Renewable Energy Civil Society Organizations (RECSOs) Sector Performance Report for FY 2017/2018.

Based on Joint Sector Review, 2017/2018.

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Environment Alert (EA), as an interim host for the RECSOs has done a commendable job in convening the actors to submit information that has informed the development of this report. The staffs including: Ms. Racheal Nalule and Dr. Joshua Zake (PhD) are appreciated for the inputs in the report and guidance on the process for compilation of the report.

The team of consultants from Tree Talk Plus, who, on short notice, were able to design a data collection tool, pre-tested it and later used it to collect the required information are also commended.

LIST OF ABBREVIATIONS

ACCC	Action Coalition on Climate Change
ACODE	Advocate Coalition for Development and Environment
AYFAP	African Youth Forum Against Poverty
BADEF	Bwambara Advocacy for Development Foundation
BET	Biomass Energy Technology
BUCCID	Bufunjyo Concerned Citizens For Development
BURIDO	Buliisa Initiative for Rural Development Organisation
CBO	Community Based Organisations
CoP	Conference of Parties
COVOID	Community Volunteer Initiative for Development
CSO	Civil Society Organisation
DLG	District Local Government
EA	Environmental Alert
EMLI	Environment Management for Livelihoods Improvement
ENR-CSO	Environment and Natural Resources Civil Society Organisations
FY	Financial Year
GoU	Government of Uganda
HRBA	Human Rights Based Approaches
JSR	Joint Sector Review
JTR	Joint Technical Review
KCSON	Kibaale District Civil Society Organization Network
MADIFA	Maracha District Farmers Association
MDA	Ministries Departments and Agencies
MEMD	Ministry of Energy and Mineral Development
MICOD	Midwestern Region Centre for Democracy and Human Rights
MoU	Memorandum of Understanding
MWE	Ministry of Water and Environment
NAMA	Nationally Appropriate Mitigation Actions
NGO	Non-Government Organisations
OWC	Operation Wealth Creation
RE	Renewable Energy
RECSO	Renewable Energy Civil Society Organisations
REDD+	Reduction of Emissions from Deforestation and forest Degradation
RET	Renewable Energy Technology
RICE-WN	Rural Initiative for Community Empowerment West Nile
SACCO	Savings and Credit Cooperative Organizations
SNV	SNV Netherlands Development Organisation
SWAGEN	Support for Women in Agriculture and Environment
UCSD	Uganda Coalition for Sustainable Development
UFWG	Uganda Forestry Working Group
UNACC	Uganda National Alliance on Clean Cooking
UNDP/GEF	United Nations Development Programme/ Global Environment Facility
UNICIDA	United Children Integrated Development Action Uganda
USAID	United States Agency for International Development
VSLA	Village Savings and Loan Association
WWF	World Wide Fund for Nature
YOCADA	Youth for Community Capacity Development Association

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1 INTRODUCTION

Alongside the Joint Sector Review process for the Ministry of Energy and Mineral Development 2017/2018, Renewable Energy Civil Society Organisations (RECSOs) operating in the renewable energy sector decided to undertake a sector performance assessment, as well as their own individual performance assessment. The assessment was designed to look at investments, targets, achievements, outputs and major challenges/ issues that affect performance of MEMD and RECSOs for the Financial Year (FY) 2017/2018. It is anticipated that results from this assessment will form a basis for engagement and provide an entry point for collaboration between MEMD (on one hand) and RECSOs (on the other hand). Further information about RECSOs is detailed in Box 3.

The assessment was undertaken based on the performance of 28 CSOs including International NGOs, national NGOs, CBOs and membership based networks implementing activities in the renewable energy sector. 50% of the contributing CSOs were local or national CSOs.

The RECSOs invested a total amount of USD 20,725,238 in the sector with much of the funds solicited from development partners (74%), contractual obligations (13%), own sources (9%) and the central government contributing 4%.

Much of the funds invested were targeted towards implementation of projects that promote energy saving cook stoves, solar systems and briquettes, awareness raising campaigns through media engagements and development and dissemination of IEC materials, and capacity building projects respectively. Other activities included advocacy and lobbying through development of advocacy strategies and position papers on key policy issues, media engagements through talk shows and. Much as the activities were covering the whole country, most of the activities were implemented in the eastern, central, mid-western, south western and very few operate country wide.

In pursuit of implementation of activities in each of the agreed undertakings, CSOs commend the Ministry of Energy and Mineral Development for achieving among others the following:

i) Formulating biogas standards and together with partners, developing capacity of communities in biogas household standards and installing over 300 domestic biogas systems in different parts of the country;
ii) Developing National Standards for Household biomass stoves;
iii) Development of strategy and plan to disseminate gasification technology;
iv) Development of regulations ongoing following enactment of the Biofuel Act, 2018;
v) Inventory of biofuels feedstock producers completed in mid-northern Uganda and ongoing in other parts of the country;
vi) Formulation of the Biodiesel Blend Standards on going in partnership with UNBS;

Despite the above achievements and more, the RECSOs take note of the following policy gaps:

i) Lack of regulations due to the informal nature of the Biomass energy subsector;
ii) Limited or lack of appropriate regulations/guidelines for charcoal production and trade;
iii) District Local Governments have a funding gap from the Centre to support rollout of renewable energy work plans;
iv) Lack of Energy Officers at the District Local Government level to oversee and implement energy initiatives;
v) Limited synergies and proper coordination between Ministries, Departments and Agencies involved in different biomass initiatives;

vi) Limited financial capacity to produce and supply the required technologies to satisfy the available demand;
vii) High upfront investment costs for efficient biomass energy technologies for users;
viii) Lack of specific incentives for growing of crops dedicated for energy production;
ix) Limited research in clean energy/renewable energy technologies within the country.

