate, Peterborough, PE15UR	East of England	Cambridgeshire	521520	299100	44.6	90,939	85
Clinical	AP3039SD	22/11/2005	DEFRA	Veterinary Laboratories Agency, Surrey	Weybridge Clinical Incinerator, Central Veterinary Laboratorie, New Haw, Addlestone, Surrey KT15 3NB	South East	Surrey	504850	166280	45.0	957	8
Municipal and/or C&I	NP3738SY	01/11/2005	South East London Combined Heat and Power Limited	Lewisham	The Kennels Site, Landmann Way, Lewisham, LONDON, SE14 5RS	London	South East London	535740	178090	47.3	428,704	488
Sewage Sludge	ZP3833BK	15/12/2005	Thames Water Utilities Ltd	Beckton Sludge Powered Generator, London	Beckton Sewerage Treatment Wor, Jenkins Lane, Barking, Essex IG11 0AD	London	East London	544256	182651	48.9	32,891	91
Municipal and/or C&I	GP3305LN	23/07/2013	Viridor South London Limited	Beddington Energy Recovery Facility	Beddington Farmlands, Beddington Lane, Croydon, Surrey, CR0 4TD	South East	Surrey	529240	168460	49.8	333,751	303
TOTAL											**3,904,340**	**5,157**
Non-operational												
Animal Carcasses	MP3930BE	-	Vetspeed Ltd	Cambridgeshire	Vetspeed Ltd, A505 Main Road, Thirplow Heath, Royston, Hertfordshire SG8 7RR	East of England	Cambridgeshire	544395	244722	36.2	0	8
Municipal and/or C&I	UP3038WA	2019	Hoddesdon Energy Ltd	Hoddesdon EfW Plant	Hoddesdon Energy, Rattys Lane, HODDESDON, Hertfordshire EN11 0RF	East of England	Hertfordshire	538766	208797	36.6	0	113

Type	Original Permit Number	Date First Permitted	Operator Name	Site Name	Site Address	Former Planning Region	Former Planning Sub-Region	Eastings	Northings	Distance from Milton Keynes City centre (miles)	Incinerated in 2022 (tonnes)	Permitted capacity ('000's tonnes)
Municipal and/or C&I	UP3232AC	-	North London Waste Authority	Edmonton EcoPark	Edmonton EcoPark, Advent Way, LONDON, N18 3AG	London	North London	535475	192253	40.9	0	675
TOTAL												**796**
Pre-operational (under construction or commissioning only)												
Co-Incineration of non- haz waste	YP3038JT	n/a	Greenfield Properties UK Limited	Chelveston Non-Recyclable Plastic to Fuel Facility	Land opposite the cottage, Upper Higham Lane, Higham Ferrers NN10 0SU	East Midlands	Northamptonshire	499222	267311	20.7	0	73
Municipal and/or C&I	KP3702MY	n/a	Keadby Generation Limited	Slough Multifuel Facility	Slough Multifuel Facility, 342 Edinburgh Avenue, Slough Trading Estate, Berkshire, SL1 4TU	South East	Berkshire	495555	181421	34.6	0	480
TOTAL												**553**

Source: Waste Data Interrogator 2022, Waste Management 2022 in England Data Tables v4

Appendix K Remaining landfill capacity within approximately 50 miles of the centre of Milton Keynes City (listed by site type, then distance)

Table K-22 Remaining landfill capacity within approximately 50 miles of the centre of Milton Keynes City (excluding capacity within the Plan area), listed by site type, then distance

