Industrial Symbiosis



Improving productivity through efficient resource management

Zeco Panels Ltd

Zeco Panels are a sustainable build construction product start-up which has seen its business grow and develop through its work with the Resource Matching Service (RMS). The company has put Industrial Symbiosis at the heart of its business model, manufacturing sustainable insulation panels from industrial byproducts. Not only is this helping to achieve environmental credibility for homes through improved insulation and energy performance, it reduces waste by regeneration of redundant materials coming out of the manufacturing sector.

The Challenges

- 1 Composite door manufacturers in Armagh & Antrim sought a sustainable solution for panel cut-out sections
- 2 Large quantities of cropper fibre from a carpet manufacturer
- 3 Surplus of hessian bags from a Belfast-based coffee roaster

The Solutions

- 1 An RMS practitioner introduced the company to Zeco Panels who found that the sections could be used in creating modular-build insulation cassettes and installed in new builds and home extensions.
- 2 Aware of its 80% wool content, an RMS practitioner introduced the carpet manufacturer to Zeco Panels who could use it as an insulation substrate in modular house builds. The carpet company saved £9000 in disposal cost avoidance.
- **3** Zeco Panels were able to stitch the hessian together to form a liner and fill them for use as roof space insulation. This saved Zeco Panels over £2300 in cost savings.

The Outcome

Through the collaborations initiated by the practitioner with a strong focus on circular economy, the companies involved have achieved substantial environmental and economic gains which will continue to grow.

Cumulative cost savings: £22k CO₂ reduction: 1157 tonnes

Additional (third party) sales: £35k Landfill diversion: 90 tonnes

The Industrial Symbiosis Service is funded by Invest Northern Ireland and delivered by International Synergies NI Ltd.