Based on the challenges identified, the RECSOs propose the following recommendations for action:

i) Develop appropriate regulations for the Biomass energy subsector;
ii) The Ministry of Energy and Mineral Development (MEMD) in collaboration with the Ministry of Water and Environment (MWE) develops charcoal regulations/guidelines;
iii) MEMD and RECSOs engage Ministry of Finance, Planning and Economic Development (MoFPED) on funding for renewable energy;
iv) MEMD engages Ministry of Local Government (MoLG) to review DLG structures to include Energy Officer for effective and efficient monitoring of renewable energy investments;
v) Continued demonstration of the efficacy of Biomass Energy Technologies and leveraging on existing platforms (JSR, Energy Week, JTR, Inter-ministerial committees on energy among others);
vi) Strengthen the operations of the inter-ministerial committee on clean cooking and biomass issues;
vii) Capacity building of artisans on management of the biomass resource and technology management;
viii) Develop appropriate financing mechanisms for acquisition of BETs and increased feedstock production;
ix) MEMD engages the private sector for demand driven research.

1.1 Context

Currently, only about 26.1%1 of the households in Uganda have access to electricity and this means dependence on biomass energy for domestic use. The limited access to modern energy coupled with high levels of poverty incidence has resulted in over reliance on unsustainably produced biomass and use of rudimentary lighting and cooking technologies with serious implications on the environment and people.

The overall challenge in the renewable energy sector is limited access to sustainable and renewable energy alternatives which contributes to forest loss and degradation. Among other challenges we have limited production capacities (e.g. of biofuels), high cost of technologies, lack of appropriate regulations (e.g. for charcoal), increasing levels of uncertified products on the market, lack of credible service providers, limited research, lack of charcoal ordinances and bye-laws at DLG level and the overall informal sector scenario among others.

Coupled with the above, is the weak capacity of CSOs and networks to meaningfully engage government and other stakeholders on decisions and practices towards sustainable and renewable energy development. CSOs have limited skills and tools for effective advocacy on the development and adoption of policies, legislation and best practices by government and private sector.

It is also clear that CSOs do not have a common voice and convening power to ably hold government and renewable energy industry players accountable for decisions and practices towards sustainable and renewable energy delivery.

Going forward, this performance assessment report would serve as a tool for engagement, a joint voice from RCSOs and a demonstration of the contribution of the RECSOs to the development of the renewable energy sector.

1 *Ministry of Energy and Mineral Development, 2016: The National Charcoal Survey for Uganda*

The compilation of this report is therefore an opportunity for:

i) RECSOs to show case their contribution to development of the renewable energy sub-sector and to demonstrate that they are partners of choice in development;
ii) Involvement, engagement, participation of RECSOs and for presentation of a common voice on sector challenges relating to policy implementation in the sector;
iii) Documentation and knowledge management for the different networks and RECSO entities since many CSOs have limitations in documentation of success stories;
iv) Packaging and disseminating of best practices and success stories to influence adoption and uptake;
v) Present positive criticism to government, in fulfilment of the public watchdog role in the renewable energy subsector.

1.2 CSOs Coordination and Participation in Renewable Energy Sector

This Financial Year, RECSOs, led by Environment Alert and regional coordination centers:

a) Conducted capacity building trainings to fill knowledge gaps on issues such as advocacy (fact-based), negotiation and social mobilization, human rights based approaches (HRBA) in delivery of sustainable and renewable energy, among others;
b) Developed an advocacy strategy for RECSOs and Networks with a view of increasing access to sustainable and renewable energy alternatives in the Albertine Graben to conserve high value forest ecosystems to benefit people and nature in Uganda;
c) Developing CSOs coordination mechanism in the clean and renewable energy sub sector with emphasis on evidence based advocacy (based on action research and modeling best practices in renewable energy), strengthening partnership (to harness technical and financial resources with likeminded organizations and government) pursuing signing of a Memorandum of Understanding (MoU) with the central government (collaborative framework), strengthening capacities of key stakeholders (basic skills and knowledge for engaging key policy makers and decision makers) and issue based advocacy engagements through supporting sub-national coalitions to influence policy implementation at the local level and linking issues and experiences with the national level engagements through line networks (e.g. UFWG, ENR-CSO Network);
d) Facilitated platforms for CSOs to share lessons, knowledge and experiences as well as participate in debate and dialogue with government and private sector on pertinent issues affecting the energy sector in the country;
e) Engaged government to provide incentives to unlock private sector investment/ financing for sustainable and renewable energy access in Uganda;

f) Participated in the awareness campaigns to promote use of efficient, clean cooking and lighting alternatives, during the Energy Week, 2018;
g) Engaged private sector on innovative financing mechanisms for delivery of sustainable and renewable energy solutions;
h) Advocate government and private sector on development and adoption of policies, legislation and best practices for sustainable and renewable energy access.

2 METHODOLOGY

The convener of the RECSOs (Environmental Alert), with funding support from WWFs Project[2] titled, 'Increasing access to sustainable and renewable energy alternatives in the Albertine Graben,' led the process for this assessment. A consultant (Tree Talk Plus) was commissioned to facilitate the process. A performance assessment tool (attached in Annex 1) was developed and pre-tested using purposively selected respondents. The tool was shared electronically through emails to some of the respondent CSOs and telephone calls made as a follow up to ensure the tool is filled. The Assessment Tool was also converted into an online Monkey Survey tool (see shrinx.it/td8) and circulated electronically to over 56 selected respondents (these had earlier been engaged in developing a rural energy advocacy and lobbying plan). A consultative meeting of RECSOs was convened to discuss mechanisms for engagement and during this meeting, the performance assessment exercise was popularised. Findings from the above methods were enhanced by desk reviews of renewable energy documentations, particularly those relating to the proposed undertaking for the financial year 2017/2018.

Out of the 56 RECSOs contacted, 28 were able to submit a fully filled performance evaluation tool. The low numbers are attributed to preparedness of RECSOs to report, the need for confidence building, suspicion that government wants to track down details of RECSOs among others. Information provided in the performance tool has been collated and compiled into this report.

This report has been subjected to a stakeholder validation process, during which RECSO members that contributed to the report, were able to validate the information they provided. The validation exercise was conducted in the presence of MEMD, in part for purposes of building stronger ties and collaboration, but also to compare notes on what the RECSOs have contributed, vis a vis what MEMD has as a record.

