Waste Not, Want Not

The world is increasingly concerned with protecting the environment and reducing its carbon footprint through innovative technologies and extensive recycling. There are numerous laws worldwide which encourage or even mandate recycling for things like glass, plastic or paper. One of the biggest issues that has arisen through recycling programmes is how to collect and pre-sort recyclables centrally, prior to transport to a recycling centre.

Reverse vending solutions have been designed to solve this problem as, when strategically located at points like supermarkets and other food stores, the collection function can be centralised. Customers put recyclables in and receive a voucher in return, which can usually be redeemed for cash. This has been a highly successful solution, as customers who have purchased bottles or cans from a convenience retailer often return them regularly, so they can bring recyclables on a return trip.

Reverse vending machines can handle plastic, glass or metal. Steel is automatically sorted from aluminium, plastic and glass colours are separated and plastic returns are checked to verify that the material is PET. Once these questions are resolved, the returned item is crushed or shredded to minimise the room it takes up. The sorting and compression of material, then, can be carried out before the material is transported to the local recycling factory.

A subsidiary of Envipco Holding NV, Envipco USA manufactures reverse-vending systems for worldwide distribution. One of a few specialised companies who actually manufacture this type of equipment, Envipco founder Bruce DeWoolfson was awarded numerous patents as early as 1982.