



## **Exploiting Opportunities in Renewable Energy and Rural Electrification in Kenya**

Joining forces for Sustainable Energy

Nairobi, 28 November 2014

### **OUTCOME REPORT**



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## 1. Background

As Secretariat of the Africa-EU Energy Partnership (AEEP), the EU Energy Initiative Partnership Dialogue Facility (EUEI PDF) is charged with the responsibility of developing a framework for political dialogue and cooperation between Africa and the European Union on strategic energy issues. The overall objective of the AEEP is to improve access to reliable, secure, affordable, cost-effective, climate friendly and sustainable energy services on both continents. One of its key aims is to facilitate dialogue between and amongst relevant public and non-state actors. Within this context, the EUEI PDF has organised a series of dialogues across Africa and one in Europe to achieve these aims and foster active dialogue and engagement amongst the various stakeholders.

The Secretariat aims to facilitate the achievement of the set targets of sustainable energy access and at the same time ensure energy security at the international level through concerted actions at national level by the public and private sectors. At a recent AEEP high level meeting in Ethiopia, both civil society and private sector stakeholders expressed the need to be more closely involved in promoting the partnership and in AEEP meetings, particularly at the national level. It is hoped that the concerted actions will guide investments and interventions around the three major components of energy for development i.e. access to energy services; penetration of renewable energies; and improvement in energy efficiency. These represent a tangible and strategic opportunity on which Non-state Stakeholders (NSS) can engage further in the energy sector.

## 2. Scope of Dialogue

In conjunction with the Government of Kenya through the Ministry of Energy and Petroleum (MOEP), EUEI PDF, in liaison with Practical Action and Alliance for Rural Electrification (ARE) a number of regional, international and local NSS in Kenya were brought together under the AEEP, with the aim of discussing recent developments in national and international energy initiatives. The dialogue was uniquely structured to contribute to the current UN Sustainable Energy for All Initiative (SE4ALL) process in Kenya and was expected to identify and propose specific opportunities for strengthening partnerships in achieving the three goals of SE4ALL and meeting the needs of the energy poor in Kenya.

From a business perspective, it was anticipated that the participants would learn about business opportunities, the existing framework for renewable energy and rural electrification in Kenya, with specific reference to the identified priorities. Moreover, the forum was also to raise awareness on off-grid technologies as a key solution to reduce energy poverty, as well as facilitate market and finance information and project partnerships. Finally, the Dialogue offered a great opportunity to network with relevant stakeholders such as high level national government officials, regional, international and local private sector and civil society organisations as well as global donors.

The dialogue also built on and was a follow up to the EUEI PDF support to Kenya under the Africa-EU Renewable Energy Corporation Programme (RECP). The programme's support measures included assessing the need to establish a national renewable energy support system; exploiting the opportunities provided by public and private financing instruments; and promoting cooperation

and exchange of best practices in renewable energy. The above three elements of support measures were central to the dialogue.

### 3. Objectives

The dialogue aimed to boost renewable energy, rural electrification and clean cooking in Kenya by:

- Increasing and attracting the private sector, civil society and donor investments and operations;
- Enhancing engagement in policy-making and implementation towards energy access;
- Strengthening mutual understanding and partnerships between civil societies, the private sector and government.

### 4. Summary of the program

The forum was opened by Grace Mukasa, Director, Practical Action Eastern Africa. As the moderator of the opening session Grace Mukasa welcomed participants and panellists, reiterating Practical Action's commitment to ensuring sustainable energy solutions in Kenya targeting the energy poor.

The keynote address was given by Elijah Kirui, Ministry of Energy and Petroleum. Mr. Kirui highlighted government's efforts geared towards meeting targets set in Vision 2030 on energy access. He also expressed hope that the deliberations and recommendations of the dialogue would be shared with the government to enable them identify and explore areas of partnerships with the various stakeholders in the sector.