2 *The project aims at communities adopting sustainable and renewable energy alternatives to reduce dependency on biomass for their energy needs.*

3 ACHIEVEMENTS AND OUTCOMES FOR 2017/2018

RECSOs perform different roles in the promotion of sustainable and renewable energy development and utilization in Uganda. They therefore compliment the implementation of Government plans and programs in value adding partnership/collaborative arrangements at different levels (village, Sub-county, local, national and international) through awareness creation, capacity building, action research, policy engagements. In addition RECSOs play a watch dog role and therefore conduct value adding policy, lobbying and advocacy engagements to review/appraise government performance in respect to commitments as stipulated in policies, programs and approved plans. Based on this and from their experiences, lessons learnt, information and facts, RECSOs provide/suggest alternative policy and practice recommendations to Government for consideration in rolling implementation of Government policies and programs at different levels (local and national). For this to happen, RECSOs should regularly share/submit their plans and budgets (financial contribution to the Energy sector) and reports of their performance to Government (both Local and National).

3.1 RECSOs in the sector

Community Based Organisation (28%) and Local Non-Government Organisation (50%), working at national and sub-national level support government in the delivery of development in the renewable energy sector. The districts and regions where they operate are summarised in Table 1 below. Central and Eastern Uganda districts have more interventions from the RECSOs than other parts of the country. Those contributing to this report are provided in Annex 2.

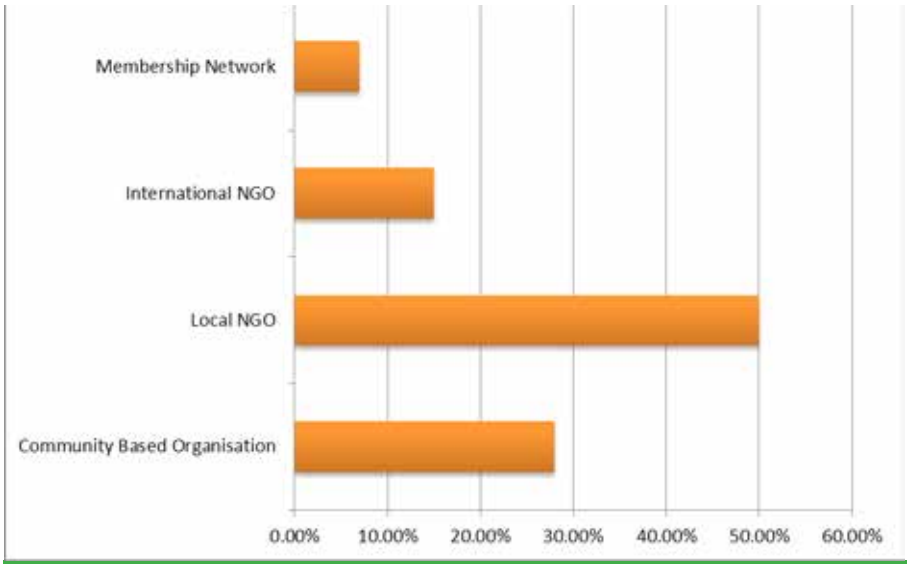

Figure 1: RECSO categories in the sector, (n=28).

Table 1: Districts where RECSOs have engagement in the sector

Region	Districts mentioned	Numbers
Country wide	CSOs working in all the districts.	3
West Nile	Arua, Nebbi, Maracha, Koboko, Moyo, Adjumani, and Pakwach.	7
South Western	Rubirizi, Bushenyi, Buhweju, Sheema, Mitooma and Ntungamo, Rukungiri, Kisoro, Mbarara, and Isingiro.	10
Mid-Western	Masindi, Kiryandongo, Buliisa and Hoima, Kibaale, Kyenjojo, Kagadi, Kyenjojo and Ntoroko Bundibugyo, Masindi, Kabarole, and Kyegegwa	13
Eastern	Bukwo, Kweni, Kapchorwa, Bulambuli, Sironko, and Mbale.Manafwa, Namisindwa and Bududa (Elgon), Jinja, Kaliro, , Bugiri, Mayuge,Iganga Mayuge, Namutumba, Kaliro, Buyende, Luuka, and Kamuli.	20
Central	Buikwe Kampala, Wakiso, Mpigi, Masaka Mityana Rakai, Kalungu, Bukomansimbi, Gomba, Mubende Rakai, Kyotera, Mityana, Wakiso, and Nakasongola.	16
Northern	Amuru, Lamwo, Pader, Kitgum, and Agago.	5

3.2 Thematic areas of work

Most of the RECSOs are engaged in implementing projects on cook-stoves, solar systems, and briquettes (29%) as well as raising awareness through public information and education materials (29%). They are also involved in capacity building and training of communities (18%) and engaging the media to disseminate good practices and information about good technologies among others.

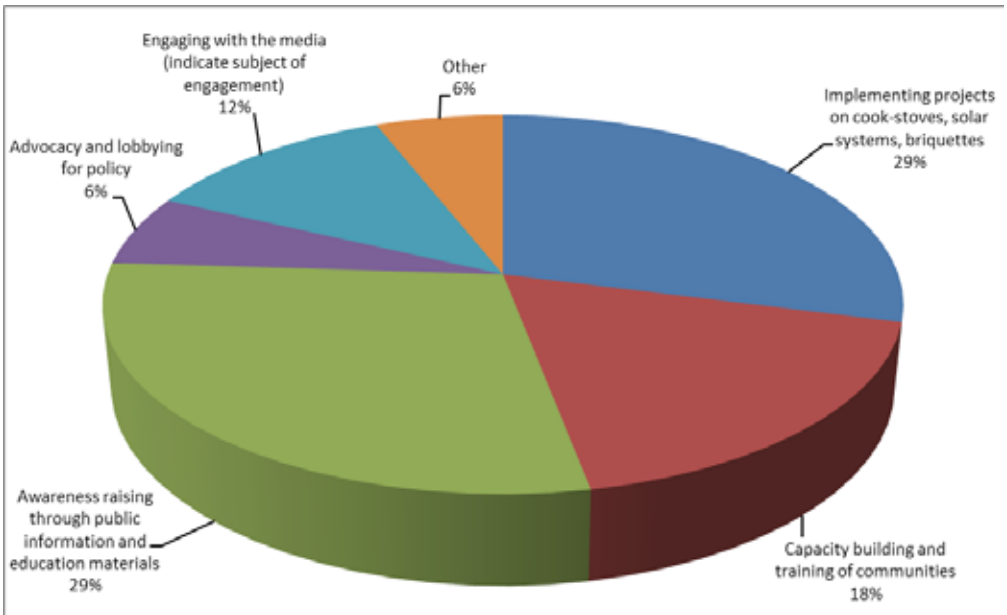

Figure 2: Thematic areas of operation of the RECSOs

Interesting to note is the fact that most RECSOs do not have independent renewable energy projects but rather integrate clean energy mechanisms in their programing centred on livelihoods improvement, health, education (work-based learning and green skills development), sustainable land management approaches and planting trees (See Box 1). Notable also is the fact that they conduct public dialogue meetings to engage power centres and duty bearers to mainstream renewable energy approaches in District Development Plans, District Environment Action Plans, sub-county level plans. They also produce public information, education, and awareness materials on clean energy approaches, energy efficient technologies, and alternative technologies. Table 2 summarises the items/tools that RECSOs produced/distributed to compliment GoU efforts in developing the sector.

