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# SWITCH AFRICA GREEN CASE STUDY

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# INDUSTRIAL SYMBIOSIS

STORIES FROM  
BENEFICIARIES

## BIO-DATA

<b>Project Title:</b>	Enhancing resource productivity and environmental performance of MSMEs through the concept of industrial symbiosis
<b>Grantee:</b>	Ghana National Cleaner Production Centre
<b>Partner:</b>	Africa Roundtable on Sustainable Consumption and Production
<b>Enterprise (MSME):</b>	Lifestyle Creations
<b>Year Established:</b>	2012
<b>No. of Employees:</b>	10
<b>Sector:</b>	Integrated Waste Management
<b>Type of Business:</b>	Handicrafts
<b>Location:</b>	Oyibi, Accra

## 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

Lifestyle Creations is a furniture manufacturing company. The company uses waste wood and wooden pallets for the production of its furniture and other products like canteens and mobile food vans.

Distell Ghana Limited, a now defunct company, was into the manufacture of alcoholic and non-alcoholic beverages for export and local consumption. As part of the decommissioning of the company's operations, the company generated a lot of wood from equipment casing which it was finding difficult to dispose of.

The GNCPC facilitated the synergy between the two companies when they both participated in the Industrial Symbiosis Training Programme. After the training programme Distell Ghana contacted the GNCPC to help facilitate the transaction between the two companies. Resulting from the inspection of the wood and the discussion that followed, Lifestyle Creation purchased 200pcs of wooden boards from Distell Ghana Limited.

## PROJECT IMPACT

As a result of this synergy

**4520**

kg of waste wood was diverted from the landfill and GHG savings of

**8136kg**

CO<sub>2</sub>e.

Distell Ghana was also able to safely dispose of the waste wood without incurring any cost.

In total 4 persons have participated in apprenticeship with Lifestyle Creations to study the art of reusing waste wood for various wooden products and furniture. This has equipped the young men and women with employable skills to be self-employed.

## 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

Lifestyle Creations intends to move into the upcycling of other waste streams such as car tires.

The activities of Lifestyle Creations clearly show that there is a potential market for repurposed wood and upcycled artefacts and products.



Images of plywood boards (top) and Furniture manufactured from the plywood and waste pallets (bottom).

## CONTACTS

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## SUPPORTING PARTNERS



## IMPLEMENTING ORGANIZATIONS

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**GHANA NATIONAL CLEANER PRODUCTION  
CENTRE**