“Breakthrough” venture to recycle ELV plastics

A "major step forward" in the recycling of end of life vehicles (ELVs) and waste electronics (WEEE) has been announced by metal recycling giant European Metal Recycling.

MBA Polymers UK plans to model its UK plastics recycling facility on existing facilities including this smaller plant in Austria.

The UK's largest metal recycling company, with headquarters in Warrington, has joined forces with Californian plastics firm MBA Polymers Inc to form a joint venture company to build and operate a recycling facility for plastics from shredder residue.

The new venture, called MBA Polymers UK, is majority-owned by MBA polymers and will target a largely untapped waste stream in the UK. It follows increasing pressure on metal recyclers to recycle plastics from ELVs that have traditionally been sent to landfill.

Although the location of the new plant has not yet been finalised, EMR said it is being developed to process 60,000 tonnes each year of concentrated plastic-rich material from EMR's eight UK shredders.

It will clean, sort and upgrade the plastics, and then sell them to MBA's customers, and is expected to be up and running by 2009.

Dr David Ireland, EMR's director of technical services, said: "It is a very significant step not only for EMR and MBA but for the UK too as this investment will enable us to recover the previously untapped plastic resource in the materials we recycle.

"Not only will this divert materials from landfill and generate significant CO2 savings but it will also put EMR at the forefront in meeting the very demanding recycling targets set under the producer responsibility regimes in vehicles and electronics recycling. These targets are very exciting and can

only be met by applying new technologies to the recovery of plastics," he added.

Dr Michael Biddle, MBA's founder and president, said: "For every ton of virgin plastic we replace, we can save two to three tons of greenhouse gas CO2 from entering the atmosphere."

ELVs

Under the End of Life Vehicle Directive, the UK is required to reuse and recycle 85% of scrap cars by 2015, and reuse, recycle or recover energy from 95%. The metal component of vehicles is relatively easy to recycle, but as this only makes up around 75% of a vehicle's weight, other components such as plastics must also be recovered.

EMR claims that MBA's plastic recycling technology is the only technology in the world which can process mixed plastic into virgin-quality plastic pellets, for use in a wide variety of plastic applications.

It order to streamline the process, EMR will also be installing new post-shredding technology at all its shredders to separate plastics from other materials such as foam and rubber into a plastic-rich feedstock.

Mr Ireland said: "We have been working with MBA for two years now and we have been developing our own technology for the pre-processing to install on our shredders. It concentrates plastics, which make up about 20% of shredder residue, into a plastic-rich stream which is about 85% plastic."

Related links

- EMR
- MBA Polymers, Inc

The announcement about the MBA Polymers UK plant is likely to be of great interest to metal recyclers, many of whom have struggled over the last year to recycle the non-metallic components of cars.

Last year, the Motor Vehicles Dismantler's Association reported that some of its members were worried they may not meet their targets because they did not have access to technology to recycle or recover some residues (see letsrecycle.com story) .

Mr Ireland said: "EMR is a leader in metals recycling and this collaboration with MBA will make us a leader in plastic recycling too."