Site Type	Operator Name	Facility Name	Facility Address	Original Permit Reference	Former Planning Region	Former Planning Sub Region	Local Authority	Eastings	Northings	Distance from Milton Keynes City centre (miles)	Remaining Capacity end 2022 ('000's m^3)
L01 - Hazardous Merchant Landfill											
L01	Augean South Limited	East Northants Resource Management Facility	Stamford Road, Kingscliffe, Peterborough PE8 6XX	TP3430GW	East Midlands	Northamptonshire	East Northamptonshire	501241	299874	40.5	657
L01 TOTAL											**657**
L02 - Non Hazardous Landfill With SNRHW cell											
L02	FCC Waste Services (UK) Limited	Calvert Landfill Site	Brackley Lane, Calvert, Buckingham MK18 2HF	BS8605IQ	South East	Buckinghamshire	Aylesbury Vale	469210	223320	13.6	1,850
L02	London Green Resources Limited	Land at Meadhams Farm Brickworks	Land at Meadhams Farm Brickworks, Ley Hill, CHESHAM, Buckinghamshire, HP5 1UW	NP3538YQ	South East	Buckinghamshire	Chiltern	498580	201070	23.2	217
L02	FCC Waste Services (UK) Limited	WELDON LANDFILL SITE	Kettering Road, Corby NN17 3JG	BV4525IB	East Midlands	Northamptonshire	Corby	492540	288060	32.3	1,335
L02	Biffa Waste Services Ltd	Ufton Farm Landfill Site	Southam Road, Leamington Spa CV33 9PP	NP3435PX	West Midlands	Warwickshire	Stratford-on-Avon	439027	261399	33.5	3

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L02	Lafarge Aggregates Ltd	Cotesbach Landfill	Cotesbach Landfill, Gibbet Lane, Shawell, Lutterworth LE17 6AA	BK1449IK	East Midlands	Leicestershire	Harborough	454000	280600	34.2	10,780
L02	Veolia ES Landfill Limited	Ling Hall Landfill	Coalpit Lane, Lawford Heath CV23 9HH	BU2381IE	West Midlands	Warwickshire	Rugby	444500	273500	34.9	2,468
L02	Augean South Limited	Thornhaugh Landfill Site	A47, Wansford PE8 6NL	RP3133PP	East of England	Cambridgeshire	Peterborough	504930	300030	41.1	97
L02	FCC Waste Services (UK) Limited	Dogsthorpe Landfill Site	Welland Road, Dogsthorpe, Peterborough PE1 3TD	BV3740ID	East of England	Cambridgeshire	Peterborough	520410	302090	45.9	202
L02 TOTAL											**16,953**
L04 - Non Hazardous											
L04	FCC Waste Services (UK) Limited	Calvert Landfill Site - Pit 6	Pit 6, Brackley Lane, Calvert, BUCKINGHAM. MK18 2HF	BP3637AF	South East	Buckinghamshire	Aylesbury Vale	468800	224600	13.3	4,825
L04	Opes MRF 2013 Limited	Finmere Quarry Landfill	Banbury Road, Finmere MK18 4AJ	TP3436YQ	South East	Oxfordshire	Cherwell	462620	232620	15.2	90
L04	Veolia ES Landfill Ltd	Springfield Farm Landfill	Broad Lane, Beaconsfield HP9 1XD	WP3438KV	South East	Buckinghamshire	South Buckinghamshire	492570	189470	29.4	8,577
L04	Mick George Ltd	Rushton Landfill Site	Oakley Road, Rushton, Kettering NN14 1RS	CP3536XG	East Midlands	Northamptonshire	Kettering	485450	283760	29.4	13
L04	Anti-Waste Ltd	Buckden Landfill Site	Station Farm, Brampton Road, Buckden PE18 9UH	RP3732SZ	East of England	Cambridgeshire	Huntingdonshire	521000	269300	29.5	347
L04	Cemex UK Cement Ltd	BARRINGTON WORKS LANDFILL	Barrington Works, Haslingfield Road, Cambridge CB2 5RQ	BV1461IV	East of England	Cambridgeshire	South Cambridgeshire	539900	251100	34.3	10,730
L04	Waste Recycling Group (Central) Limited	Dix Pit Landfill Site	Linch Hill, Stanton Harcourt OX29 5BJ	BV7214IR	South East	Oxfordshire	West Oxfordshire	441240	204930	34.4	232
L04	Waste Recycling Group (Central) Limited	Sutton Courtenay	Appleford Sidings, Sutton Courtenay, Abingdon OX14 4PW	TP3330AT	South East	Oxfordshire	Vale of White Horse	451920	193000	34.6	471

