

GHANA SEforALL NEWS

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GHANA SEforALL SECRETARIAT

GHANA'S SEforALL ACTION AGENDA SEEKS TO:

- > Ensure Universal Access to Modern Energy Services
- > Increase the Share of Renewable Energy in the National Energy Mix
- > Increase the National Rate of Improvement in Energy Efficiency

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PROGRESS ON HIGH IMPACT PRIORITY AREAS

ENSURE UNIVERSAL ACCESS TO MODERN ENERGY SERVICES

* **Electricity Access**

Sustainable Electrification for Health Facilities

The [United Nations Foundation](#) (UN Foundation), with funding from the UK Department for International Development (DFID) and in close collaboration with the [Ghana Health Service](#) (GHS) and the [Ministry of Energy](#) (MOE), has completed the installation of solar PV systems in 26 rural primary health care facilities in Ghana. The targeted Community Health Posts (CHPS) and health centres are based in the Northern, Western, and Brong Ahafo Regions, and offer essential maternal and child health services to the surrounding communities. Following an inception meeting in November 2016, the project stakeholders carried out a range of activities, including: detailed energy needs assessments at the selected health facilities, technical system design planning, and the establishment of a procurement committee. The installations were all carried out in the second half of 2017 by [Power World Ltd.](#) with support from the [Solar Electric Light Fund](#).

Prior to and during the installation, community mobilization activities were carried out.

Following the installation, the project stakeholders have also carried out training at multiple levels, including end-user trainings on how to operate and use the energy system

In September 2018, the project was officially commissioned by the Energy minister, Honourable Peter Amewu.

The project team also organized a training in Tamale, to build the capacity of MOE and GHS

representatives at the regional level. The energy solutions, which range from 3 kWp to 6 kWp, have all been operational for about 18 months, contributing directly to the availability and quality of health services.

including policymakers, development partners, practitioners, funders, and NGOs to promote the role of clean energy in creating stronger and more resilient health systems in Africa. For more information, please visit www.poweringhc.org/conference.



Panel Installation (Photo credit: Power World Ltd.)



Project being commissioned by Minister of Energy, Honourable Peter Amewu (Photo credit: Power World Ltd.)



Community Engagement (Photo credit: Power World Ltd.)

In parallel to the installation, the UN Foundation partnered with [WHO](#) and the [Ghana School of Public Health](#) to carry out an implementation research project to better understand the linkages between reliable energy and improved health outcomes. A baseline study was conducted in 2017 prior to the installations at the sites, with several data collection rounds taking place in 2018. The results of the study, combining both quantitative and qualitative research, will be finalized in the second quarter of 2019.

Together with its partners, the UN Foundation is also organizing a Clean Energy for Health Care Conference in Nairobi, on April 24-25. The Conference will bring together leading voices from the health and the energy sectors,



Complete Battery Bank (Photo credit: Power World Ltd.)

*** Improve Access to Clean Cooking Solutions**

Implementation of the National LPG Promotion Policy

The Government of Ghana (GoG) through the Ministry of Energy has introduced a new policy directive for marketing and distribution of LPG in Ghana, using the Cylinder Recirculation Model (CRM). This is to ensure Ghanaians have access to safe, clean and environmentally friendly LPG for increased domestic, commercial and industrial usage. The National Petroleum Authority constituted the National LPG Policy Implementation Committee (NLPIC) in November 2017 to plan, oversee and ensure a successful implementation of the new National LPG Promotion Policy.

The NLPIC has undertaken various activities to ensure the successful implementation of the CRM Policy. The activities undertaken focused on:

- i. New LPG Regulatory Framework: Development of new LPG Price Build-up which includes draft bottling plant margin model, Revised LPG Marketers margin model and Revised Unified Petroleum Price Fund (UPPF) and Primary Distribution Margin (PDM).
- ii. Licensing: Six Bottling Plant Company License issued to six (6) companies. Other licenses developed include LPG Bottling Plant Company License, LPG Bulk Transporter License, LPG Cylinder



Training of GHS Representatives (Photo credit: Power World Ltd.)



Complete Outback Inverter and Charge Controller (Photo credit: Power World Ltd.)



