







## De-packaging innovation achieves 98% waste diversion from landfill for returned Nespresso coffee pods



As a pioneer in the niche, REMONDIS has been processing Nespresso coffee pods via a 3-stream separation plant across Europe for more than a decade. When REMONDIS Australia recognised untapped potential in the Hunter region to cater to the increasing demand for recycling these pods and de-packaging food waste, the Turbo Separator emerged as a powerful technology and effective solution.

### At a glance > Tomago, NSW

Location	Service Summary	Environmental Outcomes
Tomago, NSW 	<ul style="list-style-type: none"><li> Product destruction</li><li> De-packaging</li><li> Aluminium recycling</li><li> Organic recycling</li></ul>	 <p>98% waste diverted from landfill</p>

## This Turbo Separator is receiving Nespresso pods from all major cities in Australia



### The challenge

Nespresso, one of the world's leading suppliers of coffee pods and coffee pod machines, has a commitment to a sustainable future firmly rooted as its core value. Their sustainability strategy, The Positive Cup, "seeks to improve the quality of our products and services while minimising our impact across our entire value chain – from sourcing to supply, from operations to delivery."

With such consistent growth in the single-use coffee pod space, REMONDIS Australia saw the opportunity to locally provide a similar technology to that used throughout the Netherlands, Belgium, France and Luxembourg. Their goal was to meet the growing demand for recycling coffee pods and de-packaging food waste, ensuring efficiency and affordability within the resource recovery process.

### The REMONDIS solution

REMONDIS consulted with a wide range of equipment suppliers to understand the various options that existed on the market which met the needs of this particular de-packaging process. This thorough review led to the discovery of Atritor's Turbo Separator, which not only met the operational requirements of recovering quality products from coffee pod waste but was able to do so without an energy-intensive drying process.

Of course, more experimentation was needed to assess whether this was a complete solution to Nespresso's recycling and efficiency goals. REMONDIS trialled the coffee pods in the Turbo Separator located at Atritor's production facility and testing centre, in the United Kingdom. When the results pointed to the need for further separation of spent coffee grounds from the pods, research and development continued, finally resulting in the introduction of a vibratory feeding plate and eddy current to maximise resource recovery.

Further changes were introduced to refine the recovery process, ensuring all components of the coffee pods were separated with little to no contamination, enabling maximum resource recovery and long-term commercial viability.



Close partnership with REMONDIS is helping Nespresso meet its corporate objective of zero waste to landfill

### The result

The fruits of REMONDIS Australia's labour has paid off. The Turbo Separator processing line is a uniquely engineered suite of equipment that was procured, installed, and operated by the team at REMONDIS Tomago Resource Recovery Facility, enabling 98% recovery of the post-consumer coffee pod waste received by REMONDIS.

Through REMONDIS Australia's development processes, the Turbo Separator has been altered to increase product throughput (at approximately 2,500kg/hour), an increased purity of recovered materials across organics and packaging, and a simpler screening process.

Now, the Turbo Separator is receiving Nespresso pods from all major cities in Australia.

For Nespresso, the result is a more efficient and affordable resource recovery solution than previous Australian options. The innovation shown by REMONDIS Australia is supporting Nespresso's admirable, and ambitious, corporate objective of creating a circular coffee economy. Close collaborations continue between the two companies within a program of continuous improvements in logistics and processing, mirroring the shared beliefs of a passion for achieving industry-leading outcomes in the humble – and essential – coffee pod.

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WORKING FOR THE FUTURE

Established locally in 1982, REMONDIS Australia is part of one of the largest recycling, service and water companies in the world.

As a family-run company and a leader in the delivery of environmental solutions, REMONDIS Australia has approximately 900 employees and 550 vehicles operating from our advanced facilities across Australia.

As one of Australia's leading recycling and waste management companies, we leverage our local knowledge and global expertise to serve more than 24,000 industrial and commercial customers throughout the country.

By sharing our knowledge and expertise, diverting waste from landfills and supporting responsible waste management practices, we believe we can work together to bring our vision of a sustainable Australia closer to reality.

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