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		(Phase 3) Landfill Site									
L04	Waste Recycling Group (Central) Limited	Sutton Courtenay	Appleford Sidings, Sutton Courtenay, Abingdon OX14 4PW	BV7001IK	South East	Oxfordshire	Vale of White Horse	451000	192700	35.1	1,555
L04	Waste Recycling Group (Central) Limited	BUBBENHALL LANDFILL SITE	Weston Lane, Warwick CV8 3BN	BW0037IA	West Midlands	West Midlands Met Districts	Coventry	435720	271660	38.5	1,078
L04	East Waste Limited	MILTON LANDFILL	Butt Lane, Cambridge CB4 6DG	BV4584IU	East of England	Cambridgeshire	South Cambridgeshire	546500	263200	40.7	189
L04	Viridor Waste Management Limited	Elsenham Landfill	Hall Road, Elsenham, Bishops Stortford CM22 6DJ	MP3435KP	East of England	Essex	Uttlesford	555000	227200	42.8	966
L04	Thalia WB ODC Limited	Ely Road Landfill Site	Ely Road, Waterbeach, Cambridge CB5 9PG	BK5037IQ	East of England	Cambridgeshire	South Cambridgeshire	548280	268340	43.1	1,704
L04	East Waste Ltd	Grunty Fen Landfill Site	Grunty Fen, Ely CB6 3RQ	BW2811IJ	East of England	Cambridgeshire	East Cambridgeshire	548009	275020	45.0	232
L04	Mick George Limited	Witcham Meadlands Landfill	Block Fen Drove, Mepal CB6 2AY	NP3036KR	East of England	Cambridgeshire	Fenland	544400	284000	46.5	139
L04	Biffa Waste Services Ltd	Eye North Eastern Landfill	Eyebury Road, Peterborough PE6 7TH	BP3537PP	East of England	Cambridgeshire	Peterborough	523910	301750	46.7	98
L04	Crown Waste Limited	Judkins Landfill Phase 3	Tuttle Hill, Nuneaton CV10 0JQ	JP3033YQ	West Midlands	Warwickshire	Nuneaton and Bedworth	434600	293000	47.8	1,943
L04 TOTAL											**33,190**
L05 - Inert Landfill											
L05	Fox (Owmby) Ltd	Stone Lane Quarry	Stone Lane Quarry, Woburn Road Off A4146, Heath & Reach, Leighton Buzzard, Bedfordshire, LU7 0AP,	101312	East of England	Bedfordshire	Central Befordshire	492659	229030	5.9	354

