

GHANA SEforALL NEWS

In this Issue

- ◆ 33,748 Households Provided with Access to Electricity under USAID Power Africa Project
- ◆ 17,000 Households in 25 Constituencies reached with LPG Stoves and Accessories for Cooking
- ◆ ISO Standards for Clean Cookstoves and Clean Cooking Solutions to be adopted for Ghana
- ◆ ISEES Facilitates the Construction of 171 Improved Cookstoves for Agro Processing Groups and Schools Nationwide
- ◆ Dissemination of Improved Biomass Cookstoves by Businesses reaches over 1.48 million
- ◆ Adoption of Solar Drying Technology by Agri-businesses Increases
- ◆ Ghana begins Preparation to Implement the Scaling-up Renewable Energy Programme (SREP)
- ◆ More Kerosene Lanterns displaced by Solar Lanterns
- ◆ About 1,800 Persons Participated in the Fourth Ghana Renewable Energy Fair
- ◆ Ten (10) New Standards Developed for Electrical Appliances
- ◆ Certified Appliances App Developed to Promote Energy Efficiency and Conservation
- ◆ 43 Automatic Capacity Banks Installed in Selected Hospitals, Schools and Military Buildings
- ◆ Biogas Association of Ghana Receives Training on Policy Advocacy

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

Contents

Progress on High Impact Priority 1-5 Areas

- * Power Africa
- * Rural LPG Promotion Programme
- * Development of Regulations for Biomass Cookstoves
- * ISEES Sustainable Energy for Agriculture Programme
- * Dissemination of Improved Biomass Cookstoves
- * Solar Drying on the Rise
- * Scaling-up Renewable Energy Programme (SREP)
- * ISEES Household Energy Programme
- * Ghana Renewable Energy Fair
- * Energy Efficiency and Demand Side Management Project
- * Energy Efficiency and Conservation Campaign
- * Energy Efficiency Retrofit in Public Buildings

SEforALL Related Events Held 5

- * Biogas Association of Ghana Receives Training on Advocacy

PROGRESS ON HIGH IMPACT PRIORITY AREAS

ENSURE UNIVERSAL ACCESS TO MODERN ENERGY SERVICES

* Electricity Access

Power Africa

Power Africa is a U.S. Government-led partnership working to increase access to electricity in sub-Saharan Africa. Power Africa has been working in Ghana since 2014 to boost both power generation and electricity connections for homes and businesses, and create an enabling framework to facilitate development in the energy sector. Power Africa's Beyond the Grid (BTG) programme has been providing support to eleven companies active within Ghana's off-grid solar sector through a combination of enabling environment activities; direct support to companies, financial service providers (FSPs), and potential investors; and collaboration with other major stakeholders and programmes operating in the country. Companies supported include PEG, Burro Brands, Offgrid-Electric/ZOLA, Villageboom/Sunhut, Black Star Energy, Wilkins Engineering,

Greenlight Planet, Stella Futura, Eco Zoom and NewGen.

The programme has provided the following specific support to beneficiary businesses:

- ◆ Support in financial planning, cost analysis, developing long-term business strategies, and organising appropriate documentation to ensure that the companies can convince financial institutions and investors of their bankability and low risk.
- ◆ Support to help the companies more effectively distribute and retail their products, including developing new partnerships with other distribution and retail companies.
- ◆ Assessments of the companies' current off-grid payment strategies and supporting them to improve their reach and sales through a range of payment options such as "Airtime for Solar" and partnerships with various aggregators to develop payment gateways, as well as solutions to help check the credit worthiness of their clients.



Installer training beneficiaries on the use of solar lanterns under the USAID Power Africa Project (Photo credit: Richard Hammond, Tetra Tech)

Power Africa has contributed to electricity access in Ghana by facilitating the provision of solar home systems for lighting and other low power applications in 33,748 households as at September 2018.

* Improve Access to Clean Cooking Solutions

Rural LPG Promotion Programme

Under the government's Rural LPG Promotion Programme which has been running for the past five (5) years, 17,000 households have been given access to LPG for cooking in 2018 through the provision of single burner LPG stoves, and accessories. 25 constituencies in the Ashanti, Eastern and Central regions of Ghana benefitted from the programme.

Development of Regulations for Biomass Cookstoves

The Ghana Standards Authority (GSA) published national Performance Requirements Standard for Biomass Cookstoves in December 2017. Following the publication of international standards for Clean Cookstoves and Clean Cooking Solutions by the International Organisation for Standardisation (ISO) in June 2018, GSA in consultation with key stakeholders has decided to adopt the ISO harmonised laboratory test protocols (ISO 19867-1:2018 (E)) and vocabulary as Standards for Ghana. Steps are being taken to make this substantive for Ghana.

