

GHANA SEforALL NEWS

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PROGRESS ON HIGH IMPACT PRIORITY AREAS

ENSURE UNIVERSAL ACCESS TO MODERN ENERGY SERVICES

* **Improve Access to Clean Cooking Solutions**

Rural LPG Promotion Programme

The Rural LPG Promotion Programme which was introduced by the Ministry of Energy in 2013 to accelerate the penetration of LPG for cooking in unserved and underserved rural communities is still ongoing. The programme has transitioned from the dissemination of free LPG cylinders, single burner stoves and accessories to beneficiaries to the distribution of only stoves and accessories. This is due to the national policy to transition to the Cylinder Recirculation Distribution Model to remove the issue of high cost of cylinders and safety which has been identified as key barriers to the adoption of the clean fuel for cooking.

The programme, in 2019, saw the distribution of 18,500 LPG stoves and accessories in nine (9) of the 16 regions of Ghana, across 31 Constituencies. The beneficiary regions are the Ahafo, Ashanti, Bono, Central, Eastern, Greater Accra, Upper West, Volta and Western regions.

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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- * Clean Cooking Forum 2019 Held in Nairobi, Kenya
- * 2019 ISO TC 285 Meeting Held in Nairobi, Kenya

A total of 151,500 cylinders and 132,800 stoves and accessories have been disseminated from 2013-2019, under the programme. It is led by the Downstream Petroleum Directorate of the Ministry of Energy.

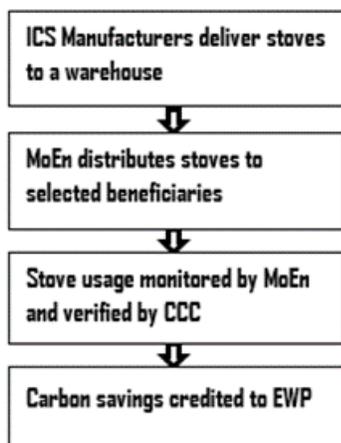
Ghana-Korea Improved Biomass Cookstove Carbon Project

A stakeholder consultation meeting on the 500,000 improved cookstoves to be disseminated under a carbon scheme was held by the Ministry of Energy (MoEn) on 27 November, 2019 at the Accra International Conference Centre (AICC). The meeting provided a platform for stakeholders including households, manufacturers, associations, governmental and non-governmental organisations to learn more about the project, and provide input to complete the processes for the implementation of the project.



Group Photo of the Meeting Participants
(Photo credit: Ministry of Energy)

The meeting was attended by 69 national stakeholders including the media and Korean delegates from the Korean East-West Power Company Limited (EWP), Climate Change Centre (CCC), Worldwide Eco and Energy Solutions (WECCS), Korea Embassy, and Green ENS.



According to the Ministry, the project will be implemented using the process shown in the preceding schematic.

On next steps, the Ministry has secured Cabinet approval to implement the project. What is left is the signing of implementation agreement between the CCC and the MoEn.

INCREASE THE SHARE OF RENEWABLE ENERGY IN THE NATIONAL ENERGY MIX

NATIONAL ROOFTOP SOLAR PROGRAMME

The National Rooftop Solar Programme which was introduced by the Energy Commission in 2017 to promote increased access to renewable energy based electricity in off-grid communities has been strategically packaged as a funding proposal to be considered by the Green Climate Fund. This is aimed at attracting external financing to increase the sustainability of the programme and reduce the financial burden on the Energy Commission.

The year 2019 was used to develop an implementation framework (draft) for the rural off-grid household component of the programme to support government's effort to achieve universal access to electricity by 2020.

The Commission also assessed the performance of 301 of the 1,263 systems supported under the programme. The assessment showed that 94.68% (285) of the systems examined were fully functional. The remaining 16 had issues of faulty batteries or inverters.

The current phase of the programme seeks to support the installation of 1,200 solar PV home systems in off-grid rural households.

ENERGY COMMISSION INCREASES PUBLIC AWARENESS OF ENERGY ISSUES

The annual Ghana Renewable Energy Fair (RE Fair) which was instituted by the Energy Commission in 2015 marked its fifth anniversary with the re-launch of the Commission's National Energy Symposium which focuses on broad energy sector issues. The event, 5th Ghana Renewable Energy Fair and National Energy Symposium was held from 7-11 October, 2019 at the Accra International Conference Centre.

