ECOCARE DEPARTMENTAL ACTIVITIES REPORTING – 2019

EcoEvent Coordinator

Education and Advocacy

Research and Development

A. REPORT FROM THE ON ECO-CLEANUP SERVICES OF ECOCARE

Overview

In the quest of Ecocare Waste Initiative to help in the reduction of plastic pollution especially single use plastics, the EcoEvent and Green Site Management services were commissioned to serve as one of the primary collection avenue.

1. Eco-Event CleanUp Services:

This involves engaging in cleanup activities at weddings, funerals, send-offs, and other social gatherings where plastics are used in serving the guests at these functions. The EcoEvent Cleanup model brings us to direct contact with plastic before disposal and as such gives us the opportunity to undertake segregation and separation of plastics to their respective categories or classifications.

Started in January 2019, we have offered 5 major of cleanups so far. The message is clear and the feedback is also positive that such endeavours are appreciated with people ready to pay for such services. Charges have averaged GHS 250 per cleanup. It has engaged 11+ volunteers who are passionate about the environment especially with plastic to embark on these clean ups at the various social gathering events. These volunteers are only given tokens of appreciation for the time and energy spent in keeping the place clean and reducing plastic pollution.

EcoEvent clean ups have proven to be the most viable business model for the group as well as the platform for propagating the message of reducing plastic pollution and minimizing single use plastics.

2. Green Site Management:

This is an ecofriendly cleaning service we render for contractors who are concerned about their environmental impact of their construction sites. We basically take care of their waste management – ranging from plastic packaging and cement paper packages, wood and metal scraps etc. So far we have only cleaned 2 times for Optimum Shelter's sites, and 1 for Sarfoliz Engineering and Construction Works building site in Goaso. Charges have averaged, GHS 100 per cleaning.

The cleaning is done about every 3 months for such major construction sites. During the cleaning we segregate all kinds of waste at source for proper disposal at the town designated dumpsite – without this service, the construction laborers find it difficult to transport waste to far distant landfills and are tempted to just throw them at the nearby bush.

Future Plans

Next plan for our Green Site Management model is to recover the recyclable plastic materials in these construction wastes, to our collection workshop for use as raw materials later – once operation is in full session. We are considering adding on this site management model, chemical wastes cleanup in future.

BY: NANA ACHEAMPONMAA DUFFOUR (ECO-CLEANUPS COORDINATOR)

B. REPORT ON EDUCATION AND ADVOCACY

Main Activities Undertaken in 2019

- Plastic Free Tuesday Campaign
- The Innovation Lectures Series
- Rolling out steps for Ecocare School Environmental Clubs
- Social Media Campaign

1. Plastic Free Tuesday

❖ Introduction

The plastic free Tuesday campaign aims to advocate against the dependency on single – use plastics as well as highlight the menace plastic pollution has on mother nature. The dire consequences of mankind's dependency on plastics and its inappropriate disposal is drummed of by a team of campaigners on various social media platforms like WhatsApp, Twitter, Facebook and Instagram. The team also share their innovative ideas and practices to help reduce the menace caused by plastics on every Tuesday of the week under the hash tags – #ENDPLASTICPOLLUTION, #PLASTICFREETUESDAY, #BETHECHANGE and #BEATPLASTICPOLLUTION.

❖ Ecocare Campaigners

Total number of campaigners: -76, M = 43, F = 33

Total number of cities/locations: - 41

Total number of countries reached: - 14

❖ Next Steps

The plastic free Tuesday expects to get more campaigners to get on board to amass a common voice on the fight against the plastic menace. It is projected that, the rising number could help set up city cells and teams to organize campaigns to create the awareness of plastic pollution effects locally and on the social media platforms.

2. The Innovation lecture

❖ Introduction

Ecocare Waste Initiative after its maiden invitation to the Science and technology Fair at The University of Energy and Natural Resource (UENR) has decided to run series of lectures dubbed 'The Innovation Lecture'. This lecture will intend to inspire students of tertiary institutions to innovate and contribute to the green world. The lectures will seek to implore the students to think of problem solving techniques considering the sustainability of the planet in mind.

❖ Expected Outcome
Plans for the lectures will roll out fully after the Environmental clubs have taken off. The lectures will be given at the various tertiary institutions in the Ahafo region of Ghana.

3. Roll Out steps on Ecocare School Environmental Clubs (ESECS)

❖ Introduction

The Ecocare School Environmental Clubs aims to instill the discipline of responsible environmental waste disposal habit in school pupils at the basic school level. This is intended to eradicate the abysmal attitude of waste disposal of many Ghanaians especially the throw-away wasteful paradigm. The club members are going to influence their fellow pupils and carry with them the training to their homes. The ripple effect will get many children grow into responsible citizens who have the heart to volunteer and care for their environment and its sustainability.

