

Waste war

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The rapid uptake of container recycling schemes is paying dividends for two SA tech companies. Container Deposit Systems and SAGE Automation are manufacturing an increasing number of hi-tech recycling terminals, which provide refunds for used cans and bottles through ATM-style machines. AUSTRALIA'S war on waste is creating new opportunities for SA technology and engineering companies SAGE Automation and Container Deposit Systems.



INNOVATIVE SOLUTION: CDS board member and SAGE Group managing director Andrew Downs, CDS executive chairman Brett Duncanson and CDS development engineer Patricia Moreno. Picture: DUY HUYNH

Four-year-old Container Deposit Systems said it had seen more than 32,000 containers per day sorted through Semi Auto Return Terminals (ART) in its first week of operations with private Queensland recyclers.

Since then the number has risen to 80,000 containers processed per day across five sites.

The terminals allow Queenslanders to return any deposit cans, plastic bottles and glass, in any condition, for a 10c-per-container refund, dispensing cash through a separate ATM-style machine.

The rapid uptake of the SAborn recycling scheme has led to more ARTs being manufactured at Adelaide-based SAGE Automation

which worked with CDS and the University of South Australia on the technology solution.

The technology was developed by combining Industrial Internet of Things (IIoT) technology and a counting and sorting system as a partnership which also included digital transformation consultancy Nukon.

"What we have created is the best solution anywhere in the world. If someone comes in and tries to copy our machine, they can knock themselves out trying to figure it out," SAGE founder and managing director Andrew Downs told The Advertiser.

CDS executive chairman Brett Duncanson expects to roll out more machines in NSW and WA as demand continues to grow nationally.

"We have invested close to \$5 million in research and development raised entirely through private South Australian capital and there is more innovation in the pipeline," Mr Duncanson said.

"There are two things we have achieved with this machine; one is for people to be able to return any deposit container in any condition and the other is to automate the cash payouts to customers and the overall depot cash management."

Former UniSA masters student Patricia Moreno is CDS' first full-time employee dedicated to further R&D.

Mr Duncanson said Ms Moreno's appointment was directly linked to the company's ambitions to grow innovation in recycling technologies.

Until now, technology alternatives to manual counting had been limited, said SAGE Automation, with a European-made reverse-vending machine only accepting and scanning containers with intact barcodes – and one at a time.

"Anything slightly damaged or with no label cannot be refunded. A larger pilot plant operating with the same technology in Adelaide is expected to increase the rates of returns of recyclable containers, currently at between 82 per cent and 85 per cent in the state since the scheme began in 1977."

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