In line with the above, the Energy Commission has developed draft regulations to implement a labelling scheme for biomass cookstoves. The Regulation is expected to be finalised and submitted to Parliament by end of 2019.

Work on the Standard for biomass cookstoves in Ghana are supported by the UNDP and the Clean Cooking Alliance.

ISEES Sustainable Energy for Agriculture Programme (SEAP)

The Institute for Sustainable Energy and Environmental Solutions (ISEES) as part of its Sustainable Energy for Agriculture Programme seeks to promote productive use of energy in agriculture through access to sustainable energy solutions for agri-businesses. In the year under review, ISEES facilitated the construction of 171

improved cookstoves for agro-processing groups and schools across the country with support from various development partners.

Below is a summary of interventions made:

- ◆ Installation of 20 improved fish smoking ovens and fish frying stoves for women groups in the Bomigo Island; training of 10 young artisans in the construction of improved fish smoking ovens; and sensitisation and training of beneficiaries in the protection of mangrove ecosystems and provision of 400 cassia seedlings to establish sustainable woodlots as feedstock for thermal applications with support from the Canadian Funds for Local Initiatives (CFLI).
- ◆ Installation of 30 improved fish smoking stoves in Tema, Nungua, and Elmina under the USAID Sustainable Fisheries Management Project.
- ◆ Installation of 100 fish stoves in Nungua, Cape Coast, Elmina, Moree, Axim, Sekondi and Discove communities under the World Bank's West African Regional Fisheries Programme (WARFP), implemented in collaboration with the Fisheries Commission and LEDing Ghana.
- ◆ Installation of 13 fish stoves in Sanzule community to help improve the livelihoods of women affected by mining and oil exploration in the Western Regions of Ghana with support from ENI Ghana and Technoserve

Under the Institute's Household Energy Programme:

- ◆ Clean and improved cooking solutions awareness creation activities were organised and over 150 ethanol stoves were sold to urban households in the Ashanti and Greater Accra Regions in collaboration with the Ghana Federation of the Urban Poor and People's Dialogue on Human Settlements.
- ◆ ISEES is also conducting market studies to access the adaptability of Jikokoa

charcoal stoves, Kuniokoa firewood stoves and Xundaco household firewood stoves among peri-urban firewood and charcoal end-users in Ghana. The studies are being done in partnership with BURN and Xundaco.

Dissemination of Improved Biomass Cookstoves

The Ghana Alliance for Clean Cookstoves has been organising events to increase awareness on the benefits of using improved biomass cookstoves for cooking. These campaigns, coupled with efforts made by businesses to make improved cookstoves available on the market is increasing the penetration of improved cookstoves in households and commercial cooking ventures.

About 188,805 cookstoves were reported to have been sold from January to September 2018 by nine (9) cookstove manufacturers for domestic and commercial cooking applications. In all, 8,989 firewood and pellet commercial cookstoves for agro-processing and fish smoking; and 1,479,493 domestic charcoal, pellet and ethanol cookstoves have been disseminated from 2012 to September 2018.

* Promote Productive Uses of Energy

Solar Drying on the Rise

The adoption of solar drying technology for post-harvest processing of farm produce by farmer groups is increasing as a result of awareness creation activities undertaken by the SEforALL Ghana Secretariat of the Energy Commission in collaboration with the German Development Cooperation's Energising Development (EnDev) Programme. PENS Food Bank continues to be the main technology provider at the heart of this increased adoption of the solar drying technology in Ghana.

The enterprise, PENS Food Bank constructed 31 solar dryers for farm based entities and businesses such as the Ghana Grains Council,

Permaculture, Aspire Food Group, Pee Farms, etc. Regions covered include the Ashanti, Brong Ahafo, Eastern, Greater Accra and Volta. The produce dried by this technology are maize, tiger nuts, moringa, rice, cassava, and mushroom.



Mobile Solar Hybrid Dryer by PENS Food Bank

The total number of solar dryers constructed from 2015 to September 2018 is 111.

