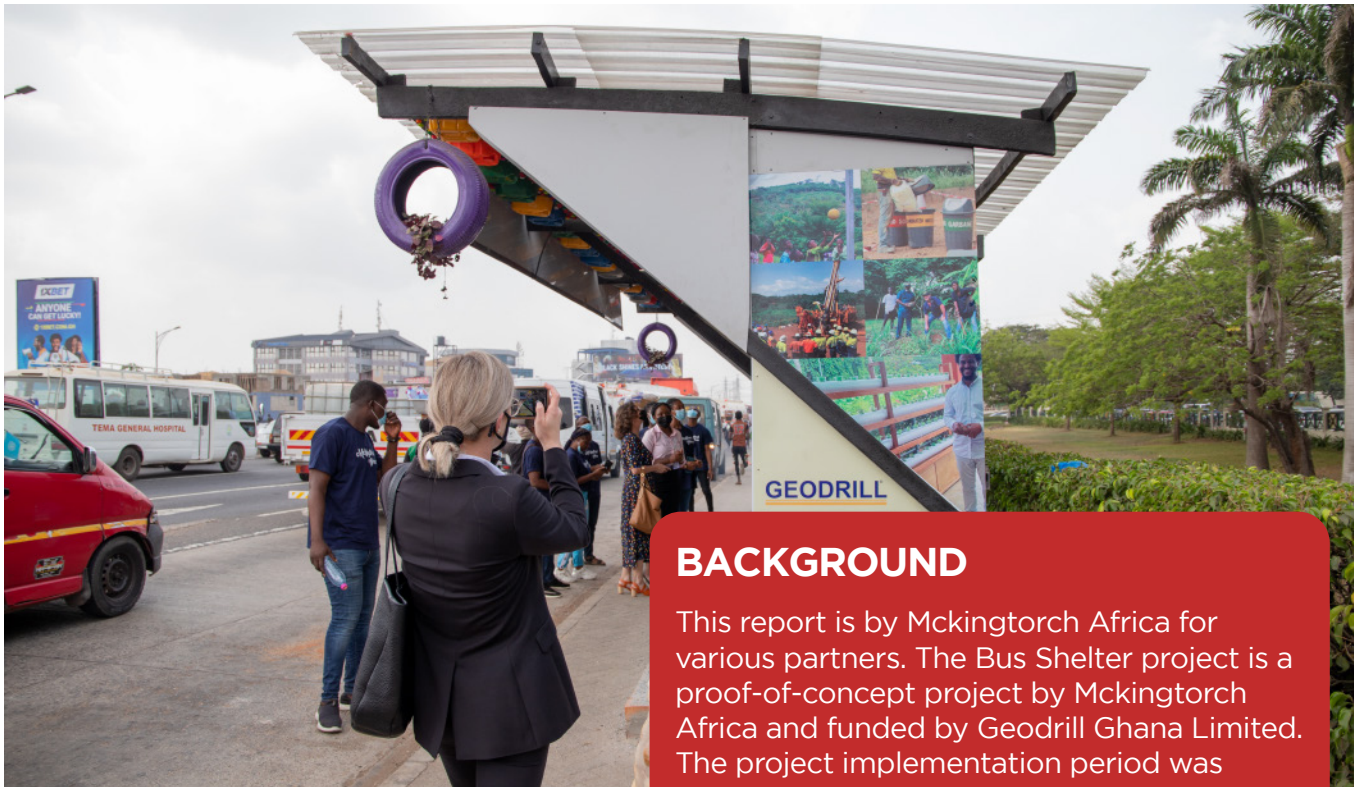




BUS SHELTER PROJECT REPORT



BACKGROUND

This report is by Mckingtorch Africa for various partners. The Bus Shelter project is a proof-of-concept project by Mckingtorch Africa and funded by Geodrill Ghana Limited. The project implementation period was between February 2021 to February 2022.

PROJECT OBJECTIVES

The general aim of this project is to explore the use of plastic beams innovation as a viable alternative for wood and other materials for construction.

The specific objectives are;

- Design, Fabricate and Install a sustainable public space structure that people can experience
- Promote further research and investigations into plastic waste innovations in Ghana
- Discover how these materials will respond to adverse weather conditions and their durability
- Promote Public-Private partnership in pursuing sustainable plastic waste recycling innovation programs
- Showcase recycling innovations as we change the narrative for Ghana and Africa
- Explore sustainable ways of keeping plastic waste out of the environment
- Use these installations as a powerful advocacy tool in pushing plastic pollution and climate crisis agenda.

The project was commissioned at Fiesta Royal Hotel in Accra on the 3rd of February 2022. In attendance was representatives from Ministry of Sanitation and Water Resources, Voltic Mineral Water, Total Petroleum, Geodrill Ghana, Ministry of Environment, Science Technology & Innovation, Australian High Commission, President Obama's Young Africa Leaders Initiative West African RLC, Azumah Nelson, AMA K Abebrese, CEOs of some multinational companies, president of Ghana Recycling Initiative By Private Enterprises (GRIPE).