This was followed by speeches from Sanne Willems, European Union Delegation Representative and Crispen Zana, African Union, describing their organisations, the context of the dialogue and highlighting the objectives of the event. To further contextualise the forum in light of the existing partnership, David Otieno, EUEI PDF made a presentation on the partnership and Secretariat.

Under the guidance of Arbogast Akidiva, the moderator for the day, the dialogue commenced. The moderator briefed the participants on the format of the three sessions, stating that each session had two sections i.e. presentations from key speakers and a panel discussion on the issues raised in the presentations. The session themes were as follows:

- Small-scale off-grid electricity: Context and potential for pico-solar and solar home systems;
- National Mini-grid policies: Promotion of solar hybrid mini-grids in Kenya and Mini-grid Policy Toolkit;
- Cooking technologies and appliances: Context and potential (Biomass and Biogas).

The conference concluded with a recap of the day's discussions by Crispen Zana followed by closing remarks by Sanne Willems and Grace Mukasa.

## 5. Introductory remarks

### Elijah Kirui, Ministry of Energy and Petroleum (MOEP)

In Africa 1.3 billion people lack electricity and 2.6 billion lack clean cooking facilities, while in Kenya connectivity is low with only 32% of the total households connected to electricity. To address this, the government has introduced a number of policies and strategies geared towards improving access. These include rural electrification, reduction of cost of connectivity, development of a National Energy Policy, enforcement of an Energy Pricing Policy and use of a looping system to address the frequent power fluctuations. The country currently generates 1,700 Mega Watts (MW), which is below the targeted 5,000 MW. In this context, the government aims to considerably increase the country's electricity generation in the next 40 months to obtain a significant change in supply and cost of electricity.

There are a number of sources of electricity in Kenya, namely hydropower, geothermal, solar power, wind, biomass, diesel fire & carbon (hybrid-system), liquid petroleum gas (LPG) and biogas. Other sources the government is working on exploiting include coal, gas and nuclear. The government has also identified the following potential areas for partnership and investment by the private sector:

- **Geothermal:** Kenya has the potential to generate 10,000 MW, at the moment the electricity being generated is below the potential, thus there is room for investors to come in.
- **Solar power:** Over the years the investors have installed standalone projects with a limited reach thus there is potential for the development of solar mini-grids that supply a wider population.
- **Wind energy:** The government has developed a wind atlas that shows the huge potential of generating electricity from wind. To demonstrate its potential the government has installed three projects in Turkana expected to generate 300 MW, Njambini expected to generate 60 MW and Ngong currently generates 13 MW.
- **Biomass:** Research has shown that despite the increased connectivity to electricity, the number of people still using biomass in urban areas has not reduced. The potential to roll out sustainable biomass technologies is huge.
- **Liquid Petroleum Gas:** Access to and use of LPG has increased significantly in urban areas, contrasting with rural areas, where its distribution strategy has not been successful.
- **Biogas:** There is a large potential for the generation of biogas in the rural areas, however, the biggest challenge has been cost of production.

In his closing statement Elijah Kirui noted that there are various opportunities for stakeholders to come in and partner with the government in addressing a number of issues, ranging from exploring ways of reducing the cost of biogas production, partnerships in research with the aim of improving clean cook stoves and an efficient distribution mechanism for LPG across the country.

### Sanne Willems, EU Delegation in Kenya

Sanne Willems outlined EU's role in the energy sector in Kenya as a facilitator of strategic investments with the aim of supporting Kenya to meet targets set in the country's road map, Vision 2030. As part of their commitment to the energy sector in the region, the EU has funded a number of projects, these include the Geothermal Risk Mitigation Facility for Eastern Africa and Africa Sustainable Energy Facility (ASEF). In addition to the above initiatives, the EU through the EDF Regional Indicative Program has committed 400 million Euros for the energy sector in the region

that will be disbursed by the EU-Africa Infrastructure Trust Fund. One of the projects that will benefit from this fund in Kenya will be the wind power plant project on Lake Turkana to generate 310 MW, which is expected to commence in 2015.