Table 2: Items produced/distributed to enhance development of the renewable energy sector for FY 2017/2018.

Item	Description	Units
Installation of PV systems (1000W)	Schools	12
	Health centres	10
Reach to awareness programs (People reached in millions)	Radio talk shows	6
	TV talk shows	9
Training in effective sales and marketing of renewable energy technologies	Female CBOs	12
	Male CBOs	24
Training in credit handling	Female CBOs	10
	Male CBOs	35
Training in technical skills in solar PV technology	Female Technicians	2
	Male Technicians	53
Training artisans for Lorena stove		4300
Establish VSLAs for solar home systems		46
Households accessing clean energy technologies		2631
Households accessing solar home systems		921
Households with improved cook-stoves		4232
IEC materials developed	Various types	12,000
Market Awareness Campaigns		9
Tree seedlings planted	Biomass woodlots	1,500,000

Box 1: The Case for RICE-West Nile.

In the Financial Year 2017/2018, RICE West Nile undertook to promote Renewable Energy Technologies (RETs) which has contributed to increased access to RETs in six districts of West Nile sub region. RICE supported tree planting in Refugee settlements within Arua that has seen over 300,000 wood and fruit tree seedlings planted in institutions and communities in both refugee and host communities. It conducted training of local stove artisans on energy saving stove construction and equipping them with start-up kit to start stove making as a business. RICE also supported 10 conflict affected girls in secondary and vocational schools to pursue their career at school. They have supported the promotion of sustainable agriculture using Enabling Rural Innovation Approach that saw RICE-WN work with 25 farmer groups in Arua, Nebbi, Pakwach, and Nwoya. RICE has also promoted pupils rights in two primary schools within Arua district that increased awareness on and respect for pupils rights among key School stakeholders.

The on-going renewable energy project that RICE is currently handling is the Clean Energy Project that saw RICE-WN engage in Promotion of Renewable Energy (RE) Technologies: 310 cookstoves and 167 Solar Home systems: six district local governments from the project districts (Arua, Maracha, Nebbi, Koboko, Moyo, Adjumani) reached with lessons and Best practices on promotion of renewable energy access from Kasese district: One strategic partnership for sustainable energy promotion initiated for the West Nile sub region: 80 local stove artisans trained in making of energy saving cookstoves: 2 energy kiosks established in Rhino Camp and Imvepi refugee settlements in partnership with GIZ: training of Solar Technicians - over 30 trained understand the Clean Energy projects.

3.3 Networks, Collaboration and Partnerships

There are a number of alliances and networks (see Figure 3) in the sector but unfortunately, over the years, these have not combined efforts to have a common voice for engaging the Ministry of Energy and Mineral Development (MEMD) through a collaborative framework such as a memorandum of understanding. Earlier engagements were mainly from the business angle addressing concerns for conducive investment environment, investment holiday, financial instruments (loans and grants) with limited engagement on pro-poor policy reviews to take care of renewable energy technology interests for the communities, environmental safeguards, assessments of biomass energy demand and supply, the question of deforestation and forest degradation, the skills challenge and the increasing levels of fake technologies on the market among others.

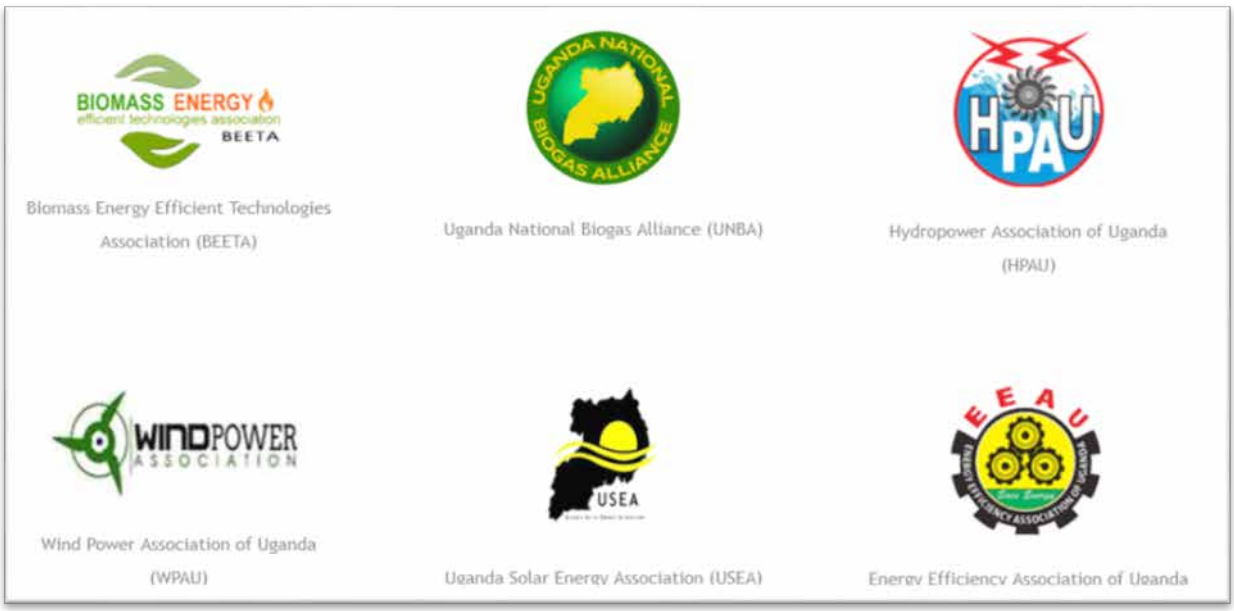

Figure 3: Examples of networks and alliances in the energy sector in Uganda.