Transporter License, LPG Marketing Company License, LPG Bulk Distribution Company License, Cylinder Manufacturing and Maintenance Company License, Permit to operate LPG Cylinder Distribution Outlet and Permit to operate Auto gas Filling Station

- iii. Health and Safety: Operational and Health and Safety guidelines have been developed for Bottling plant operations, Auto gas retail outlet operations, Cylinder Transport Operations and Cylinder Exchange point Operation.
- iv. LPG Risk Assessment Exercises: 659 LPG Refilling plants have been inspected. Out of this number, 510 (77.4%) were classified as high risk stations, 115 (17.5%) as medium risk and 34 (5.1%) as low risk.

Additionally, a two (2) day Risk Assessment exercise on nine (9) selected Senior High Schools was conducted from 15-16 February, 2018 to ascertain the risk posed by LPG handling facilities including Storage vessels to students and adjoining facilities. After the inspection, the school Authorities were informed of the findings and advised to ensure that the anomalies identified are rectified within the shortest possible time.

- v. Training and Capacity Building: Development of modules for training and certification of Bulk Road Vehicle (BRV) drivers in the industry; Operational and safety training for Fifty four (54) LPG installers; Industry safety compliance practices training for Safety and Compliance officers of LPG Marketing Companies.
- vi. Stakeholder Engagement and Consumer Education Sensitization: Regional engagement of media personnel to educate them on the LPG Policy and the CRM; Television and Radio discussions on CRM; Pilot engagement held with residents of Nima in the Greater Accra Region; Educational campaigns on the safe use of LPG at 886 consumer facilities (including: restaurants, homes, chop bars etc.) across the country; Accra

stakeholder engagement held on 8 March, 2019.



Above: Deputy Minister of Energy, Dr. Mohammed Amin Adam with The Second Lady, H.E. Samira Bawumia giving his remarks at the Greater Accra stakeholder engagement.

Below: Some stakeholders engaged (Photo credit: Gloria Nyanteh, NPA)



Development of Regulations for Improved Biomass Cookstoves

The Energy Commission held a Stakeholders' Consultative Meeting on the Draft Energy Performance Standards and Labelling Regulations for Improved Biomass Cookstoves on 26 February 2019 at the CSIR-STEPRI Auditorium in Accra.

The opening remarks was delivered by Mr. Kofi Adu Agyarko, Director of Renewable Energy, Energy Efficiency and Climate Change (REEECC) at the Energy Commission. He emphasized the need for standards and pointed out that the biomass sector of Ghana

is one of the sectors not regulated, except the export market which is very small in comparison to the local market. He noted that due to the lack of regulation of the biomass sector, there are challenges in getting data for planning, high-level lobbying and justifying the need for support from the government.

An address was given by Dr. Alfred Ofori Ahenkorah, the Executive Secretary of the Energy Commission. In his address, he talked about reducing smoke related diseases and household air pollution from the use of inefficient biomass cookstoves which affect women the most. He was of the view that the proposed Regulations could address these health, safety and sustainability issues. He encouraged the participants to be very open and constructive with their criticism to help shape and make the Regulations an inclusive one.



Dr. Alfred Ofori Ahenkorah addressing participants

Highlights of the draft Regulations was presented by Paula Edze, Energy Commission.

General issues raised and suggestions made on the draft Regulations are summarised below:

- * Stakeholder roles should be clearly defined since the document mentions the regulator but all stakeholders have a part to play, such roles should be clearly defined.
- * The transition period of 6 months given under Regulation 26 is too short, at least

a year is okay.

- * Manufacturers called for increased capacity building so as to enable artisans who mostly dominate the market meet the requirements of the Regulations.
- * Machines are required to standardize the production process and reduce variations among product models. The government could support with that.
- * Awareness creation needs to be key to change people's attitudes toward using improved biomass cookstoves.
- * Language used for labelling scheme should not only be the English language, it should cover local languages.
- * There is the need to change the scope of the Regulations and focus on portable stoves only for ease of implementation.
- * Consider designing a separate label for pellet based cookstoves which are forced draft. This is because they are cleaner and more efficient than charcoal or firewood based natural draft cookstoves.
- * The World Trade Organisation (WTO) has introduced new policies which requires that new Regulations are shared with WTO for their review six (6) months to the intended date of submission to Cabinet or Parliament. The draft Regulations should therefore be shared with the Ghana Standards Authority for onward submission to WTO for their review.

