

INTRUPLAS LIMITED

A company established by the Green Business Network to recycle mixed plastic waste and turn it into useful value added products



Project Summary

Intruplas Ltd was established by the Green Business Network (GBN) in February 2000 to take mixed waste plastic from local businesses and turn it into value added products such as picnic tables, benches, planters, pallets, waterways revetment products and ground-blocks for use, for example, in constructing pathways and car park surfaces.

The waste plastic used had previously gone to landfill but by using innovative intrusion technology, this waste plastic could now be reprocessed into plastic profiles to make a range of products, or moulded into specific products such as ground-blocks.

Intruplas was set up as a not-for-profit company, limited by guarantee, with the intention that any operating surplus generated by the company would be used to further the work of the GBN.

Aims / Achievements

- **Environmental**
 - To reduce plastic waste going to landfill by reprocessing mixed waste plastic that could not previously be recycled.
 - To demonstrate the environmental benefits of turning waste into useful products.
 - To establish a locally based recycling scheme in preference to exporting waste to developing countries.
- **Economic**
 - The creation of 19 local jobs.
 - To increase the competitiveness of local businesses by reducing their waste disposal costs.
 - To create recycled plastic products that were, due to their longevity, good value for money.

➤ **Social**

- To improve the quality of life of local people and individuals from disadvantaged groups, including adults with learning difficulties, by creating employment and training opportunities, particularly at the local therapeutic workshop where the products were assembled.

How was Intruplas started?

During visits to local companies, GBN project officers identified a problem with the disposal of mixed plastic waste.

A study was undertaken to assess the magnitude of the problem in the local area and a proposal was developed to find a way of recycling some of this waste. A decision was made to use intrusion technology, which was used in some other European countries but not widely known about in the U.K., to recycle locally produced waste plastics.

Who is involved in Intruplas?

Intruplas was established as a company limited by guarantee involving a number of organisations, including Kirklees Council, GBN and Calderdale Council, and a number of local business people. The members had an active interest in promoting practical environmental solutions, were from the local area, had the right skills and expertise to offer, and were willing to contribute to the running of the company without any reward for themselves.

Funding Sources

To set up and cover initial running costs of this demonstration project, a funding package of around £1.2 million was required.

Kirklees Council's Economic Development Service was successful in securing a grant of over £400,000 from the European Regional Development Fund towards the project costs. Initial funding of £115,000 was also secured under the landfill tax credits scheme with further funding coming from this source for specific projects as the scheme developed. A commercial bank

loan was taken out to cover other start up costs. Funding was also secured from the Government's Waste Resource Action Programme and Recycling Action Yorkshire for the development of specific products.

Outcomes

The establishment of Intruplas has demonstrated that mixed waste plastic can be reprocessed into value-added products for a number of uses. From the research and development work undertaken by Intruplas, a variety of products have been developed including: outdoor amenity products such as picnic tables, benches and planters; revetment products for canals and river bank applications; decking, fishing platforms and fencing; pallets for storage and transportation; and ground-blocks for footpaths, cycle paths and car parks.

There was a constant stream of visitors to see the project, resulting in the spread of best practice. During the ERDF funded period, the project advised 55 businesses on environmental issues and led to 34 businesses diverting their plastic waste from landfill.

As a unique demonstration project, Intruplas provided recycling facilities for some of the 10,000 tonnes of plastic waste produced each year by just 50 local companies, while at the same time, involving people with a range of disabilities in assembling the final products.

Intruplas Today

Intruplas was for a time located at the 100,000 square foot recycling facility in Sheffield, set up by GBN (South Yorkshire) Ltd on the site of Outokumpu Stainless Steel. After the decision by Outokumpu to close the site, Intruplas was forced to move, and has now been acquired by Lynwood Products Ltd, a leading UK manufacturer of decorating products and high volume plasticwares based in Halifax. The enlarged business can recycle up to 3,000 tons of waste material each year.