Candid discussions have been held by RECSOs to establish mechanisms for meaningful engagement with MEMD. Initial discussions have concluded that:

a) There is need for a loose semi-formal coalition hosted by a registered Non-Governmental Organisation that seeks for a formal collaborative arrangement (through a Memorandum of Understanding) with government and an opportunity for future engagement.
b) The coalition should be guided by Memorandum of Principles and Host Institution Agreement as tools guiding behaviour of members of the coalitions (good reputation, sound financial capacity, sufficient experience in engagement based on facts).
c) The coalition should have national and sub-national hubs (with the sub-national hubs targeting engagements at District Local Government (DLG) level).
d) First baby steps for the coalition should focus on mapping of actors in the sub sector, engaging development partners to promote the network and pursuing a Memorandum of Understanding with the Ministry of Energy and Mineral Development.

3.4 Source of funding

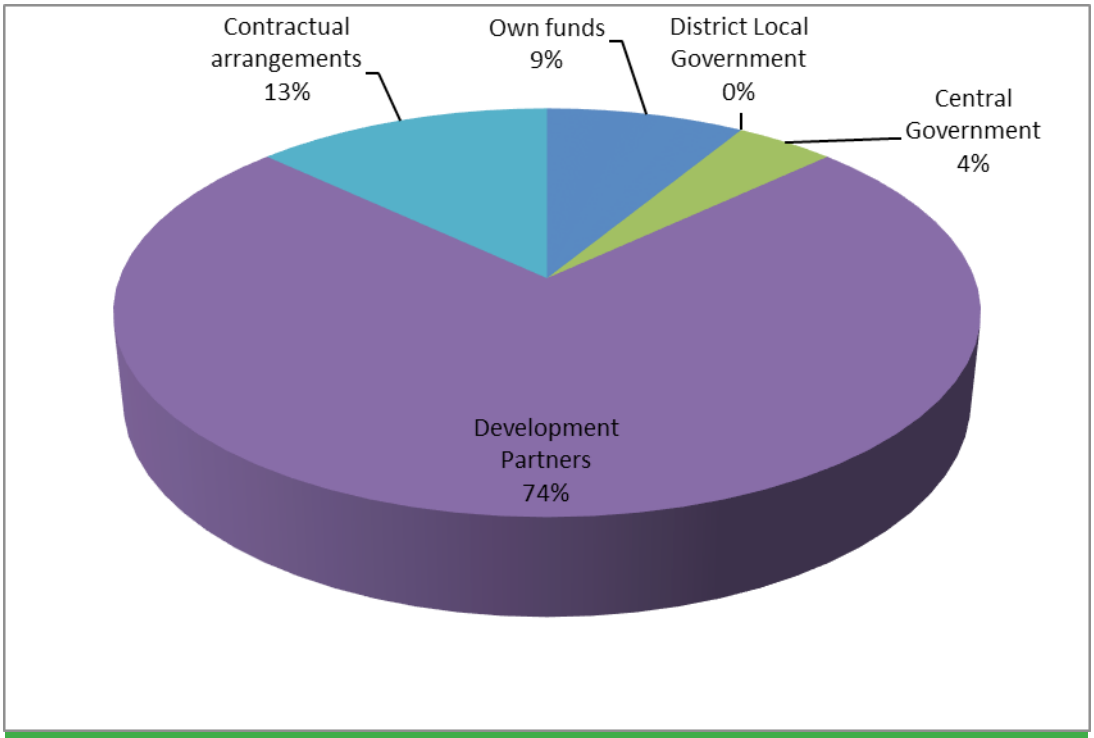

Figure 4: Source of funding for RECSOs activities.

As Figure 4 shows, RECSOs get most of the funds they utilise from development partners (74%). This is followed by funds that are registered as contracts between CSOs themselves and their clients (private sector, development agencies). For the lack of formal collaboration mechanism, there are limited funds from the central government (4%) and no funds streaming in to CSOs from the District Local Governments.

3.5 Funding

Participating organisations in this performance evaluation exercise declared the amount of money they have spent this financial year and this has been summarised in Table 3. A total of UGX 76,683,379,072 equivalent to USD 20,725,238 was spent by the different actors. Since this is the base year, there is no opportunity to compare with the previous years this being the 1st time the RECSOs have compiled a consolidated annual performance report.

Table 3: Financial contribution of RECSOs to the renewable energy sector.

No.	Name of Organisation	Contribution to the Sector
1	Power Africa Uganda Electricity Supply Accelerator	40,700,000,000
2	Global Green Growth institute	18,500,000,000
3	World Wide Fund for Nature-Uganda Country Office	10,360,000,000
4	Send a Cow	4,000,000,000
5	KIIMA foods	830,000,000
6	Maracha District Farmers Association	800,000,000
7	Rural Initiative for Community Empowerment	394,088,000
8	Environmental Alert	229,932,320
9	United Children Integrated Development Action Uganda	120,000,000
10	Action Coalition on Climate Change	110,000,000
11	Kitara Civil Society Organisation Network	90,000,000
12	Community Volunteer Initiative for Development	88,000,000
13	Advocates Coalition for Development and Environment	74,000,000
14	Tree Talk Plus/Environmental Management for Livelihoods Improvement	69,424,131
15	Buliisa Initiative for Rural Development Organisation	57,634,571
16	Midwestern Region Centre for Democracy and Human Rights	52,100,050
17	Kitara Civil Society Organisations Network	50,000,000
18	Support for Women in Agriculture and Environment	50,000,000
19	African Youth Forum Against Poverty	42,000,000
20	Bufuniyo Concerned Citizens for Development	20,000,000
21	Uganda Coalition for Sustainable Development	16,000,000
22	Jireh's Hand Foundation	15,000,000
23	Abakabaleega Farmers and Environmental Protectors Association	8,200,000
24	Bwambara Advocacy for Development Foundation (BADEF) and Hope for the Innocent Child development Foundation (HICDEF)	7,000,000
	Total (UGX)	**76,683,379,072**
	Total (USD) 1:3700	**20,725,238**

Because of the short timeframe (2 weeks) within which this report was compiled it was not possible to disaggregate this contribution by themes Biogas, Biomass, solar, energy saving cook-stoves gasification, bio-fuels among others. This would help visualise the investments per sector priority area. It is recommended that future performance assessments take due consideration of this need.