Detailed review of the Regulations were done by the participants and recommended amendments adopted by general consensus.

In his closing remarks, Mr. Agyarko thanked participants for their active participation, constructive criticisms and suggestions. He assured participants that the draft Regulations would be revised to reflect decisions made at the meeting.

The meeting was attended by fifty four (54) stakeholders made up of representatives from: cookstove manufacturing and distribution businesses; the two cookstove test laboratories; non-governmental and

developmental organisations; Ministry of Energy; Ministry of Local Government and Rural Development; Ghana Health Service; Ghana Standards Authority; National Petroleum Authority; and the Energy Commission. The meeting was jointly facilitated by Mr. Ebenezer Ashie and Mr. Kofi Adu Agyarko of Energy Commission.



Some participants at the meeting

National Woodstove Challenge

SNV Netherlands Development Organization continues to facilitate the development of sustainable modern energy markets in Ghana to scale-up access for leveraging the benefits on health, climate resilience and economic development through the empowerment of women and youth, besides the private and public sectors.

SNV, in partnership with the Ghana Alliance for Clean Cookstoves and Fuels (GHACCD), the Sustainable Energy for All (SEforALL) Secretariat of the Energy Commission, the Ministry of Energy and with financial support from the Global Energizing Development (EnDev) Partners, launched a "National Improved Woodstove for Households Challenge" – an initiative that has successfully introduced new improved woodstove designs and kick-started a rural woodstove market development programme in Ghana. The challenge was supported under the Strategic Support to the Clean Cooking Sector in Ghana Project.

The Challenge is an important step that has spurred indigenous innovation towards addressing the prevailing technological gap in

the woodstove sub-sector. It is also a critical intermediate action for areas where the penetration of LPG can only be expected in the longer term, or where fuel mixing is necessitated by the preparation of traditional foods or as a coping strategy.

This is a major step of a bigger plan aimed at facilitating a comprehensive development of Ghana's nascent improved woodstove sector to achieve enhanced demand, strengthened supply, expanded access and a thriving clean cooking market.

Eight stove prototypes were submitted for the challenge. After a thorough technical performance (thermal efficiency, emissions, safety, durability and time efficiency) and marketability (ease of operation and mobility, production cost estimate, aesthetics, and ease of manufacturing) assessment by a Committee made-up of experts from key research institutions and consumer groups, three of the prototypes were awarded prizes as Best Performing Stoves.



Finalists of the challenge (Photo credit: Alex Kwame Donyinah, SNV)

The winning stoves are:

- * Obahemaa Stove by Nasam Brand Enterprise –1st Position
- * Donago Stove by Appro-Earth Consult – 2nd Position
- * EJA Stove by StovHoms Company Ltd. – 3rd Position

The thermal efficiency and safety score of these stoves are: 42% , 60; 25.2%, 72; and 16.8% and 12; respectively.



Winner of the challenge, Founder of Nasam Brand Enterprise (left) receiving the award from Ing. Seth Mahu, Ministry of Energy, supported by representatives from RVD and Energy Commission (Photo credit: Alex Kwame Donyinah, SNV)

The award ceremony was attended by representatives from the Ministry of Energy, Energy Commission, GHACCO, Netherlands Enterprise Agency (RVD), SNV, German Development Corporation, and cookstove entrepreneurs.

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Mainstreaming Clean Cooking Initiatives in Local Government Planning and Budgeting Process in Ghana

Ghana Alliance for Clean Cookstoves and Fuels (GHACCO) has launched an initiative to support three Municipal and District Assemblies (MDAs) to develop a Clean Cooking Strategic Plan (CCSP). The initiative, which is being implemented in Ejisu and Ga West Municipalities and the South Tongu District, is part of the efforts at mainstreaming climate change mitigation and adaptation in local government planning and budget processes in Ghana. GHACCO and its collaborating partners; the Netherlands Development Organisation (SNV) and Clean Cooking Alliance (CCA), have been implementing the Voice for Change Partnership

(V4CP) programme over the last couple of years in the three Municipalities. The programme has successfully created awareness on the environmental, health and economic effects of traditional cooking practices and technologies using mostly biomass fuels and advocated for universal adoption of clean cooking solution in Ghana.