❖ Permission from Ghana Education Service

Request to engage the school pupil on this extra- curricular activity was sent to the Ghana education Service and has been duly granted after examining the content activities tailored for the entire project. School heads have been met briefly with the plans and activities. The activities will incorporate heads of various institutions like the Health and Sanitation Unit and the National Youth Authority.

❖ Expected pupils and Schools to reach

Each Environmental Club is expected to be made up of a maximum of 20 pupils of mixed gender but not less than 40% girls. The project is expected to run in Five (5) basic school in the Ahafo regional capital, Goaso in the pilot year. More Schools are expected to be rolled onto after the success of the pilot year.

❖ List of School for roll out in September, 2019:
- Ahafoman Junior High school
- Mother Ignatia School
- Bright Star Preparatory & JHS
- Ken Hammer & JHS
- Henry Heugin Preparatory & JHS

❖ Next Steps:
Upon attaining the permission to engage the school pupils, the school board and staff will be met to discuss the roadmap of the project and also to initiate the project entry in the various schools, while a survey is carried out to assess the environmental situation with regards to waste disposal. This will be followed by the formation of clubs by selected patrons and matrons by the school bodies.

Social Media Campaign

Ecocare Waste Initiative operates under the following social media handles.
- Twitter/Instagram – @ecocaregh, @EcocareN (specially for Nigerian Community of Ecocarers)
- Facebook – Ecocare Waste Initiative
- LinkedIn – Ecocare Waste Initiative

BY: ISAAC LARBI SARFO, EDUCATION & ADVOCACY DIRECTOR,

C. RESEARCH AND DEVELOPMENT DEPARTMENT

There are basically, four (4) key research milestones that has been done by this department to help the development of our processes and documentations.

1. Ecobags Ideation and prototyping:
2. Plastic lumber ideation
3. Prior research for data into Municipal Waste generation in the region
4. Current research into waste generation and recovery indicators and measurement matrices.

1. Ecobags:

The R&D department lead by Felix Ankamah has been able to document a prototype of paper bag that will replace plastic carrier bags. It was named "Ecobag", from the root name of EcoCare. Documentation was completed in November 2019. Physical prototype is however, yet to be done. [A two-page document prototype is attached to this report]

2. Plastic Lumber:

Research is being carried to turn plastic waste into plastic beams, boards, fences posts etc, to replace illicit timber logging, for non-load building construction works and fencing. Ideation completed. Some amount of plastic waste collected for the site. Next phase is to get plastic shredders and extruders, to build a physical prototype. We have signed a supply contract/MOU with SarfoLiz Engineering & Construction Works to be our first clients to purchase test the prototype in their construction works – in a collaboration manner to develop a minimum viable product (MVP).

3. Data on Municipal Solid Waste:

It is the R&D department that gathered data for us to document our insights into the waste generation problem of Ahafo, for business plan and pitch decks preparations. This was achieving by collection and analyzing data from Zoomlion Waste Management head office in Sunyani and Goaso, in addition to available literature online. Statistics from form the Ghana Statistical Survey's current 2014 District level analysis of the 2010 housing and population census, was also used.

4. Waste Generation and Recovery Indices:

The R&D is currently formulating indices and matrices that we would use to measure and analyse our quantifiable impacts and results. In addition to weighing with a balance, we would like to derive some formulas that can easily help us generating both qualitative and quantitative tracking of our waste generation and recovery levels. This will help us documenting our impacts and success achieved on certain indicators of our 7 SDGs working areas: SDG 6, SGD 8, SDG 9, SDG 12, SDG 13, SDG 14 and SDG 17.

Conclusion:

The R&D department proposes to later do an extensive research and publish findings into the current Ghanaian Plastic Economy – for use by Ecocare and for sharing with other stakeholders in the plastic industry.

BY: FELIX ANKAMAH, ECOCARE R&D

APPENDIX

ECOCARE WASTE INITIATIVES – ECOBAGS

Proposed prototype document prepared (November 2019) by

Felix A. Yeboah (Research & Development Lead, Ecocare)

Problem

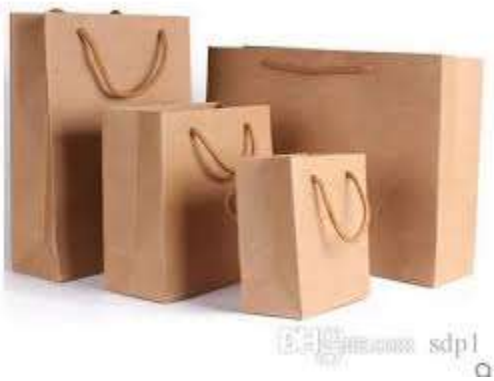
Ghana has long faced pollution concerns. Lack of a proper waste disposal system and no measures to check the use of non-biodegradable material have made cleanliness and ecological balance a distant dream.

Truckloads of garbage are being dumped on the land and even in water bodies. The vast majority of this waste consists of non-biodegradable material – mostly plastic bags and related items.