In her introduction of the Africa-EU Energy Partnership (AEEP), Sanne Willems noted that AEEP is a long-term strategic cooperation framework between Europe and Africa with a number of targets that will significantly contribute to the 2030 targets of the UN Sustainable Energy for All Initiative. The partnership aims to facilitate dialogue between public, private sector, research institutions and civil society by establishing a stakeholder's network in the energy sector.

### **Crispen Zana, African Union**

The pressing issue in Africa's energy challenges is how Africa can convert its huge energy resources into suitable and modern energy sources to meet basic human needs as well as productive use. At present, access in Sub-Saharan Africa (SSA) stands at 30% due to a number of existing barriers and challenges. Some of the challenges include low level of generation capacity and efficiency, unscalable and unreliable supplies, low level of technical capacity, high cost of generation and distribution, low access to modern and sustainable supplies.

In addition to the above challenges, a number of barriers hinder effective use of the existing energy supply thus threatening Africa's impressive economic growth. These barriers are lack of financing, private sector participation, lack of markets, inadequate pricing of energy, low levels of technical capacity, inadequate policy and regulatory frameworks and lack of data.

The continent has a huge amount of energy resources thus presenting opportunities for providing modern sources of energy at the local, national and regional level, using a combination of small, medium and large scale solutions.

To address the above challenges and barriers a number of solutions should be implemented, namely to increasingly make use of sustainable off-grid solutions; use of solar, wind and small and micro-hydro power systems to reduce costs, address electrification and irrigation challenges; promote innovative measures that address challenges related to technology, policies, financial and institutional framework; enhance sustainable rural energy markets to improve living conditions and enable productive use, resulting in income opportunities; and support private sector mobilisation to boost investment in the sector to address the current investment shortage of 30 billion USD per year.

### **David Otieno, EUEI PDF**

David Otieno introduced EUEI PDF as an initiative founded in 2005, by EU member states and the European Commission, with more than 65 activities supported in over 20 countries. Key cooperation partners include ESMAP, EnDev and the World Bank. It has three main objectives, i.e. to develop appropriate energy service delivery models; improve the policy and regulatory environment for private investments; and build institutional & thematic capacity for effective partner structures.

Through the EUEI PDF, the Africa-EU Energy Partnership (AEEP) was established in 2007 at the Lisbon Africa-EU Summit – one of eight partnership under the joint Africa-EU strategy (JAES). Its overall goal is to improve access to reliable, secure, affordable, cost-effective, climate-friendly and

sustainable energy services for both continents with a special focus on achieving the Millennium Development Goals. The partnership has focal points from the academia, civil society and private sector to represent the various stakeholders in the energy sector. Through the various initiatives implemented, the partnership aims to ensure that an additional 100 million Africans have access to sustainable energy services; increase electricity interconnections both within Africa and the EU; double the use of natural gas in Africa and exports to EU; improve and increase renewable energy use; and improve energy efficiency in Africa in all sectors.

During one of the high level meeting of the Africa-EU Energy Partnership in 2010, the Renewable Energy Cooperation Partnership was launched. RECP was launched to support the African government in the exploitation and management of renewable energy. The programme focuses on the following areas i.e. policy Advisory services; private sector cooperation; project preparation and flagship investment projects; and technology, innovation and capacity development.

## 6. Session One: Small scale off-grid electricity: Context and potential for pico-solar and solar home systems in Kenya

**Summary:** The discussion focused on a number of key areas, namely promising business models and innovations, main obstacles for rapid progress; potential for partnerships: roles of different stakeholders; what we need from each other to take this priority area forwards e.g. financing, capacity, co-ordination.

### Key presentations

#### **Kate Montgomery, D-Light**

**D-light** is the market leader in distributed solar power for consumers and small businesses in the developing world. To date D-light has been successful in the empowerment of 41 million people; provided lightning to 10 million school children to enable them study better and longer; enabled its consumers to save more than 1 billion USD in energy costs; enabled its consumers to have 15 billion new productive hours for working and studying; and enabled a saving of 3 million tons of CO<sub>2</sub> by generating more than 50 Million kWh of solar power. The company prides itself as a company that provides reliable, high quality products, affordable with a last-mile distribution strategy.