Ejisu Municipal Coordinating Director (3rd from left) and Members of the Municipal Planning Coordination Unit and GHACCO & SNV Team (Photo credit: Mohammed Lukumanu, GHACCO)



South Tongu District Coordinating Director (3rd from left) and Members of the District Planning Coordination Unit Members and GHACCO & SNV Team (Photo credit: Mohammed Lukumanu, GHACCO)

Metropolitan, Municipal and District Assemblies (MMDAs) in Ghana are planning authorities under the National Development Planning System (Act 480). Mandate of the Assemblies includes local level policy formulation within the context of national sectoral policies, planning, budgeting and implementation of development programmes. MDAs have modest sources of funding required for effective implementation of their development initiatives. These include the District Assemblies Common Fund (DACF) established by Act 455 which stipulates that not less than five per cent (5%) of the Gross Domestic Product (GDP) must be paid into the

fund which is disbursed to all District Assemblies in accordance with a formula approved by the Parliament of Ghana annually.

The Amendment Act in 2007 has increased the percentage of the DACF to seven and a half percent (7.5%) of the annual GDP. Other sources of revenues to the MDAs include locally generated revenues (from rates, land sale, fees, licenses, trading services, etc.) and transfers from the Central Government which include grant-in aid, recurrent expenditure transfers, ceded revenue and specialized transfers as outlined in Act 462. The Act empowers Assemblies to make independent investment decisions without external interference. Therefore, mainstreaming clean cooking initiatives in the planning, budgeting and programming of MMDAs is one of the most effective and efficient strategies for facilitating the adoption of clean cooking practices and technologies in Ghana.

The initiative was launched in February, 2019 and would be implemented through July 2019 in all three participating MDAs. GHACCO works closely with the Municipal/ District Planning Coordinating Units (M/DPCU) under the leadership of the respective District Coordinating Directors and Chief Executives. The process involves data collection and analysis, social mobilisation and capacity building for effective participation of all stakeholders, consultative fora at the district and municipal levels, strategy and activity formulation, public hearing and approval by representatives of the Assemblies.

GHACCO and its partners, SNV and CCA will deepen collaboration with the three MDAs for effective marketing and resource mobilisation for the implementation of the strategic plans that will be produced and approved by the Assemblies, under the initiative.

INSPOCCE-School Kitchen Improvement Project (I-SKIP)

The Integrated School Project on Clean Cooking Energy (INSPOCCE/I) School Kitchen Improvement Project (SKIP) seeks to demonstrate how an ideal school kitchen ought to be – a safe and healthier cooking environment. Kitchens where meals are prepared using efficient biomass cookstoves or clean fuels like LPG; served on time and under hygienic conditions. School kitchens could also serve as models for pupils to learn from.

I-SKIP was designed to address some issues identified under the Ghana School Feeding Programme in selected rural and peri-urban basic schools. The issues are:

- * Majority of schools under the School Feeding Programme do not have a school kitchen. Hence, most of the caterers under the programme cook off-site and transport the meal to the school, often resulting in late delivery of the meals. Those who cook on the school compound do so under makeshift structures which do not provide proper cover against the elements of the weather and safety of foodstuffs and cooking equipment.
- * Most of the caterers use inefficient biomass cookstoves which exposes them and the pupils to health and environmental hazards as well as higher cooking fuel budget.

Phase one of I-SKIP focuses on transforming 10 school kitchens from makeshift structures and traditional biomass cookstoves to permanent structures equipped with efficient biomass cookstoves or clean cookstoves (LPG).

Activities implemented so far under phase one include:

- * Establishment of baseline on the state of school kitchens in the 10 selected schools in the northern and southern zones of Ghana.
- * Awareness creation and training of 50 school staff (caterers, administrators and canteen managers) in the safe use of LPG stove and the benefits of clean cooking

solutions and practices.



