Professionally Eco-friendly Resource Management Solutions

EcoCare Waste Initiative

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CONCEPT NOTE ON ECOCARE SCHOOLS ENVIRONMENTAL CLUBS (ESECS)

[Developing Future Green Ambassadors for Ghana and Beyond]

A. WHY?

Waste generation in Ghana – organic, plastic, recyclables and non-recyclables – in general are on the increase exponentially. In Brong Ahafo alone, we generate more than 1.32 million tonnes of waste per day, with up to 1.12 m tonnes (85%) collected – comprising 40% organic, 35% plastic and remainder 15% (residual and other kinds of wastes).[1] The bad news however is: these 85% collected together with the remaining 15% – are either wrongly disposed or untraceable into the environment, and get leaked into our soils, ground water, into water bodies and finally unto our plates where we eat the dissolved plastic molecules in our food and fishes.[2]

A Simple Innovative Solution: EcoCare has discovered that if public behaviours towards waste generation was improved, we could reduce waste generation, and as well be able to recover greater (up to 91%) percentage for recycling and environmentally friendly disposal.

Why School Kids?

There is no doubt that if a tremendous change could be caused in a person's life time, it is when we are growing up and learning. That is why EcoCare has established the EcoCare Schools Environmental Clubs (ESECs) to start transforming kids to become environmentally conscious and waste generation fighters. The ESECs is in part an innovative curricula-inclusive concept to educate school children to protect their environments from waste pollution, and develop some students for careers in the environmental and social work sectors.

Why Schools?

Reducing waste and recycling are the most effective ways schools can reduce their carbon footprint, conserve natural resources, and save money. Some basic Waste and Recycling Facts:

- A school of 300 students can prevent 14.5 tons of greenhouse gases from entering the atmosphere per year by increasing the rate of recycling by 30% to 35%.[3]
- Recycling one ton of paper saves between 15 and 17 mature trees.[4] [Take 1 ton (metric) = 1000 kg]
- Recycling one aluminum beverage can saves enough energy to run a computer for two hours.[5]

Many of the actions schools can take to increase recycling and reduce waste are small but significant, requiring only a slight change in procedures. Additionally, these actions can serve as great tools for teaching students about the importance of conserving natural resources through experiential learning. The ESECs also works as an economic model to buffer school fees and related project challenges faced by partner schools.

B. WHAT?

The EcoCare Schools Environmental Clubs (ESECS) is in the first set up to help schools to develop extra-curriculum activities that will help them to educate students to protect their environments, but it will be as a structure, to recruit some selected/interested students and developed them to become ambassadors for change.

[1] Analysis from available statistics and reports on waste management activities of the EPA and Zoomlion, Sunyani, July, 2016
[2] Literature including Ellen MacArthur Foundation, *The New Plastics Economy*, 2016
[3] Calculations made according to the EPA Warm Model (http://epa.gov/climatechange/wycd/waste/calculators/Warm_home.html)
[4] Environmental Protection Agency (EPA) Factoids (http://www.epa.gov/epawaste/education/pdfs/toolkit/tools-m.pdf)
[5] ibid.

Thus the ESECS operate on these three (3) main facets:

1. ***Institutional Commitment:*** This requires schools to help in the formation of the EcoCare Schools Environmental Clubs (ESECS); Green support policy. Has two subcomponents
2. ***Education:*** EcoCare helps to Develop and train our partner schools (management, teachers, students and other stakeholders) in curriculum for environmental education and classroom-to-real-world skills. This include but not limited to Developing and implement a Scope and Sequence plan that ensures all students, during the course of their education at the school, have been introduced to resource conservation, waste reduction, reuse, recycling, and composting through lessons or classroom activities. Has 6 subcomponents
3. ***Facilities/Maintenance:*** EcoCare supports partner schools with facilities that facilitate the execution of their ESECS projects/targets; assist them in maintaining the sustainability standards introduced in the school; and to gain public (national, regional and international) recognition/accreditation for their contribution to natural resource conservation, fight against environmental pollution and raising of future green ambassadors.

C. HOW?

Activities: The EcoCare Campus Club activities will mostly be co-curricular but concepts building will be by infusion and inclusion. Major activities of the ESECS include some ***(not all)*** of the following depending on feasibilities in participating schools and general academic calendars:

1. Intuitional Commitment [Curricular integration]:
   a. Approve and coordinate formation of School Environmental Clubs (i.e. The ESECS)
   b. Reflection and Celebration of success together [with assistance from EcoCare]
   c. Professional development – for staff to become certified Environment and Sustainability educators [with assistance from EcoCare]
   d. Educate staff, students and stakeholders on waste composting and recycling
   e. Integrate insights on waste generation, management and pollution into curriculum

2. Education [Co-curricular integration]:
   a. ESECS members campaign against indiscriminate waste disposal – in schools and communities
   b. ESECS members trained to campaign against plastic pollution – "Anti-Littering" outreaches
   c. ESECS members take actions themselves – Daily Climate Actions (DACs) and Lifelong Sustainable Commitments (LSCs)
   d. Mentoring of ESECS members to become Future Green Ambassadors (Eco Activists)

3. Facilities and Maintenance:
   a. Conducting a Waste Audit and Green Awards
   b. Ideas festivals – ESECS members enter into a challenge to develop innovative solutions to Plastic Waste Pollution and get funding to become Plastic Waste Ambassadors

Conflict of Interests: EcoCare would not want the ESECS activities to jam up partner schools' calendar. So even though comprehensive each of these activities above have been programmed according a minimalistic project management approach – some overlap with others, while some are not even affected by school schedules at all.

For further details, please contact:

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More data:

Micro plastics have been found in honey, sea salt, bear, tap water and in household dust[6][7][8]

8 out 10 babies and nearly all adults have considerable amounts of phthalates in their bodies;[9]

93% of people have bisphenol A (BPA) in their urine.[10]

Intake of these plastic additives have raised concern among scientists about human health risks; because BPA for example interferes with hormonal systems (especially testosterone),[11]

DEHP makes plastic flexible but may also cause cancer.[12]

[6] Gerd Liebezeit et al, Food Additives & Contaminants, 2013
[7] Kosuth M et al, PlosOne, 2018
[8] Ana L. Catarino et al, Environmental Pollution, 2018
[9] Meeker J.D et al. *Royal Society: Biological Sciences*, 2009
[10] National Institute of Environmental Health Services, 2017
[11] Anneline Pinson et al., *Comptes Rendus Biologies*, 2017
[12] Gray J. M. et al., *Environmental Health*, 2017