INCREASE THE SHARE OF RENEWABLE ENERGY IN THE NATIONAL ENERGY MIX

Scaling-Up Renewable Energy Programme (SREP)

The Scaling-up Renewable Energy Programme (SREP) was designed by the Government of Ghana to facilitate the achievement of its goal to increase the penetration of renewable energy in Ghana's electricity mix. As part of preparatory activities to commence full implementation of the programme in 2019, stakeholders' engagement on net-metering and sensitisation workshops were held for 139 representatives of Public Distribution Utilities, Small and Medium-Scale Enterprises (SMEs), Association of Ghana Solar Industries (AGSI), Renewable Energy Association of Ghana (REAG) and the Consumer Protection Agency from 30th October to 8th November, 2018 in all the ten (10) regions of Ghana.

The objective of the stakeholder engagement workshops was to introduce the relevant stakeholders to SREP and the net metering component to prepare them for its implementation.

Below are some recommendations made by participants at the workshops:

- ◆ The Net Metering Scheme should be reviewed to make it attractive to both the distribution utilities and consumers.
- ◆ Some individuals who live in the communities where solar home systems will be installed under the programme should be trained to maintain the installations.
- ◆ Consultants engaged to undertake various feasibility studies should share findings with beneficiary solar installers and consumer associations across the regions before submission to the implementing Ministry of Energy.
- ◆ The Energy Commission must collaborate more effectively and frequently with solar installers in the Northern sector of Ghana.



Ing. Seth Mahu of the Ministry of Energy sensitising participants on Net Metering during one of the regional workshops (Photo credit: Kwasi Dhene Akuffo, Energy Commission)

A comprehensive report will be submitted to the Climate Investment Fund Board by June, 2019 for full implementation to begin.

ISEES Household Energy Programme

This year, ISEES disseminated 652 solar lanterns to households and street food vendors as part of its efforts to improve access to sustainable energy solutions in rural and peri-urban communities in Ghana.

The Household Energy Programme seeks to displace the use of kerosene lanterns for solar lanterns by households and street food vendors through a rent to own financing scheme.

ISEES is open to working with interested private enterprises, development partners and government institutions to increase access to renewable energy and clean cooking solutions in rural and peri-urban areas of Ghana. For more information visit www.iseesghana.org/householdenergy/

Ghana Renewable Energy Fair

The Energy Commission together with the Ministry of Energy organised the 4th Edition of the Ghana Renewable Energy Fair from 9-11 October, 2018 at the Accra International Conference Centre. The theme for this year's event was "Renewable Energy: Exploiting Energy Resources at the District Level."



Official opening of the exhibition section of the Fair by the Vice President of Ghana and selected dignitaries

Dignitaries who graced the event include H.E. Dr. Mahamudu Bawumia, Vice President of the Republic of Ghana; Dr. Stefan Oswald, Director for Sub-Saharan Africa, German Federal Ministry of Development and Economic Cooperation; Hon. William Dwuraku Aidoo, Deputy Minister for Power; Dusseynou Nakoulima, Director, Renewable Energy and Energy Efficiency, African Development Bank, Ivory Coast; Prof. George Panyin Hagan, Board Chairman, Energy Commission; Esther Wangombe, Senior Deputy Director,

Renewable Energy, Ministry of Energy, Kenya; and Abdoulazize Saidou Abdou, Head of Biomass Energy Division, Ministry of Energy, Niger.

In delivering the key note address, the Vice President emphasised the role that renewable energy technologies could play in the implementation of Government interventions such as "One Village, One Dam" and "One District, One Factory", among others.

The Fair had a lot of interesting technical session attended by the public and industry players. Below is a summary of the topics discussed and some outputs:

- ◆ Woodfuel Regulations for Ghana (draft): the Fair was used to solicit for inputs from stakeholders on the draft Woodfuel Regulations developed by the Energy Commission to enforce the sustainable production, harvest, process and use of woodfuel resources. The Regulation provides for the establishment of a bulk supply point where woodfuels would be sorted and packaged by weight not volume as currently done. It is expected that the effective implementation of the Regulations would facilitate the collection of accurate data on woodfuel production, supply and use in Ghana.
- ◆ A Debate on: Who is Best Placed to Lead the Renewable Energy Push for Delivering Universal Access to Electricity—The State or the Private Sector? The debate was between representatives of the public sector (Ministry of Energy) and the private sector (Association of Ghana Solar Industries and a mini-grid developer). It ended on the consensus that public-private partnership is the best approach to use for mini-grid electrification not just public-led or private-led. The Ministry pledged to give room for the private sector to participate in last mile connections by providing design and construction services while the government oversees management of the installation and assets.