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L05	L B Silica Sand Ltd	Reach Lane Quarry Landfill	Reach Lane Quarry, Heath And Rach, Leighton Buzzard, Bedfordshire	210134	East of England	Bedfordshire	Central Befordshire	492800	228200	6.4	3,584
L05	Bird D A	Pury End Quarry	Pury End Quarry, Pury End, Towcester, Northants, NN12 7NX	210078	East Midlands	Northamptonshire	South Northamptonshire	470950	245570	11.3	48
L05	Thomas Brothers Excavations (Luton) Ltd	Cainhoe Quarry	Cainhoe Quarry, Shefford, Bedfordshire, SG17 5PJ	103418	East of England	Bedfordshire	Central Befordshire	510135	237523	14.6	311
L05	Breedon Southern Limited	Willington Quarry Plant Site	Bedford Road, Willington, Bedford, Bedfordshire, MK44 3PG	404812	East of England	Bedfordshire	Bedford	509699	250240	16.7	85
L05	Mick George Limited	Ringstead Grange Quarry	Ringstead Grange Quarry, Ringstead, Kettering, Northants, NN14 4DT	104536	East Midlands	Northamptonshire	East Northamptonshire	497520	274535	24.6	640
L05	Mckenna Environmental Limited	Woodeaton Quarry	Woodeaton Quarry, Woodeaton, Oxfordshire, OX3 9TJ	403698	South East	Oxfordshire	South Oxfordshire	453326	212292	25.6	113
L05	Cemex U K Materials Ltd	Cut Field Landfill	Oaklands Lane, Hatfield, Hertfordshire, AL4 0HL	403439	East of England	Hertfordshire	Welwyn Hatfield	519560	209535	26.4	553
L05	Cemex U K Materials Limited	Stanboroughbu ry Quarry	Stanboroughbury Quarry, Coopers Green Lane, Cornet Square, Hatfield, Hampshire, AL10 9BG	407040	East of England	Hertfordshire	Welwyn Hatfield	521267	210613	26.8	450
L05	Earthline Ltd	Shipton Quarry	Shipton Quarry, Shipton On Cherwell, Oxfordshire, OX5 3EL	100826	South East	Oxfordshire	South Oxfordshire	447901	217303	26.9	1,030
L05	Brett Aggregates Limted	Hatfield Aerodrome - Inert Landfill, Waste Treatment & Mining Waste Operations	Hatfield Aerodrome, Hatfield Road, Hertfordshire, AL4 0HN	403832	East of England	Hertfordshire	St Albans	519689	207786	27.1	1,559

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L05	Barton Plant Limited	Long Drowpits Landfill	The Boughton Estate, Kettering, Northants, NN16 9UX	73153	East Midlands	Northamptonshire	Kettering	488558	280895	27.7	220
L05	Tarmac Aggregates Limited	Tyttenhanger Landfill Site	Tyttenhanger Landfill Site, Coursers Road C, London Colney, Colney Heath, Hertfordshire, AL4 0PG	80737	East of England	Hertfordshire	Hertsmere	520100	203900	29.0	4,978
L05	Blenheim Palace Heritage Foundation	Restoration Landform	Blenheim Palace, Woodstock, Oxfordshire, OX20 1PP	405908	South East	Oxfordshire	West Oxfordshire	443460	217907	29.2	167
L05	B P Mitchell (Haulage Contractors) Ltd	Panshanger Quarry	Panshanger Lane, Hertford, Hertfordshire, SG14 2NL	402047	East of England	Hertfordshire	Stevenage	527957	212026	29.8	604
L05	Ingrebourne Valley Ltd	Denham Park Farm	Denham Park Farm, Denham Green, Buckinghamshire, UB9 5DL	400391	South East	Buckinghamshire	South Buckinghamshire	502231	190196	30.3	104
L05	Grundon Waste Management Limited	Ewelme No 2 Landfill - Inert Area	Ewelme No 2 Landfill - Inert Area, Goulds Grove, Ewelme, Wallingford, Oxfordshire, OX10 6PJ	86386	South East	Oxfordshire	South Oxfordshire	464600	190800	31.5	102
L05	Mick George Limited	Cow Lane Inert Landfill	Cow Lane Inert Landfill, Cow Lane, Godmanchester, Cambridgeshire, PE29 2EJ	210043	East of England	Cambridgeshire	Huntingdonshire	525765	270698	32.3	134
L05	Skanska Costain Strabag (SCS) Joint Venture	Western Mound Ruislip Northern Sustainable Placement S2	Western Mound Ruislip Northern Sustainable Placement S2, UB9 6LX	403421	London	West London Waste Authority	Hillingdon	506989	188068	32.6	381
L05	Skanska Costain Strabag (SCS) Joint Venture	Eastern Mound Ruislip Northern Sustainable Placement S2	UB9 6LX	407212	London	West London Waste Authority	Hillingdon	506989	188068	32.6	205
L05	Summerleaze Limited	Beechwood Nurseries Landfill	Beechwood Nurseries Landfill, Farnham Lane,	83532	South East	Buckinghamshire	South Buckinghamshire	494980	183740	33.1	93

