

The need for steel in our brave new world

The UK should create a more robust system to support the recycling of steel packaging in what is a very challenging time for the industry, says [Alexander Mohr](#).

Alexander Mohr
Secretary general, APEAL

THE ASSOCIATION of European Producers of Steel for Packaging (APEAL) is a federation of four manufacturers and suppliers of steel for packaging. Founded in 1986, the organisation now represents some 95% of the production of steel for packaging in Europe; this equates to 4.8 million tonnes a year - enough to make 42 billion steel cans.

The organisation is heavily involved in creating more awareness of steel packaging's recycling and sustainability credentials and believes that the UK needs to match its European counterparts when it comes to recycling steel packaging.

We are currently inputting into the European Commission's Packaging & Packaging Waste Directive alongside our members. As the corner stone of the European packaging business, the directive lays out the parameters that steel for the packaging industry will have to work within for years to come.

While our focus is generally on the positive development of EU policy, its application in member states and their own recycling practices are vital to the steel for packaging industry and the environment.

The industry strives to supply high quality products to its customers and this means sourcing efficient recycling streams and ensuring that steel remains on the agenda for policy makers.

It is a very challenging time for the sector.

The UK lags behind many of its European counterparts when it comes to recycling rates for steel packaging.

In 2011, the rate was 59%, well behind Belgium, for example, where 98% of steel packaging is recycled, or Germany where the figure is 94%.

In Europe, steel is the most highly recycled packaging format at 74%, beating its nearest competitors in the form of glass and aluminium drinks cans (70% and 64% respectively) while maintaining a significantly higher rate than beverage cartons (37%) and plastics (33%).

In short, the UK needs to 'up its game' when it comes to steel packaging recycling rates. Every tonne of recycled steel saves 1,400kg of iron ore, 740g coal, 120kg limestone with an overall saving of 1.5 tonnes of carbon dioxide, making steel recycling a resource and carbon efficient process.

This presents not only environmental benefits, but significant opportunities to

grow the UK economy and provide much needed jobs.

Going for Growth, a report published by the Environmental Services Association (ESA) alongside WRAP earlier this year (2013), suggested that the pursuit of recycling and more efficient resource use could lead to a UK recycling industry with net exports worth over £20bn and 10,000 new jobs in the sector by 2020.

Legislation

Legislative approaches to improving steel recycling in the UK will be a vital aspect of reaching the targets set by the EU. There are already laws in place, but they are fairly muted and more needs to be done to ensure steel packaging is recycled correctly.

A 2012 report from WRAP, *Landfill Bans: Feasibility Research*, found that banning all metals from landfill would result in a net saving to the UK economy of £75m, encompassing the reduced payments in landfill tax and the sale of the metals for reuse. But this has not been imposed.

The new Scrap Metal Dealer's Act 2013 (SMDA) has been implemented and is a mechanism that indicates that England and Wales (Northern Ireland and Scotland are yet to adopt the Act into law) is moving forward in modernising its approach to metals recycling and that the industry is working to combat outdated perceptions of the sector.

The new licensing rules of the Act work to rid the sector of illegal dealers, however, the requirement for more detail about the metal itself is equally important. Merchants are now required to provide a description of the metal, including its type, form, condition

and weight and this is hugely important to the steel manufacturing sector as it helps them in obtaining appropriate metals for recycling and will provide more in-depth data at source.

Resource efficiency

A gradual landfill ban on steel packaging is worthy of consideration; indeed the metal packaging industry in Europe has set its own target of zero metal to landfill by 2020. But non-legislative approaches should also be adopted.

Deposit systems are often trialled in Europe, but there is no clear quantifiable link between deposit systems and high recycling rates for metal packaging.

Greater recycling efficiency is better ensured by promoting respect for the environment among citizens and ensuring efficient collection and recovery schemes.

Steel's magnetic properties make it the easiest and most economical material to sort and recover. However, failing effective collection and separation practices, even steel that has been incinerated or landfilled could and should be recovered.

As steel is a permanent material (Worldsteel estimates that between 80-90% of all steel ever produced is currently still in use), much of that which has previously gone into landfill will still be usable, even steel manufactured up to 150 years ago can be easily recycled into new products.

Landfill mining will provide a valuable resource for the steel packaging industry in years to come, and the recovery techniques which allow steel to be extracted from bottom ash already exist, though it's preferable to extract steel scrap before incineration.

Industry demand

Very simply, steel for packaging suppliers will respond to the demands of food manufacturers, and I believe steel packaging will undergo a renaissance in the coming years as some other materials become scrutinised for their resource efficiency and performance when it comes to recyclability.

In the push towards a circular economy, we must continue to focus our efforts on improving recycling, assisting in the implementation and maintenance of effective waste streams and considering the credentials of steel packaging. BWW

Fact File: APEAL members

- Tata Steel Packaging
- ThyssenKrupp Rasselstein
- US Steel Košice
- ArcelorMittal

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