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SWITCH AFRICA GREEN CASE STUDY

4

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):	L&G Plastics
Year Established:	1998
No. of Employees:	120
Sector:	Integrated Waste Management
Type of Business:	Plastic Manufacturing
Location:	Heavy Industrial Area Tema

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

City Waste Recycling Ltd offers responsible waste processing for a wide range of waste types from problematic e-waste and batteries to sawdust and plastic. It provides formal employment lifting waste collectors out of the informal sector. However, upon segregation of the waste collected the company realized they had about 2 tons of HDPE ice cream sachets, which the company cannot recycle.

L & G Plastics Ltd is a plastic manufacturing company which uses recycled plastic waste such as HDPE, PP, PE, etc. and virgin materials to recycle plastic products. The company often collects and buys the plastic waste from individual collectors that sell on the market.

During the networking forum organized by the UNDP, City waste informed GNCPC of their challenge in disposing of the waste. Thus the GNCPC facilitated the meeting of the two companies.

Through the facilitation by GNCPC, City Waste delivered the waste HDPE plastics to L & G plastics for free. Thus safely disposing of the waste without incurring any disposal cost.

PROJECT IMPACT

2
tons of plastic waste were diverted from the landfill and GHG savings of

24
tons CO₂e in the first exchange.

City waste was able to save approximately
GH¢ 2500.00
from the disposal cost and L&G gained a resource for free without any cost not even transportation cost as it was delivered for free by City waste.

Through this intervention L&G is encouraging women who in the community to collect such plastics that the company can purchase from them. Thus creating a new income stream for the women.

CHALLENGES IN IMPLEMENTATION

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

The absence of/insufficient data on the various waste streams

Lack of technical specification of the wastes generated.

LESSONS LEARNT/FUTURE PLANS

L&G plastics and City waste have embraced the concept as it is line with their core values as MSMEs and as such both are looking forward to collaborate with each other and the GNCPC.



From up to down, image of plastic bowls and drums made from HDPE plastics

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SUPPORTING PARTNERS



IMPLEMENTING ORGANIZATIONS

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