



REPORT

**TRAINING WORKSHOP ON ENERGY
EFFICIENCY AND CONSERVATION AT
WEIJA GBawe MUNICIPAL EDUCATION
DIRECTORATE**

3rd SEPTEMBER 2024

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We also acknowledge the Management of the Ghana Education Service (GES) for their invaluable support and collaboration in carrying out this scale-up project.

Our heartfelt thanks to the Weija-Gbawe Municipal Education Director and his team, teachers and participants from the Weija-Gbawe Municipal Education Directorate for their support and participation during the workshop.

This project and report writing was produced by the core team led by the Research Director, Dr. Mercy Nyamekye consisting of the following members: Ebenezer Nkuah Ankamah, Francis Agbalenyo, Abigail Birago Owusu and Abigail Owusu Oduro.

Introduction

The Sustainable Development Goal Four (SDG 4) emphasizes the need for countries to promote quality education. Complementing this, is Goal 7.3, which aims to double the global rate of improvement in energy efficiency by 2030. In alignment with these goals, the Energy Efficiency and Conservation (EEC) Project was launched in 2017 by the collaborative effort of the Ministry of Education, the National Council for Curriculum and Assessment, the Energy Commission, the Millennium Development Authority (MiDA) and Associate for Change (AfC) and the Ghana Education Service (GES), through a rigorous desk review (auditing) of the existing energy efficiency concepts in the previous objective-based curriculum. Through this robust institutional collaboration, nominees were selected to form the Internal Compact Team (ICT) for EEC project. The Core Team was tasked to audit the existing curriculum to find out whether there were energy efficiency and conservation concepts.

Findings revealed a huge gap in terms of knowledge, skill sets, behavioural and attitudinal change in relation to energy efficiency. For example, in the kindergarten Objective-Based Curriculum, no mention of energy or energy efficiency concepts were seen. At the primary level, energy concepts were discussed in subjects like Integrated Science, Natural Science, and Citizenship Education, but energy efficiency and conservation were not addressed. Again, at the Junior High School (JHS) level, Integrated Science covered energy conservation but excluded energy efficiency. English and Ghanaian Languages only mentioned energy conservation in some essay topics. Basic Design Technology (BDT) discussed energy conservation only in the final year. Other Subjects such as Information and Communication Technology (ICT), Religious and Moral Education (RME), Mathematics, and Social Studies did not cover energy efficiency or conservation concepts at all.

The recommendations were to integrate energy efficiency and conservation into the Standards-Based Curriculum, train teachers to integrate these concepts in their lesson planning and delivery, and expose learners to sustainable energy practices.

Following the integration of EEC concepts into the Standard-Based Curriculum, EEC Teacher Toolkits, School Club Manuals, Posters and Readers were developed and used as pilot materials in thirty (30) selected schools across the Northern, Middle and Southern Zones of Ghana. Evidence

from the Pilot showed improved knowledge level and skills sets among teachers and learners and the change in attitude towards energy efficiency and conservation.

This called for a scale-up of the EEC project to cover the whole nation. It is upon this bases that, NaCCA through funding support from ViVo Energy conducted a capacity building training workshop for some selected teachers in the Weija-Gbawe Municipal Education Directorate. The training targeted fifty (50) participants.

Workshop Purpose

The overarching purpose of the workshop was to create a ripple and multiplier effect within the educational system.

Specifically, the workshop aimed to:

- Introduce teachers to the EEC concept and its significance in mitigating environmental issues.
- Provide hands-on experience with the EEC materials, including Teacher Toolkits, School Club Manuals, and EEC Readers.
- Offer a platform for teachers to develop lesson plans and action plans tailored to energy conservation and efficiency.
- Encourage collaborative learning through interactive activities that demonstrate energy-saving practices

Activities Conducted During the Workshop

Main Presentations

Presentations were done on the following:

- Background of the EEC project
- Introduction to EEC concept
- EEC materials (Teacher Toolkits and School Club Manuals)
- Lesson Plan Template

- Lesson Plan Preparation and Delivery
- EEC School Club Action Plan Preparation

Other Activities Done

- Individual Reading of the EEC materials
- Group discussions
- Group Presentation
- One-on-one interview Sessions

Outcome/Lessons Learnt

The EEC Training Workshop yielded significant outcomes that are expected to have a lasting impact on both teachers, learners and the wider community.

