Table 1: Headline Monitoring Indicators 2017-18

Indicators	**2018 Target**	**2017-18 Performance**
Additional capacity at municipal / commercial & industrial waste management facilities	Positive contribution to demonstrating 'Equivalent Self-Sufficiency' (see below)	Additional 50,000 tonnes capacity at commercial & industrial waste management facilities added during 2017-18
Available capacity at municipal / commercial & industrial waste management facilities sufficient to manage an equivalent quantity of waste to generated in Shropshire (equivalent self-sufficiency)	100%	Municipal: 125% Commercial, Industrial and Construction wastes: 230%
Municipal waste management performance	Contribution to national targets, but no local targets	

Waste Generation

1. Just under 1 million tonnes of waste was generated in Shropshire in 2018. Approximately 46% is generated by commercial and industrial businesses, a further 2% is classed as hazardous and a further 35% is from construction and demolition activity. Municipal waste which is collected by Shropshire Council amounts to only about 16%. Most of Shropshire's waste is managed locally. Of the waste generated in Shropshire, 47% is managed in the county and a further 39% is managed in neighbouring areas. Only 14% is managed in other parts of England and Wales. A summary of how Shropshire's waste is generated and managed is shown in Table 2 below:

Table 2: Waste Generation & Management in Shropshire 2018

Waste Type	Waste generated in Shropshire	Generated and Managed in Shropshire	Exported	Imported	Managed in Shropshire
Municipal	166,000	120,000	46,000	28,000	148,000
Commercial & Industrial	442,000	168,000	275,000	16,000	184,000
Construction & Demolition	346,000	177,000	169,000	89,000	266,000
Hazardous	24,000	4,000	21,000	3,000	7,000
TOTAL	**978,000**	**469,000**	**511,000**	**136,000**	**605,000**

Forecast Waste Growth

2. The Shropshire Local Plan identifies the planned growth of housing and employment in the county. These growth assumptions have been applied as a proxy to the best available information about the quantity of household, industrial and commercial waste in Shropshire in 2018 to generate a forecast for future waste management capacity needs over the Plan period to 2038. Record levels of housing delivery in 2017 and 2018 mean that the annual quantity of construction waste is not expected to increase above that identified for 2018. In the absence of a detailed breakdown of projected economic growth, no change has been assumed in the quantity of hazardous waste produced in Shropshire. This approach is set out in Table 3 below:

Table 3: Forecast Waste Growth 2018 - 2038

1.	Number of Dwellings 2017 (MHCLG)	142,434
2.	Housing Completions 2017-18	1,878
3.	Assumed Dwellings 2018 [1+2]	144,312
4.	Local Plan Planned Housing Growth 2016-38	30,800
5.	Housing Completions 2016-18	3,788
6.	Planned growth 2018-39 [4-5]	27,012
7.	Percentage Housing growth rate [6/3x100]	19
8.	Household, Industrial & Commercial Waste 2018 (EA)	608,572
9.	Forecast Waste Growth 2018-38 [8x7]	113,911
10.	Forecast Household, Industrial & Commercial Waste 2038	722,483

The resulting forecast is shown in Table 4 below:

Table 4: Forecast Waste Growth by Waste Stream 2018 – 2038 (tonnes/yr)

Type of Waste	2018	Forecast 2038
Municipal	166,000	197,000
Industrial & Commercial	442,000	525,000
Construction	346,000	346,000
Hazardous	24,000	24,000
Total	**978,000**	**1,092,000**