#### **Rachna Patel, Solar Kiosk**

**Solar Kiosk** is an intelligent building structure, connected to solar power and a smart meter and can be easily transported and assembled in remote areas. The kiosk has transformed people's lives by providing job opportunities to entrepreneurs to stock the solar products and other essential basic products and is currently one of the few retail shops that provides after sales service for products sold to the bottom of the pyramid.

**Dr. Izeal Da Silva, Strathmore University**

**Strathmore University** is setting up an International Standard Testing lab to address the low standard products on behalf of KEBS. The lab shall be used to certify products and ascertain performance evaluation.

*Key issues from plenary session*

- **Connectivity:** There are 8 million households in Kenya, where only about 1 million are connected to the main power grid. While the use of solar products is 12%, to make a significant difference the market needs to reach 16-20% penetration. There is great potential in Kenya to generate solar energy. However, less than 2% of solar installation is in Kenya despite the fact that it lies along the solar belt while 98% of solar installations worldwide are outside the solar belt.
- **Financial:** In many areas it is more economical to set up sustainable standalone or mini-grid systems, as these solutions are much less affected by population density and available infrastructure. With regard to lighting, the use of highly efficient LED lights should be encouraged.
- **Awareness creation:** For the sector to flourish, there is a need for the end user and provider to be educated on the use of affordable, clean and renewable energy and its benefits.
- **Enabling environment:** Developing and implementing investment-friendly policies for both the provider and the end user e.g. tax and import levy waivers for renewable energy equipment, development of an incentivising renewable energy and rural electrification policy.
- **Efficient distribution channels:** Distribution of the solar technology needs to be decentralised for easy access in remote areas. This should go hand in hand with after sales service to ensure that technicians are available to repair the solar products and equipment in remote areas. There is also need to develop an efficient distribution system for LPG in the rural areas.
- **Market spoilage:** Low quality products or counterfeits in the market compromise the efficiency of the product, thus reducing client loyalty, who then revert to their previous source of lighting.
- **Models:** Investors analysing this market need to identify models that address the gaps, challenges or barriers in the sector i.e. does it address policy, distribution, cost or after sales service and policy? A good example is the pay-as-you-go model which addresses affordability.
- **Job Creation:** Most companies producing solar products target the last-mile-entrepreneurs who are based in the rural areas and sell products under 20 USD to provide lighting.

## *Session recommendations*

- The pico-solar market should scale up further and would benefit from deepened support for its further expansion.
- The government needs to develop and implement policies and regulatory frameworks that facilitate access to solar energy.
- There is a need to promote the use of clean electricity beyond domestic lighting so that the poor can boost their economy and develop additional income sources through productive use.
- Solar energy off-grid systems by the private sector can greatly contribute to clean energy access in rural areas, and should be linked to government efforts to address connectivity.
- There is a need to develop an innovative and appropriate financing mechanism across the supply chain.

## **7. Session Two: National Mini-Grid Policies**

**Summary:** The discussions focused on a number of key areas namely progress, intervention mechanisms and a roadmap for policy development.

### **Key presentations**

#### **Jackson Mutonga, German Cooperation Deutsche Zusammenarbeit (GIZ)**

**ProSolar** is a project under GIZ that promotes the development of 20 small and medium sized private sector operated solar-hybrid mini-grids in Marsabit and Turkana counties. The main objective is to contribute to cost-effective and sustainable power supply in rural areas and business development or private sector. Key partner institutions include financial institutions, private sector, MoEP, REA, ERC, Kenya Power, County Government, donors and academia. The project is promoting a number of business models namely pure ESCO, IPP and Hybrid (ESCO-Community). Through these instalments, the project aims to influence policy; to generate 40 kW from solar and 10 kW from generator; provide a platform for the establishment of a competitor to KPLC and provide an incentive to a private sector investor to provide an alternative to KPLC; and develop a mini-grid policy book. To facilitate private sector investment, the project has developed an incentive structure known as mini-grids RBF facility with funding amounting to 1.64 million Euros.

