

Recycling used tin cans

HELPS TO SAVE THE PLANET

One of the most successful recycling stories in South Africa today is that of Collect-a-Can – a company dedicated to recovering used tin cans and thus saving the environment. Collect-a-Can was established in 1993 to proactively address the steel beverage can industry's share of responsibility in the face of ever increasing environmental challenges. Its shareholders are ArcelorMittal South Africa (Africa's major steel producer and the producer of tinsplate for food and beverage cans), and Nampak (major packaging company and steel can manufacturer).

Over the past 18 years, Collect-a-Can has been at the forefront of minimising the negative impact of used metal cans on the environment. The company is dedicated to drastically reducing can litter and ensuring that used metal cans and consequently tinsplate, exist in harmony with the environment.

The company is involved in the recovery of all scrap tinsplate generated in the tinsplate and can-making processes, including sludge, cut-offs, misprints, sub-standard fills, and most importantly, the recovery of used metal cans. All recovered scrap and used metal cans are either processed to add value (de-tinning and briquetting) or prepared and sold for recycling, resulting in a complete loop, called "cradle-to-cradle".

Over the years, Collect-a-Can has expanded its services to include the collection of all cans: aerosol, aluminium, food, oil and paint cans, thereby addressing the "cradle-to-cradle" needs of the metal can industry, in that metal cans form part of the steel making process.

How we operate

Collect-a-Can pays "cash for cans" and provides tens of thousands of southern Africans with the opportunity to earn a living, helping deal with the high unemployment rate in the region. In many cases, collectors form their own collection networks and deliver their cans directly to one of the company's branches for which they are paid.

At our branches, cans are crushed into bales and then dispatched to steel mills where they are melted to produce steel. Metal cans are 100%

recyclable and can be recycled over and over without degradation.

Recovery rate

Collect-a-Can's recovery rate for used beverage cans has moved from 18% at the inception of Collect-a-Can to 65% in 2005, 70% in 2007, to a high of 72% in 2008. In 2009 a reduction to 69% was experienced due to the worldwide economic meltdown but this increased to 70% in 2010. To date Collect-a-Can has used the recovery rate for used beverage cans only as a measurement barometer for the collection rate of all metal cans for recycling in southern Africa. This recovery rate is understated as it does not include other types of cans such as food, aerosol, paint and oil cans.

COLLECT-A-CAN'S ROLE IN CONTROLLING WASTE

Approximately 48 million people in South Africa generate an estimated 50 million cubic metres of waste per annum. This does not include the huge amounts from mining, agriculture and forestry, or hazardous waste which goes to special landfills.



Bales of crushed cans

When Collect-a-Can started, there was no unified policy on the growth of waste. The public was sceptical and automatically opposed to new waste site proposals.

Since then, government has given much thought to regulations for waste and environmental control. The founding principles of Collect-a-Can neatly complement these:

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- **Waste site:** Pressure on municipal landfill sites is being reduced by Collect-a-Can's recovery programme.
- **Separation at source:** The imperative to separate all recyclable materials in the waste stream at source is precisely what Collect-a-Can encourages and promotes.
- **Minimisation of waste:** In the making of tin-plate, can making, can filling, and the disposal of UBC, Collect-a-Can recovers nearly all tin-plate scrap generated.
- **Sustainability:** Recovery and recycling should be "indefinitely enduring" as is Collect-a-Can's operation.

Achievements

In 1993, Collect-a-Can achieved a 25% recovery of the total output of beverage cans. The company aimed for a post-consumer recovery rate of cans of 50% by 1996, a figure that was easily surpassed. Since 1997, southern Africa has ranked amongst the best in the world in metal can recovery.

The current used beverage can recovery rate for southern Africa is 70%, which compares favourably with recovery rates quoted by most first world countries.

For the last few years, Collect-a-Can has striven to be a self-sustainable organisation and has for the first time in 2007 established a break-even situation.

Support for entrepreneurship

Collect-a-Can prides itself in the support it has given to entrepreneurs since inception. According to a 2005 survey, an estimated 100 000 collectors are collecting cans on a regular basis, but as many

as 160 000 people could be involved at any particular time, to supplement or as the main source of their household income.

This drive has inspired vital entrepreneurial endeavours as many collectors acquire basic business skills and grow their own recovery and recycling businesses. Collect-a-Can assists these upcoming entrepreneurs by providing them with advice on how to increase their productivity and profitability. In addition, they are assisted with materials like bags for collection, transport and the use of mobile balers.

