



Food and Beverage Waste Minimisation Club Case Study

Background

The Waste Minimisation Club for Food and Beverage companies in the Western Cape focuses on waste minimisation in order to reduce the environmental footprint of the industry. This partnership has the following objectives:

1. Improve the productivity, competitiveness and efficiency of the associated companies and reduce their pollution and waste;
2. To determine the “environmental footprint” of the Western Cape Food and Beverage manufacturing industry and assist them in developing market models that ensure sustainable practices.
3. Exchange information and experiences with other companies within the sector, as well as with customers;
4. Be informed about subjects or developments related to waste minimisation, such as cutting-edge technologies, legislation, Occupational Health and Safety improvements etc.;
5. Improve information exchange and cooperation with local and regional government.

Process

Audits and training session will provide members handles to improve their efficiency and productivity in a way that contributes beneficially to the environment, such as:

1. Reduced end of pipe treatment costs,
2. Reduced raw material consumption,
3. Reduced waste disposal costs,
4. Reduced effluent disposal costs,
5. Reduced energy utilisation.

In combination with the increased awareness and up-to-date internal and external information, audits and training sessions will in the longer term lead to improved efficiency, productivity and competitiveness of the associated companies.

Identification of Waste Minimisation Options

Various areas where modifications in the process upstream could result in both a reduction in resource consumption as well as improved process yield at the member companies. The identified savings per company is listed in Table 1.

Table 1. Summary of Identified Waste Minimisation Options at Member Companies

Company	Identified Opportunities
Cirio Del Monte	*
Parmalat Bonnievale	R520 000
Irvin and Johnson	R1 434 750
Clover	*
Wonderland Foods	R120 000
RFF Foods	R660 000
Orley Foods	R195 000
Roelcor	*
Trade Meat Centre	*
County Fair – Epping	*
County Fair – Abattoir	R2 500 000
MSA	R630 000
Woolworths Meat	*
Nestle	R95 000
Appletiser	*
Distell	R898 500
Tigerbrands Ashton	R1 599 000
Ashton Canning	R1 699 000

* No assessments as yet

Implementation of Waste Minimisation

The waste minimisation options included savings in water, energy, product recovery, recycling and chemical. The estimated savings identified pertaining to each area are broadly outlined in table 2.

Table 2. The areas of focus and the estimated identified savings

Recommendation	Savings Identified - Appr. R/year
General	
Recycling	R120 000
Chemical usage	R200 000
Product recovery	R100 000
Reduced product defects	R250 000
Energy	R6 620 000
Water and effluent	R1 785 000
Total Estimated Savings Identified	R9 075 000

We estimate that approximately 10% of the recommendations have been implemented to date. Detailed case studies accounting for the recommendations made and implemented interventions will be provided for each company in the Food and Beverage Club at the end of the membership year.

Environmental Benefits

As a result of the waste minimisation programme, benefits to the environment have also been realized. These include:

- Reduced energy consumption and therefore emissions.
- Implementation of informal Environmental Management Systems (EMS)
- Reduced water consumption and effluent load
- Reduced solid waste production
- Increased recycling of packaging and containers
- Increased environmental awareness and prioritisation

Contact Details

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