#### **David Lecoque, Alliance for Rural Electrification (ARE)**

**ARE** is an international business association representing the decentralised energy sector working towards the integration of renewable energy into rural electrification markets in developing and emerging countries. The organisation ensures improved energy access through business development support for more than 90 members along the value chain for off-grid technologies by targeted advocacy and facilitating access to international and regional funding. ARE offers a global platform for sharing knowledge and best practices that facilitate rapid implementation of available and advanced renewable energy technologies and services.

In Sub-Saharan Africa 620 million people - 68% of the total population - live without access to electricity, with 80% of the energy-poor are living in rural areas. It is therefore not surprising that majority of the people depend on biomass for cooking and heating energy, thus creating the need for alternatives including clean energy mini-grids to supply sustainable electricity to the remote population.

A mini-grid involves small-scale electricity generation (from 10kW to 10MW) and the distribution of electricity to a limited number of customers via a distribution grid that can operate in isolation from the national grid and supply relatively concentrated settlements. Mini-grids have enormous potential to enable access to electricity in rural areas but need an appropriate policy and regulatory framework for their efficient and effective roll-out.

Under the Africa-EU Renewable Energy Cooperation Programme (RECP), the EUEI PDF, REN21 and ARE jointly developed the Mini-grid Policy Toolkit (available on <http://euei-pdf.org/thematic-studies/mini-grid-policy-toolkit>). The toolkit contains background information, pragmatic solutions and tools, and literature recommendations on installation of mini-grids. The Toolkit provides a link between the rationale for mini-grids in rural electrification, mini-grid operator models and suitable policy and regulatory frameworks.

#### *Key issues from plenary sessions*

- **Enabling environment:** For the energy sector to flourish there is a need to facilitate private sector participation by providing incentives, appropriate financing and establish non-bureaucratic processes for acquisition of permits and licences for investors seeking to engage in the sector.
- **Tariffs:** In Kenya, the government has put in place a uniform tariff policy that harmonises tariffs across the various grids, so that end consumers throughout the country pay the same tariffs. However this policy needs to be reviewed as mini-grids usually require higher tariffs than national grids. Moreover, appropriate tariffs for mini-grids are necessary in order to attract private sector investment in the sector.
- **Map areas for mini-grids:** To create investors' confidence, there is a need for the government to map out areas reserved for mini-grid installations. Furthermore, it is crucial to establish a policy detailing what happens to the (investment in a) mini-grid, should it at some point be connected to the national grid.
- **Environmental regulations:** Guidelines must be developed to ensure that electricity installations meet the relevant quality and environmental standards.

### ***Session recommendations***

- There is a need to develop an incentive framework or facility that will help cushion private investment in the sector in the light of the high upfront costs.
- Solutions need to be context specific and address systemic changes, i.e. what barriers need to be addressed for people to access these technologies and appliances.
- The Kenyan government is in the process of developing a mini-grid policy and framework, and could use the mini-grid policy toolkit as a roadmap.

- For the sustainability of mini-grids, there is a need to further integrate the generation of electricity to rural economic development. Thus, electricity is not used just for lighting but to enable various economic activities while at the same time aligning them to the national plan for energy access.

## 8. Session Three: Cooking technologies and Appliances

**Summary:** The discussions focused on a number of issues including the status of the sector, potential of national targets, relevant policy and legal frameworks, promising business models and innovations, and main obstacles that affect rapid progress and potential partnership.