Solution

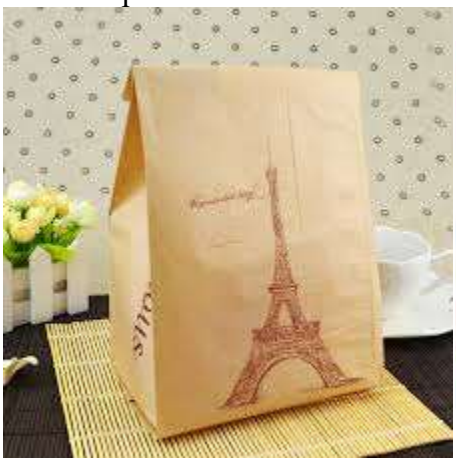
Ecobags provide a clean, safe, and eco-friendly alternative. Made of 100 per cent biodegradable material – paper and adhesive – Ecobags can bear a stronger load than conventional bags. Two layers of brown paper are pasted together with a thin piece of rope in an innovative design, resulting in a bag that can carry 2.5 kilograms.

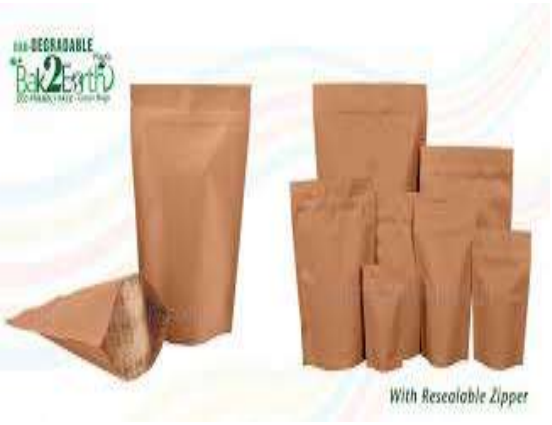
Design

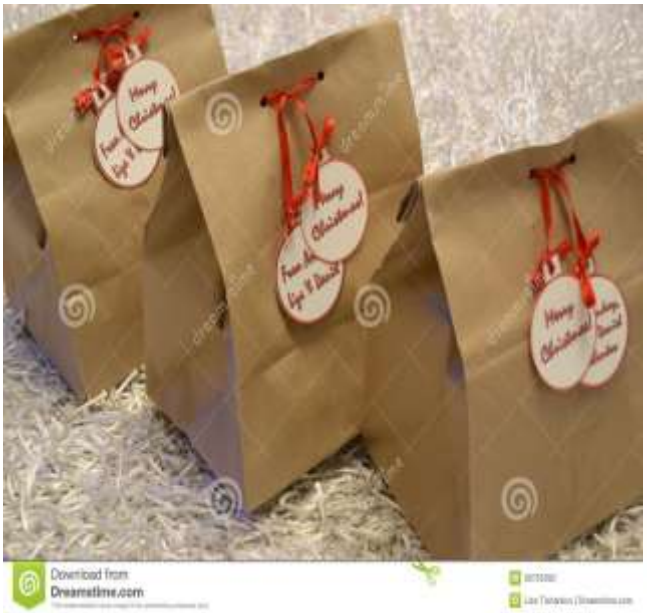


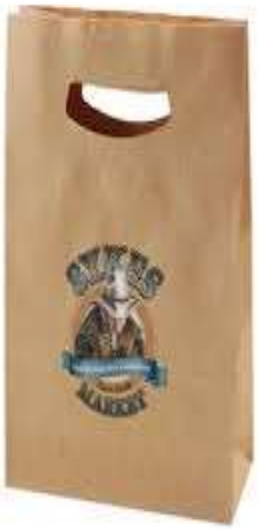
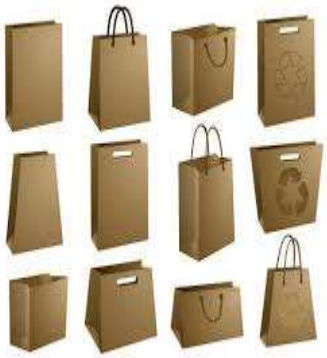
Option A

Option B







IT Inclusion:

Information technology aspects proposed

- serial code for each bag (QR Code) for easy tracking of each bag and where they go;
- free App on android for users to be able to transact with recycling companies
- “Ecobot” will answer client’s basic questions on how to handle paper waste in general

Material needed

- Brown paper
- Adhesive
- Fabric (handle)
- QR coding (in perspective)
- Android App (in perspective)

REPORT COMPILED BY:
JACKSON NYARKO
FOUNDER & COO, ECOCARE WASTE INITIATIVE
Tell/WhatsApp: +233201096181 Twitter/Instagram: @ecocaregh or @JACKSONNYARKO1
Email: ecocareghltd@gmail.com Webpage: www.ecocaregh.ga