# The treatment capacity gap that urgently needs to be addressed

The Environmental Services Association (ESA) is the trade body which represents the UK's waste and recycling industry. Our Members collect and recycle waste from homes and businesses around the country, as well as generate power from waste which can't be recycled, and landfill where there is no alternative. Our vision is a world where our resources are recycled and recovered and nothing is wasted.

ESA's Members have invested around £5 billion in UK recycling and recovery facilities in the past five years and completed detailed modelling exercises to understand what further investment is required for the future. Their conclusions are stark: the UK needs significant additional energy from waste capacity to complete the move away from landfill and to complement recycling.

The industry is alarmed by the looming emergence of a critical lack of infrastructure to treat the nation's waste. An outlier analysis has however confused the picture and led some politicians to believe that we are conversely in the process of developing too much waste treatment. This could not be further from the truth.

**ESA has commissioned an independent review**

To gain a greater understanding of the picture and to explain the source of differences between the industry consensus and the outlier analysis, ESA has commissioned Tolvik to independently review the full range of forecasts produced by different operators and consultants.

Tolvik has taken all recent published forecasts, including those from Suez, Biffa and Eunomia, as well as unpublished analyses from Viridor, FCC, and SLR. These models and assumptions have then been normalised to generate agreed forecasts for residual waste arisings from household and commercial sources and expected infrastructure delivery. In this way, Tolvik has attempted to isolate and identify the impact different recycling rates have on the treatment capacity gap we face out to 2030.

Tolvik's review shows that the UK is heading for serious under-capacity for residual waste treatment for all but the most unrealistic recycling rates. The following table shows the expected headline capacity gap in 2030. This table does not include the continuation of waste exported as a fuel or allow for future additional capacity beyond current plans.

| Scenario | 2030 UK Recycling Rate | | | 2030 capacity gap (Mt) |
|---|---|---|---|---|
| | Household Waste | Municipal C&I Waste | Combined | |
| No Change | 44% | 61% | 52% | 13.0 |
| 50% Household | 50% | 63% | 57% | 10.2 |
| 55% Household | 55% | 65% | 60% | 8.0 |
| EU Target | 60% | 70% | 65% | 4.5 |
| High Recycling | 65% | 78% | 71% | 0.7 |

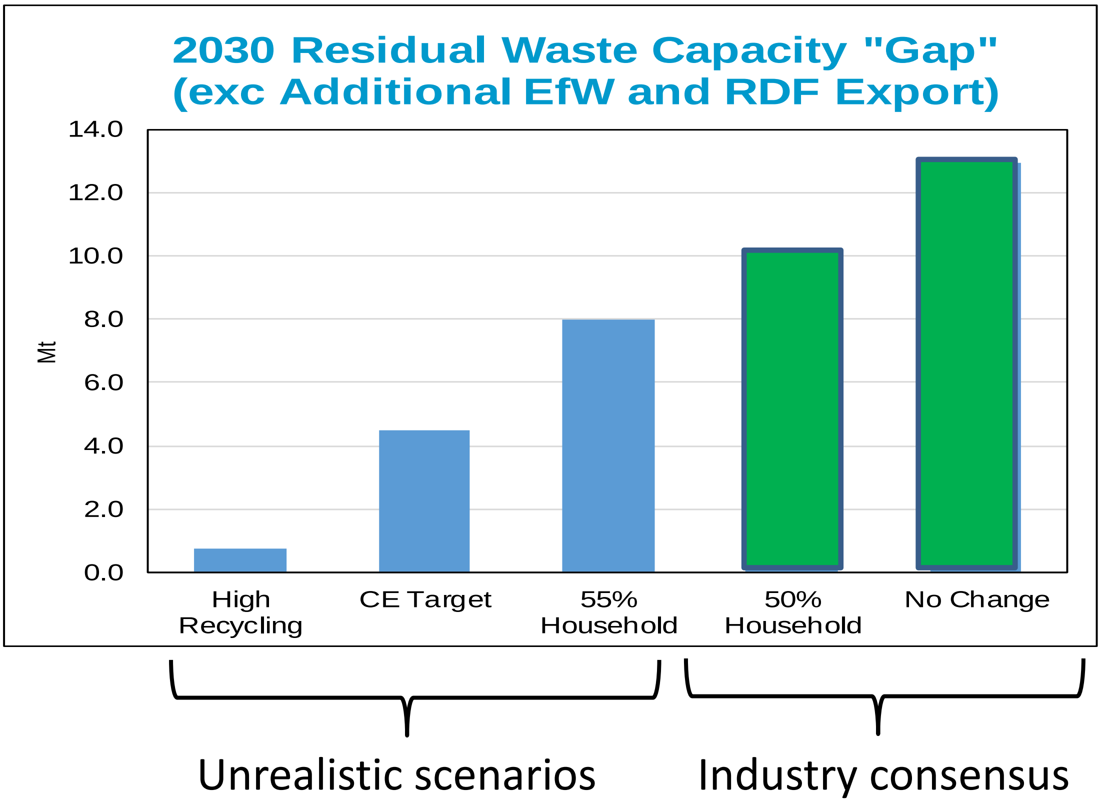
The key question for assessing the size of the capacity gap then becomes*: what is a reasonable level of recycling?*