Some participants at the southern zone training in Nsawam (Photo credit: World Education Inc.)

Under phase two, lessons learned from phase one would inform the design and implementation of a national school kitchen improvement project.

I-SKIP is being implemented by World Education Incorporated with support from the Clean Cooking Alliance.

INCREASE THE SHARE OF RENEWABLE ENERGY IN THE NATIONAL ENERGY MIX

Ghana Renewable Energy Master Plan

The Energy Commission has officially presented the final draft of the Renewable Energy Master Plan (REMP) for Ghana to the Ministry of Energy for onward presentation to Parliament. The REMP sets clear targets for renewable energy development in Ghana and potential investment opportunities by technologies and resources.

The plan is expected to achieve the following targets by 2030, if fully implemented:

- * increase the contribution of renewable energy in the national electricity generation mix from 42.5 MW in 2015 to 1,363.63 MW, with grid-connected systems totaling 1,094.63 MW;
- * reduce the consumption of biomass fuel for thermal applications through increased adoption of efficient biomass cookstoves;
- * electrify 1,000 off-grid communities using decentralized renewable energy solutions; and

- * promote local content and local participation in the development of renewable energy projects.

The REMP was developed by a team of technical persons from the Ministry of Energy, Energy Commission, National Development Planning Commission, and Academia. It was chaired by the Director for Renewable and Alternative Energy at the Ministry of Energy, Mr. Wisdom Ahiataku-Togobo.

The handing-over ceremony was held on 13 February, 2019 at the Ministry of Energy. Dignitaries present include: Hon. William Owuraku Aidoo, Deputy Minister of Energy in charge of Power; Ms. Rita Welch, Resident Representative, United Nations Development Programme (UNDP) Ghana; Dr. Alfred Ofori Ahenkorah, Executive Secretary, Energy Commission; Members of the technical team that worked on the plan; and some staff of UNDP, DANIDA, and the Ministry of Energy.



From left: Dr. Alfred Ofori Ahenkorah, Energy Commission (presenting the REMP to Hon. William Owuraku Aidoo, Ministry of Energy); Mr. Wisdom Ahiataku-Togobo, Ministry of Energy; and Ms. Rita Welch, UNDP Ghana (Photo credit: UNDP Ghana)

Receiving the REMP on behalf of the Honourable Minister for Energy, Hon. Aidoo gave the assurance that:

"Ministry would make all efforts to facilitate the presentation of the plan to Parliament for approval to secure the country's commitment for its implementation in the long term".

Marking a remark on behalf of UNDP, Ms. Welch noted that the Master Plan offers the country the opportunity to put in place the necessary implementation framework

towards the promotion of the renewable energy sector. She added that:

"The Sustainable Development Goals (SDGs), particularly SDG 7, aims to ensure access to affordable, reliable, and modern energy for all by 2030. The Renewable Energy Master Plan is a blue print and its implementation is critical for the achievement of the SDG 7 in Ghana".



The development of the REMP was supported by the Danish government under the China-Ghana South-South Cooperation Renewable Energy Technology Transfer Project, implemented by the Energy Commission on behalf of the Government of Ghana in collaboration with the UNDP.

The REMP is available here: <http://www.energycom.gov.gh/files/Renewable-Energy-Masterplan-February-2019.pdf>

INCREASE THE NATIONAL RATE OF IMPROVEMENT IN ENERGY EFFICIENCY

Energy Efficiency and Conservation Campaign

Promotional activities are on-going to increase public awareness of the "Certified Appliances" App for refrigerators and air-conditioners. Radio jingles in English and Twi were aired on Sunrise Fm, Koforidua; Skyy Fm, Takoradi; and Volta Star radio, Ho. Live radio discussions on the app and basic

energy efficiency and conservation tips were also held on these radio stations.

The Energy Commission is also collecting market data to update the app and provide up-to-date information on the compliance level of electrical appliance stores under existing Standard and Labelling Schemes.

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Link to the Ghana SEforALL Action Plan: <http://energycom.gov.gh/renewables/se4all>

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