### Presentations

#### Anna Ingwe, GIZ-EnDev, Kenya

There have been some developments in the cooking energy sector in Kenya, namely the lead role taken up by the private sector, the availability of proven technologies at affordable cost, an increase in the demand for improved stoves and the promotion by the government of clean cooking energy. Despite these developments, there are a number of challenges in the clean cook stove market namely affordability of products, low penetration in the rural areas, low use of LPG, hesitance of urban charcoal users switching to stoves of high efficiency, underdeveloped distributions channels, inappropriate credit provision and low sustained awareness. The government has also developed and enforced a number of policies and regulations to address these challenges. Some of the policies and regulations includes the National Energy Policy, Energy Act 2003, the Environmental Management and Coordination Regulations 2008, Kenya Bureau of Standards, Health Policy and Kenya Industrial Research and Development institute.

#### John Kaplon, Practical Action

**Practical Action** is an international technology development organisation working globally and in East Africa to contribute to poor people's well-being using technology to challenge poverty by building the capabilities of poor men and women; improving their access to technical options and knowledge; and working with them to influence social, economic and institutional systems for innovation and the use of technology.

In order to alleviate poverty in rural and peri-urban households, there is a need to facilitate access to modern energy services e.g. the use of biomass briquette – this is the densification of loose biomass material to produce compact solid composites of different sizes with the application of pressure. The production of briquette is not a new technology, however its use has not been widespread, despite its health benefits and affordability.

*Key issues from plenary discussion:*

- To make significant impact in the sector, a **multi-sectorial approach** is necessary in addressing issues concerning the cooking technologies and appliances.

- **Government intervention** is critical to ensure the enforcement of policies that enable research and development in the sector.
- **Decentralisation of energy services** at county level needs to be done and organisations such as Practical Action and GIZ are at the forefront to see how they can best adopt the use of modern energy sources within their energy sector.
- **A briquette as a source of fuel** is slowly gaining popularity for both domestic and commercial, therefore there is a need to standardise and determine the various products and their quality to ensure the end user get the most out of them.
- **Recycling of waste** to make briquettes is ideal as it ensures the product is eco-friendly making the products “green”.
- **Carbon trading** has had limited success, prompting a need to determine what worked and how, as well as what needs to be improved.

### *Session recommendations*

- There is a need to develop partnerships to address the issue of distribution of clean cook stoves and biomass products;
- There is a need to bundle and cross-sell products that promote clean cooking technologies and appliances;
- There is a need to develop and run a sustained campaign to ensure that clean cooking technologies become the norm.

## **9. Overall Recommendations**

- The need to **foster partnerships** between key stakeholders in the private sector, academia, civil society as well as international and national public institutions;
- The EU delegation announced the possibility of dialoguing on a possible **funding stream** for the energy sector.
- **Affordability:** There is a need to address the cost implications for both the end user and the provider:
- **Capacity building and training:** There is a need to train and build capacity in the sector, while creating awareness along the value chain.
- There is a need for the various existing government institutions to synchronise their interventions to ensure **standardised policymaking and enforcement**.
- There is a need to further develop a **comprehensive distribution and market** for the renewable energy technologies to accelerate their roll-out.
- In order to enable substantially increased clean electricity access, it is vital to establish appropriate policies, regulations and **framework conditions for the clean energy off-grid and mini-grid sector**.
- **Financing:** There is a need to develop appropriate financing mechanisms that allow entrepreneurs and the private sector to invest more in the clean energy sector.
- There is need to move beyond the products and discuss value chain management.

## 10. Speakers

Last Name	First Name	Organisation
Akidiva	Arbogast	Conscientia
Asamoah-Manu	Nana	International Finance Cooperation
Da Silva	Izael	Strathmore University
Gujba	Haruna	AUC
Ingwe	Anna	GIZ-EnDev Kenya
Kapolon	John	Practical Action
Kenda	Andrew	GIZ-EnDev
Kipruto	Walter	GIZ-EnDev
Kirui	Elijah	Ministry of Energy and Petroleum
Kitala	Jechonia	SNV
Lecoque	David	Alliance for Rural Electrification
Montgomery	Kate	D-Light
Mukasa	Grace	Practical Action
Mukulu	Myra	Clean Cookstoves Association of Kenya
Musungu	Wycliffe	REECON
Mutonga	Jackson	ProSolar
Otieno	David	EUEI PDF
Patel	Rachna	Solar Kiosk Kenya Limited
Sapp	Meghan	Partners for Euro-African Green Energy
Willems	Sanne	EU Delegation to Kenya
Zana	Crispen	AUC
Zemedklun	Meseret	UNEP