Bus Shelter Project Report



PROJECT PARTNERS

The project partners includes;



The CEO of Mckingtorch Africa Makafui Awuku an environmentalist, innovator and artist designed the bus shelter project during the beginning of the pandemic in 2020. This project is an original Mckingtorch Africa project. The Adinkra art theme on the chale wote and the inside ceiling art work from waste bottle tops and waste gallon waste was created by the artist Makafui Awuku. Mckingtorch Africa also decided on the environmental sustainability and Covid-19 Protocol advocacy icons that got printed at Academic City University College. The entire project was led and supervised by Mckingtorch Africa. The maintenance and improvement works on the installation will all be managed by the company.



GEODRILL

Geodrill Ghana is the installation funding partner for this project. The company took interest in our projects after we made learning, teaching and sleeping mats for homeless people on behalf of Children of the Light NGO which they funded. They thought the bus shelter project was an exciting long term sustainable outlet for plastic waste and committed to support the fabrication and installation of the first one.



AYAWASO WEST MUNICIPAL ASSEMBLY

Local Government Authority Partner. The municipal assembly played a key role in getting us a suitable location for the project when we reached out to them with engineers assigned to us to go round the municipality to look at suitable locations for the project. The municipal assembly thought it was a great project that will make a huge impact.



Solar power partner allowing for lighting to be done inside the installation and also creating an opportunity to further light up the installation during Christmas and even consider providing USB phone charging capability and a radio inside the roofing system.



ACADEMIC CITY UNIVERSITY COLLEGE

Academic City University College is a research and academic institution. The initial experiment to identify what tools can work with the materials, the sanitizing and installation of waste chale wote (flip-flops) on wood, the cutting of materials to size, identifying what other materials were needed for the installation, additive manufacturing (3d) modeling and printing and the physical installation itself had faculty members, students and academic city team on it.



PYRAMID RECYCLING ENTERPRISE

At Darkuman a suburb of Accra is a plastic waste recycling hub, the only plastic waste recycling hub in Ghana with over 50 companies. The plastic waste beams we used for the installation were innovated by our partner Pyramid Recycling Company.



YAAW

YIELDING ACCOMPLISHED
AFRICAN WOMEN

Women Volunteers who joined Mckingtorch Africa during one of their volunteer activities for the girls to recovered Chale Wote waste from Sakumono Mighty Beach which is one of the most polluted beach fronts in the city of Accra.



CAVEMAN

Grey Box

3D Board Installation
Partner

Caveman watch is an indigenous Ghanaian watch brand that designed the clocks installed at the shelter with a recycling team with metallic bottle tops used for the hour numbering for the clocks.



KEY MILESTONES



BUS SHELTER SUSTAINABILITY PLAN

The Bus Shelter project is a self-sustaining project as it comes with communications spaces for businesses interested in sustainability and the environment. The leasing of these spaces will generate some revenue for maintaining the installations, improving upon them, investing in production of the recycled materials for additional installations and installation. Mckingtorch plans to engage government, embassies, ministries, event facilities, private institutions and education & research institutions in putting up more of the shelters across the city and country.

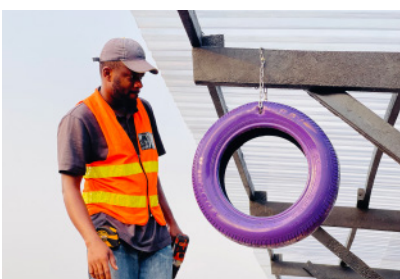


Mckingtorch Africa will be budgeting for repairs to be done if damages are done to the structure from vehicular accidents or theft of parts. Also, Mckingtorch Africa is engaging the municipal assembly in using their task force to prevent hawkers from turning the space into a market place and also preventing mentally ill people from invading the shelter. For the watering and cleaning of the area around the shelter, we have engaged and paid some women on a monthly basis to be doing that for us. Mckingtorch Africa will have a monthly monitoring program in place to make sure the shelter is being used for the purpose for which it has been built.



COST OF INSTALLATION

This proof-of-concept shelter project was supposed to have been done in the first quarter of 2021 but due to delays in getting the permit and materials we finally installed it in January 2022. The cost of this initial installation was GHS45,000. The expenses were made on labour, beams, artwork design and installation, shelter fabrication and installation, narrative design and installation, repair and maintenance, commissioning, 3D modeling & Printing, waste recovery, logistics and insurance cover for shelter.





Bus Shelter Project Report



IMPACT OF PROJECT

The bus shelter installation has led to recovery of plastic waste from the environment and beach of Accra. It has also created at least 15 jobs with 5 of them being jobs for women. The project has also created a social media buzz with it trending for more than 3 days since the launch and provoking conversations about the plastic waste menace. The project is estimated to create at least 35 more jobs. The shelter was made from over 700kg of recycled and upcycled plastic waste.

SUSTAINABLE DEVELOPMENT GOALS

The Bus Shelter project is tackling issues relating to sustainable development goals 6, 8, 11 and 13 which are about sanitation, decent jobs, sustainable communities & cities and climate action.





Keep Plastic Waste Out Of The Environment. Handle Plastic Waste Responsibly.

By:  **Mckingtorch Africa**
THE ART OF SUSTAINABLE COMMUNITIES