The theme for the Fair was "Opportunities for Renewable Energy and Energy Efficiency in a Constrained Energy Sector." Representing the President of the Republic of Ghana as the Special Guest of Honour and Keynote Speaker was Hon. Yaw Osafo Maafo, Senior Minister. Hon. Maafo launched the "Drive Electric Initiative," and re-launched the "National Energy Symposium." The Drive Electric Initiative is a flagship programme by the Energy Commission to promote the use of electric cars to consume the nation's excess electricity and reduce carbon emission by the transport sector.



Photo Above: Speakers at the Opening Ceremony

Photo Below: Dignitaries and Participants at the Opening Ceremony
(Photo credit: Energy Commission)



Topics discussed during the 3-day conference of the RE Fair included:

- * Issues with grid power over-capacity
- * Capacity building in energy efficiency in investment grade energy audit
- * Can renewable energy and energy efficiency contribute to providing less expensive power going forward?
- * Business and regulatory challenges and solutions for private sector investments in renewable energy
- * Sustainable energy service centre roadmap and education programme being developed under the Millennium Challenge Compact
- * Etc.

To increase awareness and encourage innovation among the youth, the Commission launched a Senior High School Renewable Energy Challenge for schools in the Greater Accra Region of Ghana. Forty nine schools were invited and twenty nine schools responded to the call and submitted their project concepts. Six (6) schools made it to the final stage of the competition which was held on day two of the Fair. Below were the finalists and what they worked on:

1. Achimota Senior High School—Homemade mini solar panel
2. Ebenezer Senior High School—Wind power generation
3. Forces Senior High School—Solar Dryer
4. Manhean Senior High School—Electricity generation from sea water
5. Presbyterian Senior High School, Osu—CD solar panel
6. Tema Technical Institute—Footsteps power generation (Piezoelectricity)



Achimota Senior High School Team Demonstrating Electricity Generation from a Solar Panel Made from Used Mica Plastics, Polythene Sheets, Copper Wires and Diode (Photo credit: Energy Commission)

The competition was won by Ebenezer Senior High School. The lead presenter for the same won the Best Presenter Award. The Millennium Development Authority (MiDA) and Development Environment Services Limited (DESL), provided support for the awards given to the six finalists.



Hon. Ms. Gifty Twum Ampofo, Deputy Minister of Education Presenting an Award to the Winner of the High School Challenge, Ebenezer Senior High School (Photo credit: Energy Commission)

The National Energy Symposium was held on the last two days of the Fair under the theme "Energy and Sustainable Development in the Era of Ghana Beyond Aid." Topics discussed include:

- * Energy and sustainable development in the era of "Ghana beyond aid"
 - * Prospects and challenges by players in the industry
 - * Prospects and challenges by power utilities
 - * Overcoming financial challenges
 - * Gender, security and environment

Dignitaries at the event included: Hon. Yaw Osafo Maafa, Senior Minister; H.E. Christoph Retzlaff, Ambassador of Germany; H.E. Mrs. Imane Duaadil, Ambassador of Morocco; H.E. Nesrin Bayazit, Ambassador extraordinary and plenipotentiary of the Republic of Turkey; Hon. William Dwuraku Aidoo, Deputy Minister of Power, Ministry of Energy (MoEn); Hon. Dr. Mohammed Amin Adam, Deputy Minister of Petroleum, MoEn; Hon. Joseph Cudjoe, Deputy Minister of Finance and Infrastructure, MoEn; Hon. Ms. Gifty Twum Ampofo, Deputy Minister of Education; Prof. George Panyin Hagan, Board Chairman, Energy Commission (EC);

Prof. Honore Bogler, Chairman, ECOWAS Regional Electricity Regulatory Authority (ERERA); Mr. Martin Eson-Benjamin, CEO, MiDA; Ing. Emmanuel Antwi-Darkwa, CEO, Volta River Authority; Mr. Rajmohan Rangarai, CEO, DESL; Ms. Monica Ankrah, Regional Director, Ghana Education Service; Ing. Oscar Amonoo-Neizer, Executive Secretary, EC; Dr. A.K. Ofose Ahenkorah, Former Executive Secretary, EC; etc.