## 11. Participants

Last Name	First Name	Organisation
Abiero Otieno	Maurice	SUNCO Energy
Alexandrou	Konstantinos	LDK Africa Limited
Arias	Esther	Embassy of Spain, Economic and Commercial Office
Ayoma	Jemimah	Collaboration Engineering Solutions and Products (CESP) Kenya
Barasa	Murefu	EED Advisory Limited

Berno	David	Microfinanza Srl
Boubacar	Diallo	Afrisek Energy
Bredt	Kabengele	Fichtner GmbH & Co.KG
Cherono	Duncan	DIYNGO
Comelli	Filippo	Phelan Energy Group
Costa	Valeria	CISP East Africa Office
Dominguez	Carolina	IFC
Ferrini	Luca	EUEI PDF
Gupta	Kamal	Power Technics Ltd
Haugsgjerd	Inger	UNDP Kenya
Jung	Carsten	Carbon Africa Limited
Kahura	Josephine	Winrock International
Kalunge	Wilson	SBS Strathmore Business School
Kapolon	John	Practical Action
Kerigu	Kevin	Carbon Africa Limited
Khalusi	Cyrus	Power Technics Ltd
Kibira	Dennis	African Solar Designs
Kipruto	Walter	GIZ-EnDev
Knight	Bruce	Winrock International
Leone	Michele	International Development Research Centre
Lutheran	Myles	EFK Group (Eco Fuels Kenya)
Macharia	Stephen	AVSI Foundation
Madara	William	USAID
Maina	Wanbugo	Ufadhili Trust
Maiyo	Sarah	Welthungerhilfe/ German Agro Action
Mbole	Paul	Norwegian Church Aid
Michieka	George	Green Empowerment
Misango	Getrude	Philips
Miyumo	Abed	Horizon Media Solutions
Mkianski	James	INTASAVE
Montgomery	Kate	D.Light
Morton	Tom	ClimateCare
Mukasa	Grace	Practical Action
Mugwe	Kiragu	European Investment Bank
Muhu	Livingstone	Cesp
Mukulu	Myra	CCAK
Muli	Kitonga	Kuscoco Ltd
Munagala	Ram	RAR Energy, LLC
Muthuri	Eva	African Family Health
Mutonga	Jackson	GIZ
Mwangi	Caroline	Davis and Shirliff Ltd

Ngigi	Ashington	Integral Advisory
Njiru	Godfrey	COGRI
Obara	Arthur William	Hydroflow Services
O. Nyambune	Benson	Country Energy Centre
Oduor	Evah	IEC
Ogega	Vincent	-
O'Grady	Elizabeth	PowerGen Renewable Energy
Ojwolo	John M.	Namalere Forest Conservation Organization
Okoh	Raphael	Consumer Insight
Onyiro	Milton	Almon Investment Holdings Ltd
Raghavan	Krishnan	D.Light
Ranja	Timothy	UNDP Kenya
Rezai	Natalia	One Degree Solar
Sauder	Rebecca	Enda Solar Ltd.
Smith	Graham	Off Grid Electric Ltd
Stout	Coryell	One Degree Solar
Wachira	Polly	Sustainable Agriculture Community Development Programme (SACDEP-Kenya)
Wachira	Pauline	Riwik East Africa Ltd
Wadende	Pamela	University of Kabianga
Wambugu	Maina	Ufadhili Trust
Wasonga	Phillip	Boma Safi Limited
Yumoto	Noboru	Energy and Environment Institute Inc