3.6 Projects undertaken in the FY 2017/2018

Table 4: Projects undertaken by the RECSOs in the FY 2017/2018

Organisation	Project (thematic area)	Key activities	Targeted	Outcome
i. Midwestern Region Centre for Democracy and Human Rights(MICOD)	Clean energy	Created awareness on renewable energy alongside strengthening citizens participation in health and education service delivery in refugee host communities of Bweyale and Mutunda	Refugees and host	Growing demand for home solar systems and improved energy saving cook-stoves.
ii. Power Africa Uganda Electricity Supply Accelerator's	Transaction Assistance	Supports innovative energy solutions, resource evaluations, and feasibility and grid impact studies, social and environmental impact studies.	Business community in the energy sector	Increased appreciation of business in the renewable energy sector
	Access to Finance	Equity, mezzanine financing, senior and sub-senior loans, guarantees, export credits, grants, and insurance programs		
	Capacity Building	Technical assistance to support institutional strengthening, technical and regulatory skill development, and project development and management activities.		
iii. Bwambara Advocacy for Development Foundation	Clean energy	Marketing and sale for renewable Energy Product for increased access to Clean Cooking (cook stoves and solar kits)	Community members	Increased interested to purchase energy technologies

Organisation	Project (thematic area)	Key activities	Targeted	Outcome
iv. United Children Integrated Development Action Uganda	Access to Renewable Energy Information Component	– Conducted stakeholder sensitisation meetings for renewable energy technologies for increased awareness. – Training of households and communities on proper usage of solar home systems and energy saving stoves. – Conducted radio talk shows on energy saving technologies – Supply of Solar and Cook stove products to beneficiaries.		i. Increased awareness leading to adoption of the technologies by the Communities, Leaders, and Stakeholders. ii. Reduced usage of the 3-stone cook-stove and kerosene lamps and kerosene candles (tadooba) iii. Planting energy woodlots iv. Interest in bye-laws on renewable energy v. Integration of renewable energy in Bundibugyo DDP and work plan.
v. African Youth Forum Against Poverty	Clean energy approaches	– 8,000 tree seedlings distributed to youth groups for planting – 25 youth groups acquired knowledge and skills in tree growing	Out-of-school youth groups	Increased interest and participation by the youth in planting trees
vi. Maracha District Farmers Association	Clean energy and livelihoods	– 30,000 pine, 75,000 coffee and 40,000 cocoa tree seedlings were produced and sold to farmers – Renewable energy products e.g. solar home systems and improved cook stoves were distributed to rural households.	Members and member	Integrating tree growing (for firewood) in crop production systems

Organisation	Project (thematic area)	Key activities	Targeted	Outcome
vii. Bufuniyo Concerned Citizens for Development	Clean energy and environment	– Over 1000 members of the community have been reached with messages on renewable energy in the sub counties of Bufunjo, Kitega, Nyabirongo and Kanyegaramire. – Distributed 126 dual purpose energy saving cook stoves and 36 home solar kits		Increased awareness leading to adoption of the technologies by the Communities, Leaders, and Stakeholders.
viii. Global Green Growth institute	Entire renewable energy sector	– Developing Regulatory Impact Assessment (RIA) – Developing solar and agricultural projects --Creating green jobs	All	Increased engagement and deliberation on energy
ix. Environmental Alert	Policy engagements on renewable energy	– Development of an advocacy strategy for project CSOs and networks (at national and sub-national level) – Prepared a policy review and gap analysis report on Renewable energy policies, laws and guidelines to identify gaps and provide recommendations on sustainable and renewable energy development – Held the biomass dialogue during Energy Week 2017 in partnership with MEMD – Profiled the key CSOs ,platforms and networks operating in the renewable energy sub-sector at the national level to inform subsequent policy engagement – Undertook a study on unlocking investment/ financing for sustainable and renewable energy access in Uganda – Prepared a CSO position paper highlighting key policy issues and recommendations to advance policy reforms towards increased financing and investment in the renewable energy sub-sector	Civil Society in Renewable Energy, MDA in Renewable Energy	Identifying and creating spaces for engagement on pro-poor policies on renewable energy

Organisation	Project (thematic area)	Key activities	Targeted	Outcome
x. Uganda Coalition for Sustainable Development	Climate change and renewable energy nexus	– Implemented a project aimed at strengthening the resilience and sustainability of local economies with specific consideration of renewable energy technologies. – Implemented activities associated with the implementation of the Paris Agreement in collaboration with the International Network for Sustainable Energy (INFORSE), Sustainable Environmental Development Watch (SusWatch-Kenya) and Tanzania Traditional Energy Development Organization (TaTEDO).	Policy makers	Improved understanding of climate change concerns in the energy sector relating to CSO participation, Nationally Determined Contributions and Paris Agreement.
xi. Send a Cow Uganda Limited		– A total of 65,000 beneficiaries reached with household economic strengthening opportunities (under sustainable outcomes for youth and children) – Income of over 5,992 farmers increased through sale of oil seeds (Oil seeds project). – Over 200 households with improved livelihoods (Kamuli livelihoods Project). – 1500 Households with improved Agriculture methods (Agriculture for women and girls) – 300 Household embracing aspects of disability (Amuru disability mainstream project) – Orphans with improved livelihoods (Rakai orphans project)	All	i. Aligning renewable issues and concerns along livelihoods projects

