

How adopting circular economy principles helped a Swansea start-up go from strength to strength



Summary

Techlan has researched, developed and patented an innovative process to remove contamination from high value silicon coated paper from the manufacture of resin materials used in the aerospace and the wind energy sectors, which was previously landfilled or incinerated, to give it a new life.

This case study describes the how WRAP Cymru worked with Techlan to support the business to move from the research stages to a growth business.

Key Facts

- From January to September 2017 Techlan diverted almost 250 tonnes from landfill.
- Techlan has forecast a turnover of £5 million within five years.
- Techlan has created three new jobs since 2014.

Background

Techlan Limited was founded in 2009 when founders Mark Thompson and Roger Banks realised there was a gap in the market for a process which would extend the use of single-use silicon coated paper, commonly used in the aerospace sector. They came up with an environmentally-friendly solution to remove the residual resin contaminant from the paper surface without degrading its release characteristics so that the paper could be recycled for use in other sectors - a perfect example of the circular economy. When they were ready to move from research and development to implementation, they turned to WRAP Cymru for help.

WRAP Cymru support

WRAP Cymru started working with Techlan in 2013, initially providing support to identify and evaluate potential markets and develop implementation plans, and subsequently providing capital funding for new equipment under its European-funded Accelerating Reprocessing Infrastructure Development (ARID) project, which was designed to grow the markets and infrastructure for priority wastes (including paper) in the areas of Wales most in need of support. With this WRAP Cymru support, Techlan installed a high-tech inspection system that verified the quality of the cleaned paper and significantly increased the processing speed so that Techlan was able to enter into full production at its Swansea site in 2014.

Since then, Techlan has gone from strength to strength, thanks in no small part to WRAP Cymru's help. It is now part of the Welsh Government's Accelerated Growth Programme, and its unique process has been selected to be

exhibited at Innovate UK's Innovate 2017 exhibition in November 2017.

Having diverted almost 250 tonnes from landfill in the year to September 2017 and with a forecast turnover of £5 million within five years, Techlan is now entering a new phase. But because WRAP Cymru recognises the benefits of developing long-term relationships with the businesses it supports, Techlan has been able to turn to it for help to plan its next steps, as WRAP Cymru Programme Area Manager Bettina Gilbert explains:

"Techlan is a great example of the kind of innovative, ambitious business which WRAP Cymru wants to support. We know that developing more circular business practices creates jobs and stimulates growth; we also know that change doesn't always happen overnight. Building long-term relationships with businesses means that we get to understand their changing needs and challenges - and deliver greater impact as a result.

"Developing a circular economy for Wales has the potential to create up to 30,000 new green jobs, and save Wales £2 billion in material costs alone. Neither manufacturers nor the resource management sector can afford to ignore its consequences.

"That's why WRAP Cymru is providing specialist business support to help Wales' resource management SMEs grow capacity and develop the kind of services and practices which will create high quality materials for Welsh businesses. We're also working with Welsh manufacturers of all sizes to help them introduce recycled materials into their products and tackle some of the preconceptions about recycled content - such as quality and consistency."

“From just an idea, Techlan has gone through the full development cycle to the establishment of a production line using its innovative technology to clean high value paper. This would not have been possible without the financial support and guidance we received from WRAP. It has given employment opportunities to young people in Swansea and diverted large quantities of paper from landfill. It is a win-win solution cutting the cost of waste disposal and introducing recycled paper to replace virgin product. We are proud of our contribution to the circular economy.”

Mark Thomson, Managing Director, Techlan

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