The Outcomes include:

- Increased Awareness and Understanding of Energy Efficiency and Conservation
- Practical Skills in Using EEC Materials
- Hands-On Experience with Creative Pedagogical Techniques
- Behavioral Change and Adoption of Energy-Saving Practices
- Greater Collaboration and Community Engagement
- Increased Confidence in Teaching EEC Concepts

Recommendations

To ensure the long-term sustainability and success of the EEC scale-up project, it is crucial to build upon the foundational work achieved during this initial scale-up training workshop in the area of:

Scale-up the Training to include more Regions, Municipals & Districts Across Ghana: For the EEC project to make a broad impact, the training could be *scaled-up* to reach more teachers and districts across Ghana. The Weija-Gbawe Municipal Assembly served as a first scale-up, and was very successful.

Baseline, Midline and Endline Monitoring and Support: It is critical to track the progress of the trained teachers in their various schools and ensure that the knowledge and skills gained during the training are effectively applied in the classroom.

Continuous Professional Development: While the 1-day workshop was a critical first step in introducing energy efficiency and conservation concepts, it is essential to provide periodic refresher training and opportunities for professional growth and development for teacher who participated in the workshop.

Resource Allocation: While the EEC Teacher Toolkits and School Club Manuals were effective starting points, additional EEC teaching and learning *resources* would further enhance the ability of teachers to deliver engaging and impactful lessons on EEC concepts.

Appendix

PROGRAM OUTLINE

S/N	ACTIVITY	DURATION	FACILITATOR
1.	Arrival and Registration	8:00am-8:50am	RPME Rep
2.	Opening Prayer/Overview of Training Outline	9:00am	Participant/ RPME Rep
3.	Welcome Address/ Introduction /Purpose of Gathering	9:05am-9:15am	Municipal Director of Education/ NaCCA-DDG
4.	Background of EEC Project	9:15am-9:30am	Dr. Mercy Nyamekye
5.	Presentation I <ul style="list-style-type: none"> • <i>EEC Concept -Joachim/Francis</i> • <i>EEC Materials (Teacher Toolkits, School Club Manuals, EEC readers)... francis</i> • <i>EEC Action Plan</i> • <i>EEC Lesson Plan Template - Eben</i> 	9:30am-11:30am	RPME Rep/ MEO Rep
6.	Snack Break	11:30am-11:40am	ALL PARTICIPANTS
7.	Presentation II & Activities – Primary Teacher tool kits...sadiq <ul style="list-style-type: none"> ▪ <i>Matching Energy Pictures with Words</i> ▪ <i>Saving Energy</i> ▪ <i>Energy Saving Brochure</i> ▪ <i>Drawing and Role Play in group</i> ▪ <i>Worksheet 1: Savers Or Wasters?</i> 	11:50 am - 01:00pm	RPME Rep/ MEO Rep
8.	Lunch Break	1:00pm -1:30pm	ALL PARTICIPANTS
9.	Presentation IV & Activities – JHS Teacher tool kits <ul style="list-style-type: none"> ▪ <i>Identifying Sources of Energy</i> ▪ <i>Discovering Principles of Conservation</i> ▪ <i>Search for non-renewable sources of energy</i> ▪ <i>Project work of climate change</i> 	1:30pm - 2:30pm	RPME Rep/MEO Rep
10.	Q &A/Remarks/ Closing Prayer/ interview session/Closure	2:30pm -3:00pm	Municipal Director/ Dr. Mercy Nyamekye

Photo Gallery