Organisation	Project (thematic area)	Key activities	Targeted	Outcome
xii. Support for Women in Agriculture and Environment (SWAGEN)	Tree planting, fuel efficiency, rainwater harvesting	– Planted 300,000 Pinus Oocarpa trees in the Buffer Zone of Rwoho Central Forest Reserve – Constructed 50 fuel efficient stoves in 50 households in Mwizi Subcounty – Constructed 35 rain water harvesting tanks in 35 households – Partnered with Solar Sister to provide 100 households with solar lighting	Members of SWAGEN	ii. Increased support to rural and poor women in renewable energy technologies.
xiii. Abakabaleega Farmers and Environmental Protectors Association		Four hectares of trees were planted	Farmers	
xiv. Tree Talk Plus	Climate change, tree planting, skills development	– Awareness raising on REDD+ for Forest Dependent People – with reference to strategic actions on renewable energy – Planted 120,000 seedlings with refugees and host communities in Imvepi and Rhino Camp Settlements. – Green, entrepreneurial and life skills for 80 youth in Masindi (nursery establishment and Management; woodlot establishment and management; energy saving stoves construction) – Training 50 farmers in Farmer Managed Natural Regeneration – Capacity building for journalists on news triggers in the charcoal value chain	Forest Dependent	iii. Improved understanding of renewable energy challenges through awareness raising, positive journalism, and work-based learning for skills development.
xv. Buliisa Initiative for Rural Development Organisation (BIRUDO)	Tree planting and briquette making.	– 35,000 trees were planted in 570 householders in Buliisa District – 3 women groups trained in briquettee making for income purpose (Total of 45 women)		Increased appreciation of the need to plant trees as source of firewood

Organisation	Project (thematic area)	Key activities	Targeted	Outcome
xvi. The Uganda National Alliance on Clean Cooking		– Conducted consultations on renewable energy policy producing a policy brief to MEMD – Championed the Inter-ministerial committee on clean a cooking where emphasis was drawn to mainstream Clean Cooking through having budgets and work-plans for inclusive intervention. – Participated in the development of Bio-Fuels Standards in Uganda	Private Sector Civil Society Decision makers	Identifying and creating spaces for engagement on pro-poor policies on renewable energy
xvii. SNV-Netherlands	Biogas	Household Biogas implementation - over 500 bio-digesters have been constructed at the household under this project	All	Adoption of technologies
xviii. Advocates Coalition for Development and Environment	Policy engagement	Advocacy on use of petroleum revenues to promote renewable Energy	All	Continuous engagement is necessary
xix. Kitara Civil Society Organisations Network	Clean Energy Project	– Three position papers on renewable energy in Kagadi, Kyenjojo and Kibaale developed and shared with district officials. – Distribution of solar home systems and energy saving cook-stoves		Increased uptake
xx. Kiima Foods	Agriculture Extension, Distribution and	– Distribution of Renewable energy technologies – Dissemination and Mobilisation of communities Supporting 2 districts CSOs to develop and submit their renewable energy position papers.		Increased uptake

The notable areas of engagement this financial year (2017/2018) included:

a. Policy advocacy to promote favourable business environment (engaging donors and investors, advocating for quality standards to protect consumers from inferior products while ensuring that manufacturers produce quality clean cooking solutions, negotiating for access to relevant data in the clean cooking sector, facilitating access to finance, training members in technology(s), business development and entrepreneurship and organizing networking events and connections with diverse stakeholders and experts within the sector.

b. Supporting government ministries, departments and agencies by aligning activities along funded projects such as USAID's Power Africa Uganda Electricity Supply Accelerator's(Power Africa Uganda Accelerator) whose goal is to facilitate 1,000 Megawatts of generational capacity and one million new connections in Uganda by 2020

c. Creating awareness about opportunities for positive change along the entire biomass energy value chain (supporting government media programs such as Fumbalive campaign, sustainable charcoal journalism) and creating platforms where sector players interact and deliberate on clean energy approaches and technologies.

d. Promoting energy saving cook-stoves and solars systems used at households, institutions and communities for lighting.

e. Working through partnership (with international, regional, national organizations, universities, schools, CBOs, Faith Based Organizations) to engage policy and decision makers to integrate renewable energy concerns in development plans.

f. Promoting entrepreneurship and life skills through work-based learning for the out-of-school youth by retooling them with artisanal skills and start up kits to engage in renewable energy enterprises (construction of energy saving cook stoves, growing of trees as feed stock among others).

g. Establishing Village Savings and Loan Associations (VSLAs) at community level as a financial inclusion model where individuals and businesses have access to useful and affordable financial products and services that meet their needs and that are delivered in a responsible and sustainable way. This is one way to promote enterprise development in the renewable energy sector.

h. Supporting social movements for sustainable renewable energy (young people understanding their roles) and incubation of friendly businesses in the renewable energy sector among others.

i. Integrating renewable energy interests and concerns in sustainable agriculture (ensuring that communities grow trees to meet their future biomass demands).

j. Research in gender and social development (looking at gender disparities in the energy nexus, energy demands for refugee and host communities, energy demands for the extremely vulnerable individuals of society).

k. Forest conservation with a view of addressing availability of feed stock into the biomass value chain (working with communities to conserve indigenous forests and trees, planting biomass energy woodlots, promoting farmer managed natural regeneration and advocating for tree growing under government projects and programs such as Operation Wealth Creation (OWC).

Box 2: A success story for WWF Uganda Country Office in FY 2017/18.

WWF has a mission is to stop the degradation of the earth's natural environment and to build a future in which humans live in harmony with nature, by:

i) Conserving the world's biological diversity,
ii) Ensuring that the use of renewable natural resources is sustainable, and
iii) Promoting the reduction of pollution and wasteful consumption.

In the FY 2017/2018, WWF implemented two renewable energy projects. For the first project on increasing access to sustainable and renewable energy alternatives in the Albertine Graben, the following has been achieved:

a. Increasing access to sustainable and renewable energy alternatives in the Albertine Graben to conserve high value conservation area. At impact level, the project facilitated 2,631 households in the Albertine Graben to access clean energy technologies to meet their energy needs. Out of these, 601 households accessed solar home systems for lighting, phone charging and entertainment while 2,030 households accessed improved cook stoves for cooking in the period November 2017 to June 2018.
b. In the course of implementation of the activities above, WWF and its implementing partners were able to contribute towards the review of the Renewable Energy Policy for Uganda, the development of the Uganda National Biomass Cook Stove Standard, replacement of the Wood Charcoal and Charcoal Briquettes for household use, charcoal for non-industrial use and mainstreaming of the clean cooking agenda in the work plans and budgets of Government MDAs.
c. Two (2) draft District Renewable Energy Strategies (for Arua and Masindi District Local Governments) were finalised. The documents will facilitate district level energy planning & guide renewable energy development in the two districts.
d. Kasese Municipal Council established a one stop center initiative that brings together government, private sector, and CSOs to show opportunities/services they offer that can boost renewable energy financing to the local communities. This initiative has attracted banking institutions, Uganda Revenue Authority, Micro Finance Support Center and SACCOs. Additionally, Kasese Municipality Council allocated 20 Acres of land for interested investors in renewable energy for setting up solar plants. In Northern Uganda and the Mid Albertine Region, 46 VSLAs in the Northern and Mid-Albertine Graben were providing loans to their members to acquire solar home systems and improved cook stoves. One private company (Prime Green Ltd) was selling clean energy technologies to local communities on credit.