On participation, the number of people who participated in the conference sessions ranged from 236-534 per day. In all, there were 40 speakers and session facilitators, and 143 student participants from 17 schools. A total of 2,619 people patronised the conference and exhibition. Exhibition was done by 34 companies.

The Fair was organised by the Ministry of Energy and the Energy Commission in partnership with MiDA, and German Development Cooperation. It was sponsored by the Volta River Authority, Bui Power Authority, Ghana Grid Company, Wilkins Engineering, Ghana Oil (GOIL) and DESL.



Fair Exhibition Booths (Photo credit: Energy Commission)

INCREASE THE NATIONAL RATE OF IMPROVEMENT IN ENERGY EFFICIENCY

NATIONWIDE TRAINING ON ENERGY EFFICIENCY AND CONSERVATION FOR THE SECURITY AGENCIES

In 2018, the Commission commenced training on energy efficiency and conservation for security agencies (Military, Police, Prisons

Service, Fire Service, and Immigration) with the main objectives to:

- * create consumer energy efficiency awareness among Officers of the security agencies and their families to reduce their electricity consumption;
- * inspire changes in energy use behaviour in barracks and offices; and
- * reduce the total energy bill of security agencies.

The Commission started the training in 2018 with the military and has so far trained military officers in all the Armed Forces Garrisons (Tamale, Sunyani, Kumasi, Ho, Takoradi, Accra and Tema). Following the successful training of the military, the exercise was extended to the Police Regional Commands nationwide in 2019.



Mr. Kennedy Amankwa, Chief Programme Officer Energy Commission, Speaking to Police Officers in Tema (Photo credit: Energy Commission)

The team was able to train a total of 1,594 participants from the Ghana Police Service, their families and civilian employees in phase 1 of the programme. The second phase of the training will be undertaken in the first quarter of 2020 and will cover the Regional Commands in the three newly created regions and the Greater Accra Region.

PARTNER SPOTLIGHT

EKEM ART POTTERY LIMITED, WINNEBA

Ekem Art Pottery Limited was established as a limited liability company in the year 2000, in Winneba, Central Region of Ghana. The object of the company includes the production of ceramics and refractories and other industrial and domestic ceramic products.

The company started with the production of ceramic arts and later changed to the production of refractories, stoves and liners. It uses different types of clay, silica, alumina, firewood and sawdust mixed in specific proportions to make products that are thermal efficient.

The clay is mined from a nearby location in Winneba, while the rest of the materials are sourced from the Western and Volta regions of Ghana.

Management and Staff Strength

Mr. Richard Coffee Ekem is the founder and managing director of the company. He graduated from the University of Science and Technology (now KNUST) with Bachelor of Arts in Ceramics in 1970.

Mr. Ekem taught Ceramics at the Winneba Secondary School for five years. He has also undertaken many research and produced high quality decorative pieces like flower vases and tableware; crucibles for mining companies; and refractories. Mr. Ekem is a beneficiary of Empretec, a capacity-building programme of the United Nations Conference on Trade and Development (UNCTAD).



Mr. Ekem (third from left, front row) and His Staff (Photo credit: Paula Edze, Energy Commission)

The company has a total of 30 staff (28 men and 2 women), largely trained by the Managing Director.

Production Capacity

An average of 5,000 stove liners are produced monthly and several thousands of crucibles as requested.

Impact Made

Ekem Art Pottery is the main supplier of liners for stove manufacturers under the "Gyapa" brand (largest producers of improved cookstoves in Ghana). The regions supplied are Greater Accra, Western, Eastern and the Ashanti Regions.



Photo Above: Artisan Moulding a Liner with Clay

Photo Below: Liners being Sun Dried

(Photo credit: Paula Edze, Energy Commission)



Ekem also produces bricks for institutional stove producers. The company partnered with an entrepreneur to build institutional stoves for commercial food vendors and for school feeding at St. Mary's, Presbyterian Boys', Odorgonkor, and Accra Academy Senior High Schools.



Stove Built for Kenkey Seller at Amasaman
(Photo credit: Ekem Art Pottery Ltd.)

Ekem supplies crucibles to Interkek Minerals Limited, Tarkwa and other clients.



