

Sale and return

It's relatively easy to recycle paper, but what can be done about more complex hard wearing materials such as those commonly used for outdoor signs?

Signs for outdoor use are, by their nature, weather resistant and therefore not easily biodegradable. Yet a great many banners and posters are designed for relatively short term use, and have to be disposed of when the campaign is over. For the most part this means dumping them in landfill sites - not a very environmentally-friendly option.

So it's hardly surprising that some suppliers are beginning to think about how to dispose of their materials in a more eco-friendly way. There are many different approaches to solving this problem, but one of the most common is waste collection. In the UK the Robert Horne Group has launched what it calls the R3 process because it's based on the principles of recover, recycle and reuse. It involves the removal of all of a customer's waste sign and display products. Steve Lister, business development manager for Robert Horne, explains: "We have waste and we feel responsible for selling these products in the market so we are taking a responsible stance to collect this waste."

The Robert Horne Group sells a wide range of products, from paper to boards, but this scheme is run by Robert Horne's Sign and Display division which concentrates on signage substrates, such as Correx and acrylics. Lister says: "It's the full range of product that people would buy from Robert Horne so everything from Dibond to PVC foamboards."

Too valuable to waste

The scheme isn't free, but it should pay for itself. Lister jokes: "Our headline for this whole thing is that sign and display products are too valuable to waste." The service starts with an initial waste audit to assess the volume and type of waste a customer generates. This leads to a service level agreement detailing the amount and type of waste and the costs involved and then onto a Waste Pilot solution that can be tweaked according to the waste involved. Robert Horne charges customers a single price, and this includes a management fee from Robert Horne,

which is actually charged to the recycling firm, plus the cost of collecting and processing the waste, and including the cost of leaving skips at customer sites.

There's an inherent value to the waste itself and it is this value which offsets the cost of the scheme as Robert Horne takes the value of the waste into account when writing the service level agreement and setting the price.

This article is part of the Verdigris series of stories about understanding the environmental impact of print. The Verdigris project is supported by Agfa Graphics, Canon Europe, Digital Dots, drupa, Fujifilm, HP, Ricoh and Screen.

But some waste products are more valuable than others so it's important to get the right mix of waste. Lister explains: "If a customer phoned us up because he had half a tonne of cardboard the price that he would get back for it wouldn't pay for the collection. So we will take card and paper but it's better to arrange that it's taken with other more valuable waste."

It doesn't always work out that the value of the waste covers the cost of the collection, but as Lister points out: "If I was a customer I would have a skip full of rubbish and I would have to pay for landfill and collection. We will pay them for the waste and that includes the collection charge." Lister claims: "Our aim is to take people from being cost negative to cost neutral and hopefully to fully positive," adding, "We haven't had anyone get a negative yet."

One happy customer is AllSigns, based in Yorkshire in the UK, and which supplies a lot of health and safety signage. The scheme has slashed a £32,000 (\$58,000) landfill bill by 60 per cent, demonstrating that there is a financial as well as an environmental benefit to recycling.

Lister says that this kind of success does depend on the staff and management of the company making the scheme work: "They have got to be disciplined. It's not a simple case of chucking it into a skip and hoping that someone will take it away. They have got to want it and to make it work."

This need to educate customers has also forced Robert Horne to take more of a consultancy role. Lister says: “We wanted to introduce it as an additional service because we felt we could enhance our relationship with our customers.” He continues: “It’s a big differentiator in the market place. Will others copy it? Yes, but it will be hard for them to do it because of our size and scale we have got the scope to do it. Our environmental statement is very clear and we will do what we can. We are not worried about competition. It’s not about the money, it’s all about giving the customers a helping hand.”

Robert Horne surveyed its customers and found that 79 per cent of them wanted it to deal with their waste management issues. The initial trial carried out with nine customers prior to the official launch resulted in over 100 tonnes of waste being diverted from landfill sites. Lister says: “Long term our goal is to have a significant waste management service to our customers.”