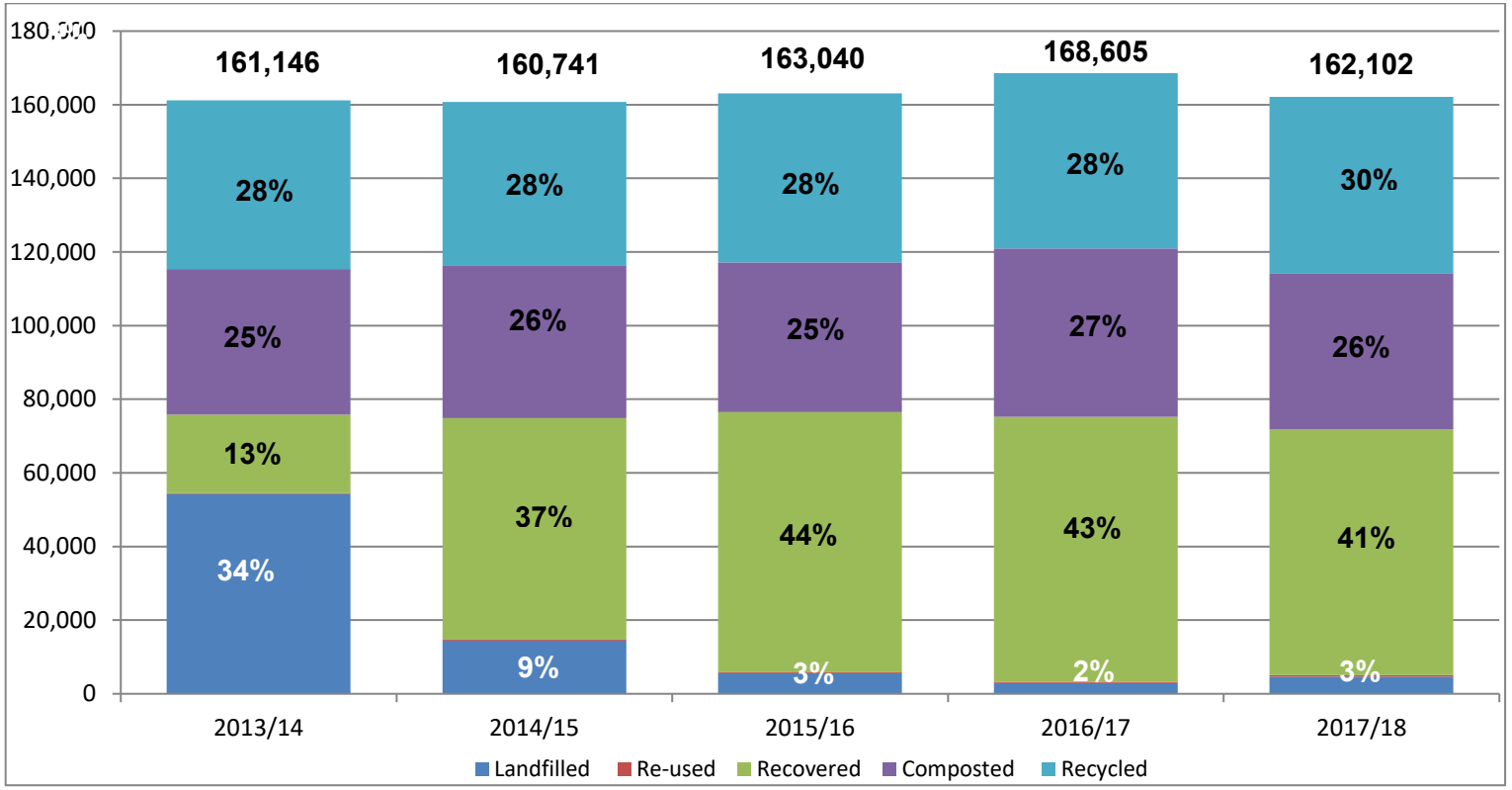
Waste Management in Shropshire

3. Of the waste generated in Shropshire, about 86% is recycled or has value recovered from it and only about 14% is sent for disposal. However 2.5% of the waste is delivered to transfer stations and its eventual fate is unknown. Of the waste handled at waste management facilities in Shropshire, 74% is recycled or has value recovered from it, often at composting and biological treatment facilities. The remaining waste is managed at transfer stations and its eventual fate is therefore unknown.