Crucibles
(Photo credit: Paula Edze, Energy Commission)

Prospects

The company is open to joint venture partnership to invest into modern machinery, improve on the quality of its products, scale-up, improve the conditions of service of personnel and make the business more sustainable.

SEforALL RELATED EVENTS HELD

CLEAN COOKING FORUM 2019 HELD IN NAIROBI, KENYA

The Clean Cooking Alliance and the Kenya Ministry of Energy co-hosted the Clean Cooking Forum 2019, held at the Radisson Blu Hotel in Nairobi, Kenya, from 5-7 November, 2019.

The theme for the forum was “Investment. Innovation. Impact.” The event attracted 550 attendees from 50 countries across the globe working to build an inclusive and sustainable industry that make clean cooking solutions accessible to the three billion people who still use detrimental, unsustainable cooking solutions.

The forum hosted 20 discussion and experience sharing sessions on a variety of topics including: the use of catalytic research to inform innovative policies; investing in women-led businesses; experience sharing in standard setting and implementation; what investors look for; the importance of impact research; enhancing clean cooking supply chain; achieving affordability through crowdfunding; using data to accelerate market growth; etc.



Panel Discussion on Standard Setting and Implementation. In Photo— Paula Edze, SEforALL Ghana Coordinator (Second from Right), (Photo credit: Dr. Julius Ahiekpor, CEESD)

The forum was used to launch the “Clean Cooking Is” social media campaign to stimulate discussions and increase awareness on cooking issues worldwide. The event was also used to honour Neha Juneja, the CEO and Co-Founder of Greenway Appliances, India’s largest clean cookstove enterprise as the 2019 Woman Entrepreneur of the Year. The award

recognises outstanding female leaders in the household energy sector who are advancing clean cooking solutions in emerging markets.



Julie Gichuru, Renowned Media Personality in Kenya Taking a “Clean Cooking Is” Video (Photo credit: Clean Cooking Alliance)

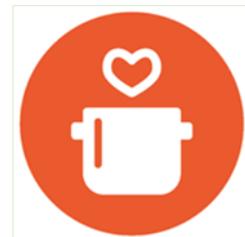
Quotes on “Clean Cooking Is”

“Clean Cooking is healthier mothers and healthier families”

- Julia Roberts, award-winning actor.

“Clean cooking is my life”

- Chef Extraordinaire Sanjeev Kapoor.



For more information on the clean cooking campaign, visit www.cleancooking.is

To foster business partnerships, 185 business-to-business meetings were held between over 100 entrepreneurs and investors from over 30 countries.

Site visits were also organised to five innovative clean cooking solutions facilities and initiatives in and around Nairobi. It was attended by about 150 participants. Businesses visited were BURN Manufacturing’s biomass stove facility, Proto Energy’s cylinder manufacturing and refilling factory, and KOKO Networks’ ethanol cookstove facility. To showcase household adoption of clean solutions introduced through government supported programmes,

participants visited some homes using biogas and electric cooking appliances introduced under the Modern Energy Cooking Services (MECS) programme.

Below is a summary of some commitments and announcements made at the forum:

- * The Kenyan government committed to achieving universal access to clean cooking by 2028, two years ahead of the UN Sustainable Energy for All (SEforALL) target of 2030.
- * The Kenya Household Cooking Sector Study report was launched by the Ministry of Energy. The Ministry also pledged to lead an advocacy for the United Nations to establish an "International Day of Clean Cooking" to increase awareness on the need for governments to promote access to clean cooking solutions.
- * The World Bank shared on its \$500 million Clean Cooking Fund.
- * From the financial sector, Equity Bank, Nairobi, pledged to invest \$100 million in the clean energy sector with more focus on clean cooking solutions financing over the next two years.
- * Dr. Kandeh Yumkella, Former United Nations Under-Secretary-General announced the creation of the "High-Level Coalition of Leaders for Clean Cooking, Energy and Health" aimed at bringing together political representatives from ministries of health, energy, and finance to provide leadership in driving national clean cooking efforts.
- * The Energy Access Booster 2020 programme was launched by TOTAL, ENEA Consulting, SEforALL, and Acumen to support energy access entrepreneurs in Africa and Asia. The group also announced a call for projects.
- * The Global LEAP Awards, in partnership with MECS programme (funded by UK Aid) and the Efficiency for Access Coalition, previewed a new competition for electric pressure cookers.

