

# GHANA SE4ALL NEWS

## PROGRESS ON HIGH IMPACT PRIORITY AREAS

*In this quarter, more progress was made by the SE4ALL implementing institutions toward the achievement of the Ghana objectives. Below are highlights of activities undertaken and successes chalked under the high impact priority areas of the Ghana SE4ALL Action Agenda:*

### Promoting Productive Uses of Electricity

- \* The Spanish government is supporting the Government of Ghana (GoG) through the Ministry of Fisheries and Aquaculture Development (MOFAD) to establish six (6) cold store and refrigeration facilities in the Western, Central and Greater Accra Regions. Five of these cold store facilities have been completed in Half Assini, Shama, Kromantse, Nyanyano, and Prampam. The sixth is currently being constructed at New Takoradi in the Western Region. The Ministry of Energy and Petroleum is supporting with transformers to supply electricity to the cold stores and the responsible district assemblies are working on providing access to water, drains, roads, markets and other social amenities to ensure the sustainable operation of the cold stores.

### Access to Improved Cookstove

- \* The Energy Commission and the Ghana Alliance for Clean Cookstoves (GHACCO) have completed two reports: National Mapping of Stakeholders in Ghana’s Improved Cookstove Industry, and Consumer Segmentation Study. The two reports are currently being merged by the Energy Commission to constitute a baseline report for the improved cookstove industry in Ghana. The studies were supported by UNDP-Ghana, and SNV; and the Global Alliance for Clean Cookstoves (The Alliance), respectively.
- \* The development of standards for improved cookstoves is on-going at the Ghana Standards Authority. This activity is part of UNDP’s support toward the implementation of SE4ALL in Ghana.
- \* Procurement has begun for the purchase of equipment for the establishment of the Cookstove Testing and Expertise Centre at the Technology Consultancy Centre of KNUST. The Request for Proposal was published on UNDP and The Alliance websites. Proposals received are being reviewed.
- \* To promote the establishment of sustainable woodlot plantations for fuelwood, the Energy Commission has kick-start a Sustainable Woodfuel Project in the Eastern and Volta Regions of Ghana. The project which is being piloted in four Senior High Schools (SHS); namely Presbyterian SHS, and Greater Manchester Education Institute at Begoro in the Eastern Region; and Adidome SHS and Dabala Technical SHS in the Volta Region; will establish a total of 16 hectares of woodlot plantation. It is anticipated that 21,500 seedlings would be planted under the project. The Forestry Commission is providing technical support to the project.

### Improved Access to LPG for Cooking

- \* Under the Rural LPG Promotion Programme being implemented by the Ministry of Energy and Petroleum in partnership with the National Petroleum Authority, Ghana Cylinder Manufacturing Company, Bulk Oil Storage and Transportation (BOST) Company and Energy Commission, 7,000 LPG cylinders (6kg) and stoves were distributed in Tano South District of the Brong Ahafo region and Ajumako-Enyan-Essiam district of the Central Region of Ghana. About 66 and 74 communities were reached in the Tano South

### GHANA ACTION AGENDA

- > Promote Productive Uses of Electricity
- > Improve Access to : Improved Cookstove
- > Improve Access to LPG for cooking
- > Provide Access to Electricity for Remote Communities Using Off-Grid Systems

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and Ajumako-Enyan-Essiam districts, respectively.

## SE4ALL EVENTS IN GHANA AND ABROAD

### Ghana National Clean Cookstoves and Fuel Conference

The Alliance in collaboration with GHACCO organised a national cookstoves and fuel conference in Accra from April 7–11, 2014. The conference brought together stakeholders from government, research and academia, private sector, civil society and multilateral partners.

The conference was in two parts: field trips by the participating SE4ALL partners to observe cookstoves and fuel usage in urban and peri-urban areas for domestic and productive purposes; and multi-stakeholder engagement sessions. The multi-stakeholder engagement sessions addressed the following issues:

- \* Day one: stakeholder country action plan (CAP) review
- \* Day two: commitments from implementing partners; and cookstove and fuel technology exhibition
- \* Day three: health; gender; and monitoring and evaluation

**Stephen Appiah unveiled as the National Cookstove Ambassador for Ghana**

At the end of the event, the following commitments were made by partners in the cookstove sector of Ghana:

- \* The Alliance—USD 500,000 catalytic grants for seven (7) cookstoves and LPG small and medium enterprises, plus USD 30m spend in the cookstove sector for a 3-year period
- \* GoG—increasing access to LPG in rural areas through the Rural LPG Promotion Programme and support for future LPG infrastructure development
- \* GIZ—financial support for the adoption of improved institutional stoves
- \* SNV—innovation in the cookstove sector and support for the setting of standards
- \* GEF Small Grant—Provide access to funds for cookstove initiatives

Participating dignitaries included: Minister for Energy and Petroleum; Minister for Gender, Children and Social Protection; Executive Secretary, and Director for Technical Regulation of the Energy Commission; Executive Director for The Alliance; SNV Country Director; The Alliance's Global Ambassador for Clean Cookstoves (Lucky Dawuni); and other SE4ALL Partners.

