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SWITCH AFRICA GREEN CASE STUDY

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INDUSTRIAL SYMBIOSIS

STORIES FROM
BENEFICIARIES

BIO-DATA

Project Title:	Enhancing resource productivity and environmental performance of MSMEs through the concept of industrial symbiosis
Grantee:	Ghana National Cleaner Production Centre
Partner:	Africa Roundtable on Sustainable Consumption and Production
Enterprise (MSME):	Cadbury Ghana Limited
Year Established:	
No. of Employees:	248
Sector:	Integrated Waste Management
Type of Business:	Manufacturing of cocoa confectionery.
Location:	North Industrial Area, Accra, Ghana.

PROJECT BACKGROUND

The Industrial Symbiosis Project introduced to MSMEs the concept of useful uses for waste generated either in-plant or by another company. This was to aid in the effective management of waste by moving waste generated up the waste hierarchy.

Through the project the MSMEs were trained in the following:

- Concept of industrial Symbiosis and Benefits to the MSME
- Process Mapping to identify resource inputs, product output and waste streams either for a specific product line or the entire facility.
- Data Collection/Gathering for resources/wastes.
- Prioritizing waste stream for Industrial Symbiosis
- Waste segregation.

ISSUES ADDRESSED

Cadbury Ghana Limited is a manufacturer of a wide range of milk powders and cocoa products. The company has an installed and operating capacity of 7000tons/annum. This case study is centered on their packaging waste, specifically the paper packaging from their raw materials namely sugar, whey powder and natural cocoa powder. Due to the large quantities generated per month the company disposing off the waste paper and even started burning them but this produced a lot of smoke which was harmful for the community. This resulted in the community reporting to the EPA. Fortunately, the company participated in the Industrial Symbiosis training and were very keen in implementing the concept.

The company was thus successfully linked with another MSME on the project, Fine Print a waste paper recycling company. Ensuing from that Fine Print is now sourcing waste paper from Cadbury for their Kraft paper and egg crates plants.

PROJECT IMPACT

4880

kg/month of waste paper
was diverted from the landfill
and GHG savings of

8784kg

CO₂e per month

Approximately

GH¢ 3785

per year from the sale of
the paper waste

Smoke from the burning of
the waste paper is no
longer an issue in the
community and the
relationship between
Cadbury and the
community has greatly
improved resulting in
improved corporate image

CHALLENGES IN IMPLEMENTATION

The initial challenge the team encountered was finding an appropriate end user of the waste.

LESSONS LEARNT/FUTURE PLANS

The concept of industrial symbiosis clearly is capable for identifying end users for waste generated but results in the overall improvement of an MSMEs corporate image.

Also the concept is useful in assisting MSMEs meet their Environmental obligations in terms of waste management.



From top to bottom, the images of the waste paper packaging and resulting Kraft paper.

CONTACTS

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SUPPORTING PARTNERS



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