- * Progress on efforts to strengthen the political and technical cooperation between the health and energy sectors via the special vehicle, "Health and Energy Platform of Action" was reported by the World Health Organisation (WHO) and other actors.

"Cooking is a silent tsunami. Failure to address the problem does not reflect inadequate technology or even insufficient resources, but a lack of political will."

– Dr. Kandeh Yumkella,
Former UN Under-Secretary-
General and CEO for
SEforALL

Dignitaries at the 2019 Clean Cooking Forum included: Hon. Charles Keter, Cabinet Secretary, Kenya Ministry of Energy; Hon. Simon Kachapin, Chief Administrative Secretary, Kenya Ministry of Energy; Franciscus Albrecht Makken, Dutch Ambassador to Kenya; Dr. Kandeh Yumkella, Former United Nations Under-Secretary-General and CEO for SEforALL; Dymphna Van Der Lans, CEO of Clean Cooking Alliance; Rohit Khanna, Programme Manager, ESMAP World Bank; H.E. Samira Bawumia and Rocky Dawuni, Global Alliance Clean Cooking Ambassadors; and representatives of public, private, research and academia and non-governmental organisations.



Some Ghanaian Delegates at the Forum
(Photo credit: Paula Edze, Energy Commission)

The forum was sponsored by the Ministry of Foreign Affairs of the Netherlands, World Bank ESMAP, European Union GET Invest, Shell, MECS, UK Aid, The Norwegian Agency for Development Cooperation (Norad), Equity Bank Limited and Chevron.

For more information on the forum, visit <https://www.cleancooking2019.org>

2019 ISO TC 285 MEETING HELD IN NAIROBI, KENYA

The platform created by the Clean Cooking Forum 2019 which gathered government officials, development partners and researchers across the globe was strategically used to organise a Plenary Meeting for the International Organisation for Standardisation's Technical Committee on Clean Cookstoves and Clean Cooking Solutions (ISO/TC 285). The meeting was held from 7-8 November, 2019 at the Radisson Blu Hotel in Nairobi, Kenya. The meeting was used to discuss the status of outstanding tasks under the TC and make resolutions on the next steps.

Below is a summary of resolutions made by member countries and experts who participated in the meeting:

- * A Task Group on Standards Adoption and Implementation of Laboratory Testing Method would be established to support countries who have adopted the lab test protocol to implement it, and collect feedback on its usability and revisions needed.
- * A Task Group on Standards Adoption and Implementation of Field Testing Methods would be established to support countries who have adopted the field test protocol to implement it, and collect feedback on its usability and revisions needed.
- * A Task Group on Safety for Liquid and Gas Stoves would be established to review existing standards and test protocols, user perception, etc. to identify gaps that need working on.

- * A New Work Item on Test Protocol for Institutional Stoves was proposed to develop test protocols for stoves with over 150 litres pot capacity, not covered under the new protocols published.
- * A New Work Item on Test Protocol for Stoves for both Cooking and Space Heating was proposed to initiate steps toward the development of test protocols for stoves for both heating and cooking.
- * The decision was taken to restart and advance the development of the Technical Report on Clean Cookstoves and Clean Cooking Solutions—Guidelines for Social Impacts (ISO/NP TR 19915) which had passed its validity period, to the next stage within five (5) months.
- * Working Group 1 on Conceptual Framework was given the approval to proceed and advance their deliverable as Technical Report project.
- * Members resolved to review the Strategic Business Plan of TC 285 to include Contextual Test Sequence and User Guide which will look at good cooking practices.
- * Following the successful completion and publication of the Clean Cookstoves and Clean Cooking Solutions—Guidance on Field Testing Methods for Cookstoves (ISO 19869), the Working Group 3 was disbanded.



Delegates at the ISO TC 285 Meeting (Photo credit: Paula Edze, Energy Commission)

The meeting was attended by 42 delegates from Australia, Ethiopia, Germany, Ghana, Kenya, Nepal, The Gambia, Uganda and the

United States of America. Support for organising the meeting was provided by the Clean Cooking Alliance. The Alliance also partnered with the ISO DEVCO to support delegate attendance to the meeting.

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

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