

Waste Management - plastic recycling

The issue

Over recent months there has been growing publicity about the levels of plastic that are exported out of the country to developing nations or which are polluting the environment (and especially oceans) highlighted by the current War on Plastic TV programme. The government is well aware of the increasing plastic problem and through “A Green Future: Our 25 Year Plan to Improve the Environment” (released January 2018) has set a target of eliminating all avoidable plastics by 2042 whilst also significantly reducing and, where possible, preventing all kinds of marine plastic pollution with particular reference to that which came originally from land.

The position in Calderdale

In Calderdale, we have tried to make it as easy as possible to recycle plastic via doorstep collections since 2009 when plastic bottle recycling was introduced. The current Waste and Recycling contract (Aug 2016) expanded the range of plastics that can be recycled with pots, tubs and trays added to plastic bottles. The introduction of the new contract also brought about changes in the vehicles used to collect recycling, resulting in far better containment of recyclate and greatly reduced littering from vehicles. Recent estimates now show that we are collecting over 1100 tonnes of plastic a year, up from an average of around 900 when bottles alone were collected.

The plastic collected is bulked up by Suez, the Council’s Waste and Recycling Contractor, before being sent to merchants for further reprocessing. We have had assurance from Suez that the exporting of plastic to China had ceased by April 2017 and that no materials collected from households in Calderdale end up out of the country. Their fall-back position should any material be unsuitable for reprocessing is that it will be used to feed energy from waste plants.

The latest statement from Suez is as follows:

“Ninety-five per cent of the plastics SUEZ recycling and recovery UK handles today are traded with licensed sorters or re-processors in the United Kingdom, while the remaining five per cent is traded directly with re-processors, or other SUEZ Group business units within the European Union.

The market for recycled fibres (paper and card for example) is a global one and Asia still represents a significant proportion of this market. However, all of the recycled fibres that SUEZ processes and sells to paper mills, regardless of destination, are produced to European Standard EN643 and are purchased by the mills as a valued commodity. We follow the MRF Code of Practice and keep photographic records of the material we produce, prior to export, as evidence of its quality. Our sites and production processes are also open to inspection by the Environment Agency and other regulatory authorities.

As such, we are confident that the recycled material our clients entrust us with is of a high quality when it is sold and is ultimately put to its intended use – helping to protect the environment, not harm it.”

Calderdale’s residual waste goes to a facility in Leeds operated by Associated Waste Management (AWM), with just under 50,000 tonnes delivered during 2018/19. Processes at the facility extract further recycling from the waste which accounts for around 14% of the input, a further 82% is converted into either Refuse Derived Fuel (RDF) or Solid Recovered Fuel (SRF) through incineration, with the remaining 4% disposed of at landfill.

Converting large proportions of Calderdale’s waste into RDF and SRF means that it is dealt with higher up the Waste Hierarchy through energy recovery. This minimises the use of landfill sites and the greenhouse gases they produce whilst providing an important domestic energy source which contributes to energy security. It also helps to meet renewable energy targets and is non-intermittent unlike most other renewables sources such as wind and solar.

AWM have provided the following statement:

Plastic bottles are recycled through Greencircle in Scotland where the plastic is sorted into the different types ready for plastic re-processors to granulate the plastic into flakes or pellets so that they are suitable for melting down into new plastic products such as food packaging.

Rigid plastics are segregated and diverted to Van Werven who recycle the plastic at their processing facility in Holland, once processed and granulated the plastic is used in the manufacture of plastic pipes.

Plastic Film is processed into refuse derived fuel (RDF) to enhance the calorific value of this product, the RDF is burnt in Energy from Waste facilities such as Ferrybridge as a replacement of fossil fuels.

More recently plastic bottles and film are also processed into RDF and solid recovered fuel (SRF), which is used as a fuel for powering cement kilns as a replacement to fossil fuels. Due to the contamination and poor quality of the plastics found within the mixed municipal waste the plastic films and bottles are now more efficiently recovered within the RDF and SRF.

More info required re: electric bulbs, aluminium and foil, paper