**"cooking should not kill" - Radha Muthiah, Executive Director for The Alliance**

### Third Ghana SE4ALL Mission Held

From April 29 - May 7, the U.S. Department of State led the third SE4ALL mission to Ghana. The mission convened multilateral partners in Ghana for an SE4ALL update session.

The Finance Working Group met for its third meeting and discussed financing options and the challenge of implementing renewable energy projects that are economically sustainable, that

is,

can operate at cost recovery, under the Uniform Tariff Policy. The group deliberated possible mini-grid configurations or sales arrangements that would allow a mini-grid to meet existing regulations while charging for a service that would recover cost.

The mission delivered an energy project economic and financial analysis model—designed by the State Department SE4ALL team—which facilitates detailed project analysis on financial, energy potential, and environmental measures.

Moving forward, the U.S. will continue working with Ghana and the multilateral team on developing SE4ALL project specifications and financing options, drafting of the Investment Prospectus, collaborating with the private sector, and linking advances in institutional cookstoves to private sector financing.

### SE4ALL Forum, New York

Sustainable Energy for All (SE4ALL) convened both the first annual SE4ALL Forum and the third Advisory Board meeting in New York, June 4-6, at the United Nations. The Forum attracted approximately 1,200 participants from government, business and civil society. Participation ranged from working level to ministerial and presidential level.

On the opening day of the Forum, forty panel sessions presented a wide range of SE4ALL-related topics such as building partnerships, connecting with business, "scaling-up" decentralized energy solutions, cook stoves, women, youth, financing, innovation, efficiency, select individual country actions (including Ghana), energy access practitioner network, and more. The second day featured the launch of the UN Decade for Sustainable Energy, an SE4ALL

Advisory Board meeting with UN Secretary General Ban-Ki Moon presiding, and open meetings of the Advisory Board's four committees: finance, access, renewable energy, and efficiency. The meetings highlighted progress to date in each of the four areas and reinforced support among the attending high level officials for the SE4ALL initiative. The third day featured remarks by high level officials and rallied all SE4ALL stakeholders to mobilize their efforts into action.

From the Ghana SE4ALL multilateral team, the Energy Commission's Dr. Nii Darko Asante participated on two panel sessions: "Scaling up Decentralised and 'Bottom-up' Energy Solutions: A Little Less Conversation, a Little More Action" and "Country Action Progress: Action Agendas."

KITE's Ishmael Edjekumhene participated in four sessions: "Together We've Got the Power: Why SE4ALL Needs Civil Society?"; "Energy Access Practitioner Network"; "Renewable Energy for Off-Grid/Rural Electrification"; and "Catalyzing Bottom-up Financing and Investment for Sustainable Energy for All." The State Department's Mark Kissel participated in one panel session: "Promoting Sustainable Energy for All" and focused on local financing challenges.



**The gasifier for off-grid electricity generation at TCC-KNUST**

Also, Faustina Boakye of the Ghana Alliance for Clean Cookstoves attended the Forum.

## REPORT FROM PARTNER

### SNV Ghana

SNV is one of the development partners in Ghana working actively to contribute to the achievement of Ghana's SE4ALL objectives. In the first half of 2014, SNV has worked on the following projects:

- 1) Biogas for off-grid electricity generation and fertiliser

SNV Ghana in collaboration with Center for Energy, Environment and Sustainable Development (CEESD) constructed a 40m<sup>3</sup> institutional fixed dome biogas digester to convert human waste to generate 3 kilowatts of green electricity and organic fertilizer for students at the College of Tropical Agriculture, KITA Campus, in Domeabra – Kumasi, Ashanti Region. SNV provided the expertise to build the capacity of CEESD to realize the project. The Biogas project cost GHC70,000. The project includes a 10 unit toilet facility, a biogas digester with a composting chamber, desulfurizer, dehydrator, 3kW generator set, gas holder, and a biogas cookstove.