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			Farnham Royal, Slough, Buckinghamshire, SL2 3SD								
L05	Summerleaze Limited	Hindhay Quarry	Hindhay Quarry, Furze Platt Road, Pinkneys Green, Maidenhead, Berkshire, SL6 6NL	402413	South East	Berkshire	Windsor and Maidenhead	486778	182892	33.3	223
L05	Summerleaze Limited	New Denham Quarry Northern Extension	Land At Denham, Uxbridge, Buckinghamshire, UB9 4E,	403057	South East	Buckinghamshire	South Buckinghamshire	504248	185196	33.6	855
L05	Hills Quarry Products Limited	Upwood Quarry	Upwood Quarry, Besselsleigh, Abingdon, Oxfordshire, OX13 5DW	400588	South East	Oxfordshire	Vale of White Horse	445263	200058	34.3	263
L05	Brett Aggregates Limited	George Green Inert Landfill	George Green Landfill, Uxbridge Road, Slough, Berkshire, SL2 5NH	402936	South East	Buckinghamshire	South Buckinghamshire	499760	180870	35.5	240
L05	Mick George Limited	Wakerley Inert Landfill	Wakerley Inert Landfill, Wakerley Quarry, Laxton Park, Laxton, Northants, NN17 3AZ	406144	East Midlands	Northamptonshire	East Northamptonshire	494556	296591	37.7	510
L05	Jayflex (Aggregates) Ltd	Horton Brook Quarry	Horton Brook Quarry, Horton, Slough, Buckinghamshire, SL3 0LP	100801	South East	Berkshire	Windsor and Maidenhead	501700	176580	38.3	300
L05	Mick George Limited	Park Farm	Park Farm, St Ives Road, Somersham, St Ives, Cambridgeshire, PE28 3ET	403968	East of England	Cambridgeshire	Huntingdonshire	535268	276373	39.1	330
L05	Cappagh Public Works Limited	Kingsmead Landfill	Kingsmead Landfill, Stanwell Road, Thorpe, Horton, Berkshire, SL3 9PA	401082	South East	Berkshire	Windsor and Maidenhead	501513	175026	39.2	1,758
L05	Mick George Limited	Colne Fen Quarry	Chatteris Road, Earith, Cambridgeshire, PE28 3DE,	404155	East of England	Cambridgeshire	Huntingdonshire	533697	278881	39.4	385
L05	Cappagh Public Works Ltd	Stanwell I I I Landfill	Stanwell I I I Landfill, Stanwell Moor Road,	210021	South East	Surrey	Spelthorne	504776	174533	40.1	101

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			Stanwell, Staines, Middlesex, TW19 6AB								
L05	Sirom Limited	Hythe End Farm Landfill	Hythe End Farm Landfill, Hythe End Road, Wraysbury, Middlesex, TW19 5AW	210125	South East	Berkshire	Windsor and Maidenhead	501625	172538	40.8	50
L05	Harleyford Aggregates Limited	Homers Farm Inert Landfill	Homers Farm Inert Landfill, Short Lane, Staines Upon Thames, Middlesex, TW19 7BQ	404982	South East	Surrey	Spelthorne	507070	173220	41.3	94
L05	Widdington Recycling Ltd	Widdington Pit	Widdington Pit, Hollow Road, Widdington, Saffron Walden, Essex, CB11 3SL	75213	East of England	Essex	Uttlesford	552900	231100	41.3	199
L05	Bullimores Sand And Gravel Limited	Collyweston Quarry	Bullimores Sand And Gravel Limited, Stamford, Duddington, Northants, PE9 3QA	210055	East Midlands	Northamptonshire	East Northamptonshire	500310	301710	41.4	316
L05	Hatford Quarry Limited	Hatford Quarry	Hatford Quarry, Fernham Road, Hatford, Faringdon, Oxfordshire, SN7 8JQ	407469	South East	Oxfordshire	Vale of White Horse	433789	194437	42.0	250
L05	Multi - Agg Ltd	Shellingford Quarry Landfill	Shellingford Quarry, Stanford Road, Stanford-in-the Vale, Faringdon, Oxfordshire, SN7 8HE	86298	South East	Oxfordshire	Vale of White Horse	432536	194187	42.7	680
L05	Brett Aggregates Ltd	Laleham Landfill	Laleham Landfill, Littleton Lane, Shepperton, Middlesex, TW17 0NF	210115	South East	Surrey	Spelthorne	505943	167538	44.4	900
L05	Frimstone Limited	Mepal Airfield Inert Landfill	Mepal Airfield Inert Landfill, Mepal Road (A142), Mepal, Sutton, Cambridgeshire, CB6 2PZ	100561	East of England	Cambridgeshire	East Cambridgeshire	544658	279261	44.8	29
L05	Holeworks (management) Ltd	Wilbraham Chalk Quarry	Wilbraham Chalk Quarry, Great Wilbraham, Cambridgeshire, CB21 4HH	210129	East of England	Cambridgeshire	South Cambridgeshire	556570	254620	44.9	287