Municipal and Household Waste

4. Shropshire produced about 166,000 tonnes of municipal waste in 2018. The overall quantity of municipal waste generated in Shropshire decreased by about 4% between 2017 and 2018. The five year trend shows that the quantity of municipal waste has remained largely static. Shropshire continues to perform well against national municipal waste recycling and composting and landfill diversion targets. Approximately 57% of municipal waste was recycled and composted in 2018 and the level of energy recovery has been broadly maintained at 41%, with a consequent significant reduction in landfill from 34% in 2013 to only 2% in 2018. Of the municipal waste produced in Shropshire, about 120,000 tonnes or 72% was managed in Shropshire and 32,000 tonnes or 19% was sent for recycling or recovery in other parts of the West Midlands. The remaining 14,000 tonnes or 9% was material which was recycled in other areas of England.

Figure 1: Municipal waste management performance 2013/14 - 2017/18



Commercial and Industrial Waste

5. Estimates of commercial and industrial waste arising are notoriously inaccurate at the level of an individual county and detailed recent information about the quantity of waste is limited to the Environment Agency interrogator data from 2018. This suggests that approximately 442,000 tonnes of commercial and industrial waste derived from Shropshire was managed at licensed waste management facilities in 2018. Of this material, around 95% was diverted away from landfill by recycling or recovery processes and around 1% was landfilled. The

remaining 4% of commercial and industrial waste was handled at transfer sites, and its ultimate fate is unknown. Of the quantity of commercial and industrial waste produced in Shropshire in 2018, about 38% was managed in Shropshire, 41% was managed in areas neighbouring Shropshire and the remaining 21% was managed in other parts of the UK.

Construction and Demolition Waste

6. Estimates of the amount of construction and demolition waste produced in Shropshire vary. Most surveys are only statistically accurate at a regional or national level. The best available waste arising data derives from a regional model which breaks down 2010 national data using shares of development suggests that approximately 497,000 tonnes of construction and demolition waste was produced in Shropshire in 2010. The fate of this material is not recorded, but Environment Agency data suggests that about 346,000 tonnes of construction and demolition waste derived from Shropshire was managed at licensed facilities in 2018. However, this does not include material which is managed at facilities which are exempt from licensing. The EU Waste Framework Directive establishes a target of 70% diversion away from landfill by 2020, the Dti Sustainable Construction Review (October 2006) established an objective of zero inert waste to landfill by 2020 and the BIS Strategy for Sustainable Construction (June 2008) established a target of a 50% reduction of construction, demolition and excavation waste to landfill compared to 2008. Of the inert material from Shropshire recorded as being managed at licensed facilities in 2018, 51% was managed in Shropshire and a further 46% in neighbouring areas. The remaining 3% was managed in other parts of England. Of the material managed at licensed facilities, 55% was recycled or recovered, 1% was handled at transfer sites, but its ultimate fate is unknown, and the remaining 44% was deposited at landfill sites, although some of this material may have been used for cover and engineering purposes.

Hazardous Waste

7. Shropshire produced about 24,000 tonnes of hazardous waste in 2018, most of which was exported for treatment and disposal. Of the hazardous waste generated in Shropshire, about 94% was managed in parts of the West Midlands and other areas of England outside Shropshire and neighbouring areas. About 97% of hazardous waste was recovered or treated and the remainder was disposed of at incineration or landfill facilities.