- 2) Gasifier for off-grid electricity generation from charcoal

SNV Ghana in partnership with the Technology Consultancy Center of KNUST have constructed the first ferro cement charcoal gasifier to generate 10kw of electricity from charcoal. The technology which could be used to provide electricity to off-grid rural communities was trans-



**Construction of the 40m<sup>3</sup> institutional fixed dome biogas digester at KITA by the CEESD team**

ferred from Mr. Harrie Knoef of Biomass Technology Group. The project seeks to prove the concept that electricity could be produced from charcoal. The gasifier was built from materials readily available in Ghana such as cement, sand, iron rods and chicken wires. SNV expects that the gasifier will be fed with charcoal from sustainably grown biomass and agricultural and forestry residues including charcoal briquettes from fecal sludge.

- 3) Improved institutional cookstoves for productive uses

Under the Energy, Poverty and Gender in Agro-processing Project (EPGAP), SNV Ghana facilitated the construction of 65 improved institutional cookstoves in the Ashanti, Northern, Upper East and Upper West Regions of Ghana.

### The gasifier for off-grid electricity generation at TCC-KNUST



Link to the Ghana SE4ALL Action Plan: <http://energycom.gov.gh/files/SE4ALL-GHANA%20ACTION%20PLAN.pdf>

Energy audits by SNV showed a 42% reduction in fuelwood consumption compared to three stone stoves commonly used by agro-processing industries. Stoves promoted are made of mud/clay, and have a chimney that takes the smoke from the cooking area. Switching to improved institutional cookstoves is financially viable, in that the initial investment is paid off within four (4) months.

Under the Improved Fish Smoking and Mangroves Restoration Project, SNV has constructed 13 fish smoking ovens in Keta community in the Volta Region as well as Tema New town and Chorkor

communities in the Greater Accra region of Ghana. SNV has also conducted energy audits on the Morrison fish smoking oven which also indicates 39% efficiency over the chorkor smoker which is commonly used in Ghana. The Morrison fish smoking oven has special features that enhance its efficiency, including chimney over the oven for reduced smoke levels, special interlocking trays and heat resistant base that ensures efficient and fast smoking of the fish.

The project has also established 8 acres of mangroves in the Kwakpoyom community in the Ada East District of the Greater Accra Region.

## Ghana SE4ALL Secretariat

Sustainable Energy for All

**Under SNV Ghana's EPGAP and Improved Fish Smoking and Mangroves Restoration Project, the organization seeks to promote the adoption of 1000 improved institutional cookstoves in Ghana, comprising of:**

- \* **600 institutional cookstoves for pito brewing, rice par boiling and shea butter processing; and**
- \* **400 fish smoking ovens for women groups in the coastal regions of Ghana**

## ANNOUNCEMENTS

### **Sustainable Energy For All (SE4ALL): High Impact Opportunity: Clean Energy Mini-Grids**

#### **Call for Proposals: ECOWAS Renewable Energy Facility**

The ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE) is pleased to announce that the EREF Second Call for Proposals is now open. In view of the SE4ALL High Impact Opportunity of Clean Energy Mini-Grids, this initiative aims to support the installation of renewable energy-powered mini-grids and the establishment of an appropriate management, operation and maintenance system. The overall amount available under this call is 1,000,000 Euros.

After the successful implementation of the First Call for Proposals, under which 41 projects were selected and 30 are under implementation in the ECOWAS region, ECREEE is now looking specifically at the promotion of mini-grids, a technical solution that can often be the most feasible option to provide electricity to isolated communities.

Interested applicants may submit their proposals until 10th August.

The EREF Second Call for Proposals is supported by the Austrian Federal Ministry for Agriculture, Forestry, Environment and Water Management (BMLFUW), the United Nations Industrial Development Organization (UNIDO), the Spanish Agency for International Cooperation and Development (AECID) and the Austrian Development Agency (ADA).

More information, including the EREF 2 Guidelines, is available here: <http://www.ecreee.org/page/eref2>

### **UNDP China and Ghana Renewable Energy Technology Transfer Project Approved**

The Government of Denmark is lending support to the promotion of SE4ALL in Ghana and Zambia under the South-South Cooperation through UNDP China. UNDP China seeks to facilitate the transfer of renewable energy technologies from China to Africa by building the necessary institutional framework and capacity

required to make the local absorption of renewable energy technologies effective.

The project will contribute to GoG's target to achieve universal energy access by 2016. The project will affect off-grid community-based electrification, increase the share of renewable energy and promote the productive uses of energy.

The project will facilitate exchange of expertise and technology between China and Ghana, thereby building on China's unique development experience. The project will be implemented over a period of four years with a total budget of USD 2,720,000.

The project is a collaboration between the Ghana Energy Commission, the Ministry of Science and Technology in China and the UNDP Country Offices in Accra and Beijing. On institutional arrangements, Ghana's Energy Commission and China's Ministry of Science and Technology will implement the project while UNDP China and Ghana provide technical and administrative support for the project implementation.