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L05	Wcl Nuneaton Quarry Limited	Griff No 4 Quarry Landfill	Griff Quarry, Gipsy Lane, Nuneaton, Warwickshire, CV10 7PH	400153	West Midlands	Warwickshire	Nuneaton and Bedworth	436342	288666	45.1	2,417
L05	Mick George Limited	Mepal Landfill Southern Extension	Mepal Landfill Souther Extension, Block Fen Drove, Mepal, Chatteris, Cambridgeshire, CB6 2AY	403438	East of England	Cambridgeshire	Fenland	543663	283528	45.9	1,057
L05	Sewells Reservoir Construction Limited	Highwood Quarry Inert Landfill	Highwood Quarry, Little Easton, Great Dunmow, Essex, CM6 1SN	400345	East of England	Essex	Uttlesford	559752	222322	46.2	1,234
L05	P J Thory Limited	Willow Hall Quarry And Landfill	Willow Hall Farm, Thorney, Peterborough, Cambridgeshire, PE6 0QN	402485	East of England	Cambridgeshire	Peterborough	525046	302109	47.3	1,009
L05	Cappagh Public Works Limited	Addlestone Quarry	Addlestone Quarry, Byfleet Road, Addlestone, Weybridge, Surrey, KT15 3LA	210096	South East	Surrey	Runnymede	505824	162619	47.4	555
L05	L K A B Minerals Limited	Dimmocks Cote Quarry Restoration & Aggregate Recycling Facility	Stretham Road, Wicken, Ely, Cambridgeshire, CB7 5XL	403761	East of England	Cambridgeshire	East Cambridgeshire	554439	272426	47.7	417
L05	Land Logical Thorney Limited	Land At Pasture House Farm	Land At Pasture House Farm, The Causeway, Thorney, Peterborough, Cambridgeshire, PE6 0QL	402723	East of England	Cambridgeshire	Peterborough	525123	303272	47.9	1,780
L05	Bullimores Sand & Gravel Ltd	Woolfox Quarry	Woolfox Quarry, Wood Lane, Greetham, Rutland, LE15 7SN	210060	East Midlands	Leicestershire	Rutland	494958	313841	48.4	374
L05	N R S Waste Management Services Limited	Meriden Quarry Landfill Site Area G	Meriden Quarry Landfill Site Area G, Birmingham Road, Meriden, Solihull, West Midlands, CV7 7JT	402326	West Midlands	West Midlands Met Districts	Solihull	423134	282758	48.9	1,700
L05 TOTAL											**34,029**

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L06 - Hazardous Restricted Landfill											
L06	Cemex UK Cement Ltd	Southam Landfill	Southam Road, Long Itchngton, Southam CV47 9RA	DP3335ME	West Midlands	Warwickshire	Stratford-on-Avon	441741	264097	32.8	340
L06 TOTAL											**340**
ALL TOTAL											**85,169**

Source: Waste Data Interrogator; EA, 2024d