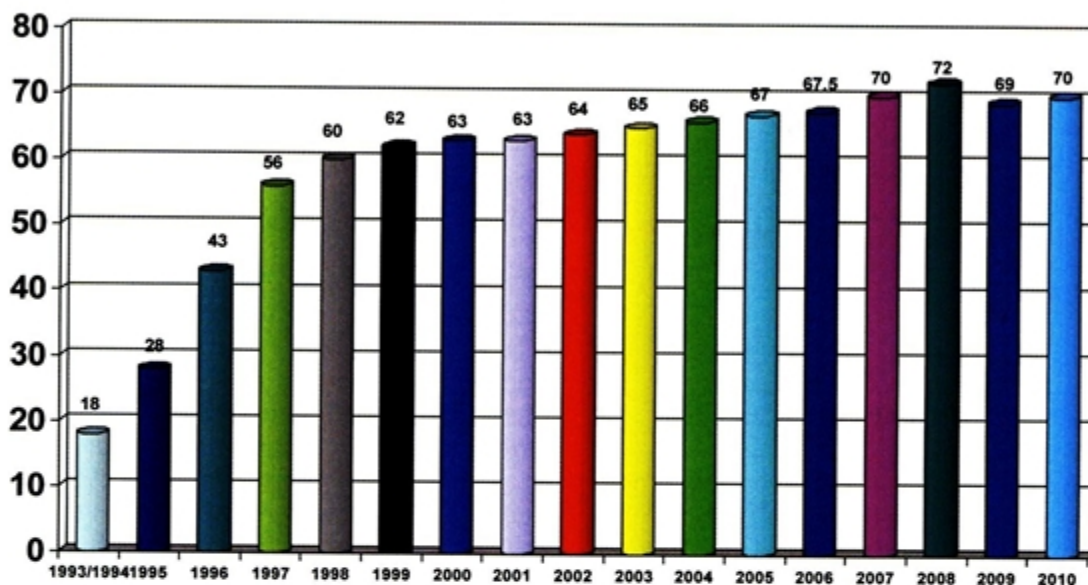
Partnerships

Collect-a-Can has environmental responsibility partnerships with various stakeholders such as the Department of Environmental Affairs, local government bodies, the recycling industry, manufacturers, fillers and distributors of products within the can packaging value chain. Corporate social investment projects include environmental education and awareness programmes, development legacy projects, enterprise development support and job creation, poverty alleviation projects, and general public education projects to promote environmental responsibility amongst the citizens of South Africa. 🇿🇦

A positive role

- **Job creation:** In excess of 100 000 people are earning or supplementing their income by recovering cans for Collect-a-Can.
- **Poverty relief / income generator for the unemployed:** Collect-a-Can has paid in excess of R200 million for cans over the past 18 years. An additional, conservative estimate in excess of R100m has been paid for cans by the industry where the cans are not routed through Collect-a-Can.
- **Controlling litter / protecting the environment:** The contribution of used beverage cans to litter has been reduced to a minimal percentage.
- **Saving raw materials / preserving natural resources:** More than 950 000 tonnes of tin-bearing steel has been recovered since 1993. All tinplate scrap generated in steel making, can making and filling processes is also recovered for recycling.

Southern Africa: Steel Beverage Can Recovery Rate 1993 to 2010



- Adding value: Tin is recovered by means of a de-tinning process and used in the production of new tinplate. Special products (using new technologies) have allowed the development of new markets for used beverage cans in the mining industry.
- Waste recovery programmes: The recovery and recycling of other materials have been encouraged through continued communication programmes. In addition, young people are educated through on-going competitions at schools, which are rewarded for recovery operations. To date, more than R4 million has been paid to schools as competition prize money.
- Reducing the need for landfills / extending life of landfill space: The volume of all cans recovered since 1993 equals the volume of major landfill sites designed to accommodate all rubbish or major city refuse sites such as Johannesburg's over an 18-year period.
- Society wins: Sustainable recycling processes have many far-reaching effects on society in the form of:
 - Poverty alleviation

- Creating jobs
- Skills development
- Protecting the environment
- Minimisation of waste and usage of landfill
- Saving of raw materials
- Creating awareness and instilling a sense of responsibility to the environment
- Setting an example for the recovery of other recyclables ☆


ArcelorMittal



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