Cross boundary movements of waste

8. The settlement pattern and distribution of business waste producers in Shropshire means that the county lacks the necessary economies of scale to support more specialised waste management processes. Natural geology and water resources also significantly restrict opportunities for landfill. This means that some waste material, including hazardous wastes and Very Low Level Radioactive Waste (VLLRW) is likely to continue to be exported for management and disposal outside the county. Shrewsbury, in particular, remains heavily dependent on commercial waste management services delivered from facilities in neighbouring local authority areas, particularly Telford & Wrekin. However, whilst Shropshire remains a net exporter of waste, around 163,000 tonnes of waste was imported to Shropshire for management in 2018. Of this material, 57% was from neighbouring areas, principally Wales, 19% was from other areas of the West

Midlands and the remaining 24% was from other areas of the UK. Of the waste imported to Shropshire, 97% was recycled or recovered and the remaining 3% was either landfilled or handled at transfer facilities for onward disposal. About 31% of the material imported was for composting or biological treatment and this reflects the fact that substantial additional capacity, particularly for biological treatment facilities has come on-stream in Shropshire in recent years.

9. Shropshire's waste planning strategy actively supports the development of new waste recycling and recovery facilities as a means of stimulating enterprise and to support a transition to a low carbon economy and reduce local business waste management costs. The combined capacity of existing permitted sites (see below) and the presumption supporting new sites for recycling and environmental industries (Policy MD4) exceeds that which is required to manage a quantity of waste equivalent to that generated in Shropshire. This approach effectively counterbalances net waste exports and helps to support appropriate 'cross boundary' waste flows:

Existing Waste Management Capacity and Facilities

10. In 2018, there were about 136 consented waste sites in Shropshire. Of these sites, about 70% are classed as operational. In theory, these sites provide almost 1 million tonnes of capacity, although they only handled approximately 600,000 tonnes of locally generated waste and imported materials in 2018. The new facilities which have been permitted during 2017-18 will deliver 50,000 tonnes of additional annual waste management capacity for commercial waste recycling and recovery (see Table 35). Increases in energy costs and changes in international trade policy may be responsible for the continued increase in applications for new commercial waste management capacity, particularly farm-based anaerobic digesters and this will help local businesses to mitigate their energy costs and secure improved resource efficiency. The wider trend is that, during the period 2013-2018, applications for new waste management facilities, once operational, will deliver about 5,000 tonnes of additional municipal waste management capacity and 310,000 tonnes of additional business waste management capacity. The available capacity to treat both municipal and business wastes significantly exceeds the level required to demonstrate 'equivalent self-sufficiency.

Future Waste Management Capacity Requirements

11. The national Resources and waste strategy supports reinforces the need to avoid waste and to recover resources as part of our 'natural capital'. Shropshire's Climate Change and Economic Growth strategies support 'clean growth' and development which assists the transition to a low carbon economy.

12. In addition to existing permitted capacity, a number of additional sites are identified in the Local Plan (Schedule A6) as suitable for general industrial or business use, including waste management operations, recycling and environmental industries. These sites are in accessible locations close to the main urban areas.

13. The capacity of existing consented waste management facilities, together with those employment sites identified as suitable for recycling and environmental industries provide sufficient throughput capacity to allow Shropshire to continue to manage an equivalent annual amount

of waste to that which is forecast during the Plan period to 2038. The type of existing facilities predominantly supports the recycling and recovery of waste materials and energy and additional sites will support the development of facilities to recover the material resource and energy value from a greater proportion of waste in line with national and local policy objectives. Shropshire is likely to remain reliant on the export of some material for specialist processing and disposal but will continue to counterbalance this for imported wastes through the provision of recycling and recovery capacity, particularly for biodegradable wastes.

Table 5: Capacity of new waste management facilities by type 2017-18

Address	**Description**	**Waste Type**	**Additional Capacity:** (tonnes/yr)	**Status**
Oakland Farm Eggs Ltd, Storage Hangar, Wem Road, Shawbury, Shrewsbury, Shropshire, SY4 4RH	Construction of an Anaerobic digester facility	Commercial	50,000	Permitted

Table 6: Approval of additional waste management capacity 2017-18 (thousand tonnes)