Debaters and expert discussants on the mini-grid Electrification Policy

- ◆ Job Creation under Renewable Energy: representatives from the Association of Ghana Solar Industries (AGSI), Biogas Association of Ghana (BAG) and the Ghana Alliance for Clean Cookstoves and Fuels (GHACCO) presented on job opportunities in their respective fields and potential number of jobs to be created if some provisions are made by the government to make the sector attractive to businesses and consumers.
- ◆ The Emergence of Green Buildings and the Contribution of Renewable Energy and Energy Efficiency: the session was used to discuss the role renewable energy and energy efficiency plays in making a building green. Participants were exposed to the International Finance Corporation's EDGE Software for designing and assessing green buildings. The features of the new Mother and Baby Unit of The Komfo Anokye Teaching Hospital (KATH) that makes it green was shared by the contractor, Africa Building Partners.



Eric Gene, CEO of Africa Building Partners educating participants on choices made in making the Mother and Baby Unit of KATH green

Opportunity was also given to researchers from academic and private institutions to share findings from key renewable energy and energy efficiency researches conducted.



A participant who won an improved cookstove through a lucky dip supported by exhibiting businesses

The three day exhibition and conference event was patronised by 1,800 persons from public and private institutions and businesses, development community, civil society, and the media.

The Fair was supported by Wilkins Engineering; ECOWAS Centre for Renewable Energy, and Energy Efficiency (ECREEE); Strategic Power Solutions; German Development Cooperation; Electricity Company of Ghana; Northern Electricity Distribution Company; Ghana Grid Company Limited; Bui Power Authority; and the Media.

INCREASE THE NATIONAL RATE OF IMPROVEMENT IN ENERGY EFFICIENCY

Energy Efficiency and Demand Side Management Project

The Energy Commission in collaboration with the Ghana Standards Authority has developed and gazette energy efficiency standards for 10 electrical appliances. The Commission is working on the Regulations to implement the standards. Baseline studies have also been conducted to retrofit selected streetlights.

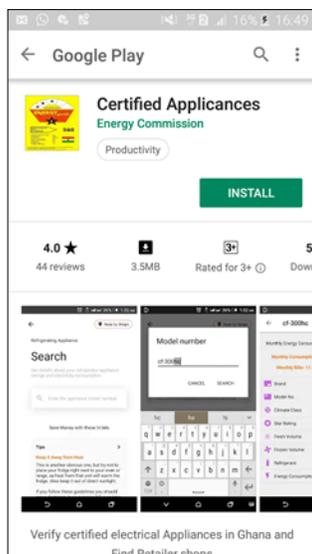
The Energy Efficiency and Demand Side Management Project is supported by the

United States Millennium Challenge Compact 2.

Energy Efficiency and Conservation Campaign

The Energy Commission in collaboration with the media has increased public awareness of energy efficiency and conservation practices through radio and television discussions and adverts. Over 2,000 leaflets and brochures on energy conservation were disseminated. Military persons nationwide and students of the British International School, East Legon, Accra were also engaged on energy efficiency and conservation.

The existing energy efficient refrigerating appliance app has been updated into "Certified Appliances" app for refrigerators and air conditioners. The app can be downloaded from google "Play Store" on android devices.



Screen shot of the Certified Appliances app

Energy Efficiency Retrofit in Public Buildings

To reduce the waste of energy in public buildings, improve energy use efficiency and reduce expenditure of public buildings on electricity, the Energy Commission has supervised the installment of 43 automatic capacitor banks in selected hospitals, schools

and military personnel buildings in the Greater Accra Region. The Commission is collecting data to assess total savings made on the project.

SEforALL RELATED EVENTS HELD IN THIS QUARTER

BIOGAS ASSOCIATION OF GHANA RECEIVES TRAINING ON POLICY ADVOCACY

Thirty (30) members of the Biogas Association of Ghana have received training on effective policy advocacy to improve their business environment. The four-day training is part of a project to promote policy advocacy for the conversion of septic tanks into Bio-digesters.



Advocacy training participants (Photo credit: Lovans Dwusu-Takyi, ISEES)

The training was conducted by Mr. Joseph Awantogo, a renowned BUSAC advocacy trainer who took participants through the principles of business advocacy, development of advocacy communication tools, how to prepare an advocacy proposal and conduct constructive advocacy, the use of media as an advocacy tool, and effective private sector advocacy.

The training was supported by the Business Advisory Challenge (BUSAC) Fund, DANIDA, USAID and European Union.

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Link to the Ghana SEforALL Action
Plan: [http://energycom.gov.gh/
renewables/se4all](http://energycom.gov.gh/renewables/se4all)

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