Licensed waste collection

The scheme is actually run by Retch Recycling, which is a licensed waste carrier. Lister explains: “They are Robert Horne’s waste recycling partner and have been for many years and have recycled all of our plastics, foamboards and so on from our Northampton headquarters.” He adds: “That’s where we got the idea from.” Retch already had a scheme in place but Robert Horne has expanded it into a much bigger project. Lister explains: “It was a fragmented and difficult market and people hadn’t realised the potential of their waste.”

Another important aspect of this scheme is that all the reprocessing is done in the UK so that there is no further transport of the waste. The materials have to be separated from each other, but they can be done in one line at the Retch plant. Most of them can be mechanically granulated, chipped or shredded so that they are broken down into polymers and then sold back into the plastics industry to be made into other products.

Closed loop recycling

The ultimate aim is to be able to sell customers recycled sign and display materials made from the materials collected in the R3 scheme. Lister says: “We would invite

all of our manufacturers to talk to us in regards to actively recycling their products at the end of their life. Then we could understand the base materials and sell them back to them to be made into recycled products.”

And indeed Robert Horne has already begun working on a scheme with Brett Martin, a company based in Northern Ireland which manufactures foam boards. Lister says: “We are now taking back the foam boards and chipping them. We have just granulated our first five tonnes of foamboard and are going to be sending that back to Brett Martin, which will use them to make Foamalux Extra, which will contain 80 to 90 per cent of recycled waste.”

He continues: “We are actively working with another partner in Liverpool who can make sheets of product into a board made up of your post sign waste. It’s under trial and we are happy that we might have an 18mm MDF-type board and that hopefully we can phase out the MDF product”

Robert Horne is also using its scheme to help Alcan collect its Dibond and Dilite aluminium composite panels. These are then sent back to Alcan’s plant in Germany where they are used to make new Dibond panels. Lister explains: “All they needed was a partner who could collect the waste in a single area to make it economically viable to make it into new product.” These panels are made from an alloy, and do not use heavy metals such as lead or cadmium, meaning that up to 99 per cent of the material can be recycled.

The Verdigris Project website is being built and will be live soon!

Future plans

The scheme has started in the UK, but there are plans to take it further. Lister says: “We are looking at ways to expand this to our other European partners.” But he points out: “Countries like Germany and Holland have slightly more advanced recycling already and so we are looking at the commercial funding to it. In Germany, for example, they have a very good recycling scheme so you can get your waste collected but you don’t get paid for it.”

Robert Horne is also looking at recycling ink and cartridges, but Lister says: “There are some financial implications because they are dealt with differently, so we envisage that that service will carry a charge.”

Robert Horne does have a good track record in setting up environmental initiatives. It has worked hard to reduce its own carbon footprint, and is working with its suppliers to persuade them to do the same. It also produces a range of paper and board products that use recycled materials. Not surprisingly, Robert Horne also offers advice to customers on how to choose environmentally-friendly substrates.

And of course the Robert Horne Group is itself part of a larger company, Paper Co, which also runs other similar schemes. For example, Paper Co has a logistics division, the Delivery Co, which as well as delivering paper to its customers will also take the paper waste away and arrange for it to be recycled into other paper products which can then be delivered back to the original customer. Lister says that there are practical difficulties in extending this scheme to Robert Horne’s Sign and Display products, because waste certification issues prevent them using the Delivery Co lorries, adding: “Also the trucks aren’t designed to take waste acrylics.”

Lister had no problems in convincing the management at Robert Horne to back the scheme, saying: “They were 100 per cent behind it. It was an easy decision to make. It was a fragmented and difficult market and people hadn’t realised the potential of their waste. Five years ago we weren’t under any pressure over our waste but now our customers are demanding that we do something about it.”

Lister concludes: “This is a new thing from Robert Horne and we are learning a lot from it. I think that legislation and landfill directives will catch up and in the future people will have to do a lot more.”

– Nessian Cleary 