**How much can we recycle?**

Without policy intervention the industry believes that recycling rates will remain at around current levels. These are circa 45% for household waste and 60% for the commercial waste which is similar to household waste. The combined current "municipal" recycling rate is around 50%.

If recycling trends follow those of more mature recycling societies in other parts of Europe, then the industry expects that the UK will achieve medium to long-term municipal recycling rates of 55%. At the industry consensus of 50-55% municipal recycling, the forecast treatment capacity gap is almost 6 million tonnes in 2030, even after factoring in a continuation of exports and the development of currently unplanned capacity.

Regional differences will further aggravate the capacity shortfall making it a starker picture in some major conurbations with pressures likely to become apparent before the end of the current Parliament.




To achieve much higher recycling rates than this will require significant – and potentially costly – policy intervention to boost recycling markets. Without policy support, higher recycling rates will remain commercially unviable.

To recycle more we need to (i) fund the provision of additional recycling services and (ii) develop end markets for the extra recycled materials we would collect.

**An extra £1 billion for council collections**

The draft London Environment Strategy estimates that London's Boroughs would need £100m-300m of funding to provide the additional recycling services to push the capital's collection rates from 32% to 42%. Extrapolating this conservatively suggests that English authorities as a whole would need around £1 billion to push household recycling rates up to around 60%. This is unlikely to be acceptable either politically or financially.

If businesses could also be encouraged to take up recycling services to reach a similar capture rate, then the UK could theoretically achieve an overall municipal recycling rate of 65%. This however is a recycling level the industry considers to be unachievable based on existing policy and will only happen if the economics of recycling can be subsidised.

**Making use of our recycled resources**

In addition, these much higher recycling rates will only be possible if there are available outlets to send the additional material collected. ESA supports new measures to encourage the producers of products and packaging to use more recycled material. These measures will inevitably lead to additional costs on some businesses. For example, if the UK's packaging industry paid the same level of compliance costs under the Packaging Regulations for recycling as those in Germany and Austria, then the packaging industry would face an additional annual bill of around £500 million.

**Closing the gap**

We can close the forecast waste treatment capacity gap in two ways.

1. The Government can drive recycling above the expected 50-55% range by spending £1.5 billion and intervening to support recycling markets.
2. The private sector can develop new treatment capacity for the material we cannot recycle economically.

It is a question for government as to how much it wishes the country to spend to meet higher recycling levels. But the Government must decide the recycling level it would like to see. And it must put in place the funding and interventions required to get there.

We believe that building new treatment capacity will be required to close the gap. This will not need heavy intervention or additional funding. But the Government must send a clear signal as to how much post-recycling capacity it wants, and – crucially –provide the long term policy stability that tells investors that their projects will not be undermined in the future.

**Allow the private sector to invest**

Putting in place long-term policy clarity and stability will enable the private sector to deliver the treatment capacity we need to replace closing landfills. To close a 6 million tonne capacity gap would lead to £4.5 billion capital investment, creating 1,500 permanent jobs in the waste sector and almost 7,500 jobs in the construction phase. These Energy from Waste facilities would produce almost 0.5GW of electricity, which could power around 720,000 homes.

**What will happen if we don't close the gap?**

We will fail to close the treatment capacity gap if we have unrealistic recycling ambitions which aren't supported by robust policy action. If this happens then the only possible solution will be landfill and we will lose out on maximising the use of our waste resources.

Landfills are currently closing at an uneven rate around the country. Land pressures in the South of England mean that some regions are likely to be left with no landfills and no replacement capacity in the relatively near future, and certainly before the end of this Parliament. This will lead to waste travelling further around the country, which will push up waste management costs for all and lead to increased opportunities for waste crime. This is an outcome no-one wants.