SWITCH AFRICA GREEN CASE STUDY

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):** Ripples Interior Decor

**Year Established:** 2018

**No. of Employees:** 2

**Sector:** Integrated Waste Management

**Type of Business:** Tyre Recycling Company

**Location:** Legon, 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

Ripples Interior décor, a newly established company specializes in the use of car tires as their main raw material to make furniture. During the In-Depth Assessment section of the project at the company’s facility, the company communicated to the team from GNCPC that sourcing for clean and suitable car tires was the main issue that they could get some assistance with. They faced this difficulty because they had to fight with local scavengers who burnt these tires to recover scrap metal from them. The local scavengers have been in the business for quite some time hence they have built relationships with the mechanics and auto-repair shops who are the main sources of car tires, making it difficult for the MSME to get access.

The team from GNPC then proposed that the MSME consider the possibility of sourcing these tires from other MSMEs who had car tires as part of their waste, in accordance with the principles of Industrial Symbiosis. Through the information gathered during the duration of the project, the team was able to set up a meeting between Ripples Interior and Raincoat Roofing Systems, another MSME under the project who had car tires from their transport department as part of their waste, with no environmentally safe way of dealing with them. And the exchange was done successfully.
PROJECT IMPACT

As a result of this synergy, 120kg of car tyre waste was diverted from the landfill and GHG savings of 6900kg CO₂e. Ripples Interior Decor was able to save approximately GH₵ 100 which would have been spent on buying the tires from the local market. It reduces the amount of money spent by the local district assemblies on the landfill sites. Job creation for the individuals involved who are students still in school. In-direct job created for individuals who spun the fibers into yarns for Ripples Interior.

CHALLENGES IN IMPLEMENTATION

- The initial challenge the team encountered was finding an appropriate source of the waste.

LESSONS LEARNT/FUTURE PLANS

With the potential of other MSMEs under the Industrial Symbiosis Project accumulating car tyre waste, we intend to engage ripples interior décor and build their capacity even beyond the duration of the project, leading to significant reduction of instances of burning and disposal of tyres.
From top to bottom, Images of used tyres and a center table set made from used tyres.

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