Waste Stream	**Existing Capacity[1] 2016-17**	**Additional Capacity Permitted 2017-18**	**Available Capacity 2018**	**Target 2018[4]**	**Equivalent Self-sufficiency %**
	(i)	**(ii)**	**(i+ii)**		
Municipal Recycling & Recovery[2]	202	0	202	162	125
Commercial Recycling & Recovery[3]	998	50	1048	455	230

1. AMR 2018 (EA data on waste handled at licensed facilities in 2018)
2. Includes local estimate of available composting capacity
3. Includes construction, demolition and inert wastes
4. Equivalent to the quantity of these wastes generated in Shropshire during this period

Landfill Capacity

14. The availability of landfill void in Shropshire is declining and the combination of economies of scale and environmental constraints which derive from European policy on groundwater means that the potential for new landfill is very limited. Only one landfill site accepting mixed (non-hazardous) waste remains operational near Ellesmere. The most recent assessment of landfill capacity in the West Midlands reveals that less waste is being landfilled and that existing capacity is expected to last at least 10 years at current input rates. Application of the waste hierarchy requires that new landfill sites should not be considered unless specific local circumstances apply. Natural geology and the geography of water resources in Shropshire significantly restrict opportunities for landfill because of the potential for adverse impacts on groundwater.

Appendix 1: Active Recycling Sites in Shropshire 2016

Active Recycling Sites

Site Name	Operator	Type of Facility or Operation	Status
Shifnal Transfer Station	Unit 26 Lamledge Lane Ind. Estate, Shifnal, Shropshire, TF11 8SD	Household, Commercial & Industrial Waste Transfer Station	Operational
M N Choudary	Unit 1 Lamledge Lane Industrial Estate, Lamledge Lane, Shifnal, TF11 8SD	Waste Transfer & Recycling	Operational
Samco (Norton) ltd	Apley Estate Yard, Windmill Lane, Norton, Shifnal	Waste Transfer & Recycling	Operational
B A Shorthouse Limited	Knowle Sands Industrial Estate Eardington Bridgnorth WV16 5JL	Waste Transfer & Recycling (non-hazardous wastes)	Planning Consent
Peter Griffiths	Lowe Cottage Farm Transfer Station Lowe Cottage Farm, Lowe, Wem, Shropshire, SY4 5UE	Household, Commercial & Industrial Waste Transfer Station	Operational
Tudor Griffiths Transport Ltd	Wood Lane Landfill Site Wood Lane Landfill Site, Wood Lane, Colemere, Ellesmere, Shropshire, SY12 0HY	Co-Disposal Landfill Site (including recycling activity)	Operational
Veolia E S Shropshire Ltd	Waymills Industrial Estate, Whitchurch	Civic Amenity & Waste Transfer Station	Operational
Ches & Son Skip Hire	Unit G10, Wem Industrial Estate, Soulton Road, Wem SY4 5SD	Household, Commercial & Industrial Waste Transfer Station	Operational

Site Name	Operator	Type of Facility or Operation	Status
A R Richards Ltd	Warrant hangar, Tern Hill	Household, Commercial & Industrial Waste Transfer Station	Operational
A R Richards Ltd	Warrant Road, Stoke Heath, Market Drayton, Shropshire TF9 2JJ	Materials recovery facility	Operational
PTS Skip Hire	Unit 2, Parry's Yard, The Oaks, Shawbury Heath SHREWSBURY SY4 4EA	Household, Commercial & Industrial Waste Transfer Station	Operational
Tudor Griffiths Transport Ltd	TG Waste Transfer Station Maesbury Road, Oswestry, Shropshire, SY10 8NR	Household, Commercial & Industrial Waste Transfer Station	Operational
Veolia E S Shropshire Ltd	Glovers Meadow, Maesbury Road, Oswestry, Shropshire	Household, Commercial & Industrial Waste Transfer Station	Operational
Mr Gwynfor Davies	Ifton Colliery Ifton Heath St Martins Shropshire SY11 3DA	Transfer Station taking Non-Biodegradable Wastes	Planning Consent
Green Skip Company Ltd	Ifton Colliery Ifton Heath St Martins Shropshire SY11 3DA	Waste transfer and waste recycling yard	Planning Consent
EvaWaste (Oswestry) Limited	Unit 11 Rednal Industrial Estate West Felton Oswestry Shropshire, SY11 4HS	waste processing facility, for crushing of material to create aggregates for sale	Planning Consent
Loosemores (Transport) Limited	Battlefield Transfer Station Loosemores Yard, Battlefield, Shrewsbury, Shropshire, SY4 3DE	Transfer Station taking Non-Biodegradable Wastes	Operational

Site Name	Operator	Type of Facility or Operation	Status
Veolia E S Shropshire Ltd	Battlefield Integrated Waste Management Facility, Vanguard Way, Battlefield, Shrewsbury	Civic Amenity and Transfer Station	Operational
Harry Price Sand & Gravel	Buildwas Quarry, Ironbridge, Telford	Inert landfill and recycling of secondary aggregates	Planning Consent
H Evason & Co	Dorrington Quarry, Dorrington, Shrewsbury, SY5 7ED	Inert Recycling	Planning Consent
Mr W Cullis (Budget Skips)	land adjacent to Engine House, Cruckmeole, Nr Hanwood	Sorting skip waste and storage of recyclable waste and non-recyclable waste prior to recovery/disposal elsewhere	Operational
Mark Price Skip Hire	part of Cruckmeole Brickyard, Hanwood, Shrewsbury	Sorting skip waste and storage of recyclable waste and non-recyclable waste prior to recovery/disposal elsewhere	Planning Consent
GA Recycling	The Shed, Boreatton Lodge, Near Baschurch	Non-hazardous waste transfer, recovery and recycling and as a base for a skip hire business	Planning Consent
Wades Skip Hire	Land at Monkmoor Farm Industrial Estate Monkmoor Shrewsbury	Waste transfer station for sorting and recycling in connection with an existing skip hire business	Planning Consent
ADH Transport (Mr Andrew Hunt)	Boreton Farm, Boreton, Cross Houses, Shrewsbury	Recycling operation comprising sorting, crushing and baling of waste materials	Planning Consent
Dorset Skips	Dorset Farm, Queen Street, Shrewsbury Shropshire SY1 2JS	Household, Commercial & Industrial Waste Transfer Station	Planning Consent

Site Name	Operator	Type of Facility or Operation	Status
Aggregate Industries UK Ltd	Haughmond Hill Quarry, Uffington, Shrewsbury, Shropshire, SY4 4RW	Manufacture of products from waste	Planning Consent
Severn Trent Water Limited	Shelton Depot Transfer Station Shelton Water Tower, Shelton, Shrewsbury, Shropshire, SY3 8BJ	Transfer Station taking Non-Biodegradable Wastes	Planning Consent
Mr Steven Thomas	Land at Startlewood Farm Hopton Nesscliffe Shrewsbury Shropshire SY4 1DJ	Household, Commercial & Industrial Waste Transfer Station	
Mr George Wilkie	L M S Skips Transfer Station Bromfield Garage, Bromfield, Ludlow, Shropshire, SY8 2BT	Household, Commercial & Industrial Waste Transfer Station	Operational
Veolia E S Shropshire Ltd	Craven Arms HWRC Long Lane, Craven Arms, Shropshire	Household, Commercial & Industrial Waste Transfer Station	Operational
J McGrath (Tenbury) Ltd	J McGrath Transfer Station Temeside, Temeside, Ludlow, Shropshire, SY8 1JH	Household, Commercial & Industrial Waste Transfer Stn	Operational
Steven J Weaver (Woofferton) Ltd	Old Timber Yard/Railway Sidings at Station Road, Woofferton, Near Ludlow	Storage and processing of inert waste materials	Planning Consent

(Source: local monitoring information 2016)