For the second project on Scaling-up Rural Electrification Using Innovative Solar Photovoltaic Distribution Models, the following has been achieved:

a. The project strengthened the technical capacity of 55 (represented by 2 women and 53 men) CBOs to install, operate and maintain solar PV systems in 20 districts of the Albertine Graben in Uganda. By June 2018, the 55 trained technicians from these CBOs reported installation of 601 solar PV systems after the acquisition of technical skills in solar PV technology.
b. Forty five (45) CBOs (represented by 10 women and 35 men) were trained in credit handling and stock management to minimize defaulting payments by beneficiary households under the solar credit sales model adopted by the project in distribution of the solar PV systems.
c. Furthermore, the project strengthened the capacity of 36 active partner CBOs (represented by 12 women and 24 men) to undertake effective sales and marketing of renewable energy technologies to address the current challenges of the competitive solar PV sales market in Uganda
d. The project supported awareness campaigns on the value of solar PV technology, which resulted in increased knowledge among the population about the options, value, pricing and benefits of solar PV systems. These awareness campaigns involved broadcasting messages on three radio stations and one television station, distribution of publicity materials and conducting road shows and exhibitions. An estimated total of about 6 million people were reached through the radio awareness campaign and over 9 million viewers were reached through Television broadcast of a documentary of one of the project beneficiaries.

In terms of advocacy, WWF has contributed both financially and technically to the development of two position papers urging MEMD to revise the Renewable Energy Policy (2007-2017). In addition, WWF has been part of the RECSOs that consulted on the development/revision of standards for clean cooking. These include Ugandan National Biomass Cook Stove Standards and the Uganda National Fuels Standard.

The Key lesson for WWF this FY is that integrating energy into livelihood interventions is the best strategy for dealing with the price concerns raised by the target communities. Although it might take a while before the desired results, it provides a more sustainable win-win scenario for both the beneficiaries and the CSO marketing the renewable energy technologies since they would not only have provided a means of earning for the household but also additional income to purchase the renewable energy technologies.

3.7 Media engagements, research/studies/ surveys and Policy engagement (DLG, Parliament) on renewable energy this financial year

Environment Management for Livelihoods Improvement (EMLI), together with Tree Talk Plus jointly supported MEMD is undertaking capacity building sessions on sustainable charcoal journalism (40 participants) for environment reporters, information/communication officers and natural resources managers drawn from media houses and districts implementing the Green Charcoal Project (Nakaseke, Kiboga, Mubende and Kiryandongo). A whatsapp group of environment reporters has been created for sharing news triggers around the charcoal industry and increased number of positive stories along the charcoal value chain.

The Uganda National Alliance on Clean Cooking (UNACC) has undertaken different forms of public information and education engagements to enhance behaviour change, facilitate knowledge transfer and research especially through its members (public, private, development, businesses, research and education sectors that have promotion of clean cooking solutions).

MICOD in partnership with KCSON and other partners presented a position paper seeking to highlight the status of access, use and conservation of Renewable Energy Technologies (RETs) in Masindi District, focusing on the major hindrances of increased access and penetration of the technologies. This has been critical in facilitating the integration of renewable approaches in the district development plans of lower local governments.

MADIFA is currently collecting data on individuals that are purchasing renewable energy products with a view of documenting and disseminating information on genuine versus fake technologies on the market. This will inform MEMD and other MDAs on policy decisions relating to fake products on the market.

Currently, UCSD is implementing a research project on ecosystem services and how they can be used for poverty alleviation as well as Linking notions of justice and project outcomes in carbon offset forestry projects: Insights from a comparative study in Uganda (2018). Related to this is UCSD's work with partners in Tanzania, Kenya, Bilivia that informs engagements with the media on a monthly basis (through media grants to enable reporters from New Vision and Daily Monitor write articles and publish them as feature stories).

SWAGEN, in partnership with Solar Sisters, is raising awareness through local media about solar lighting options through cooperatives. The beneficiary households are being trained in fuel efficient cook-stove construction (but also provided with local media coverage). In addition, the organization has introduced the pass-on the gift project where a household is given a heifer. When the heifer produces a female calf, it is passed on to the neighbour. All heifer recipient households are required to use the manure to generate bio gas. The project provides start up equipment and installation on the understanding that all male calves produced are returned to SWAGEN to pay for the cost of biogas equipment and installation until the cost is covered. After that, all the male and female calves belong to the beneficiary household.

4 ASSESSMENT OF PERFORMANCE OF THE MINISTRY OF ENERGY AND MINERAL DEVELOPMENT ON INCREASING ACCESS TO CLEAN AND RENEWABLE ENERGY RESOURCES

Uganda is richly endowed with abundant energy resources, which are fairly distributed throughout the country. These include hydropower, biomass, solar, geothermal, peat and fossil fuels. The energy resource potential of the country includes an estimated 2,000 MW of hydro power, 450 MW of geothermal, 1,650 MW of biomass cogeneration, 460 million tons of biomass standing stock with a sustainable annual yield of 50 million tons, an average of 5.1 kWh/m2 of solar energy, and about 250 Mtoe oited!f peat (800 MW). In addition, petroleum in an estimated amount of 6.5 billion barrels, of which 1.4 billion barrels are recoverable, has been discovered in the western part of the country. The overall renewable energy power generation potential is estimated to be 5,300 MW[3].

However, the energy sector is characterized by:

i) Very low access to modern energy services (e.g. electricity) for the bigger proportion of the population throughout the country, especially in the rural areas.
ii) Inadequate capacities for generation, transmission and distribution) to match the growing energy demand in some areas.
iii) High dependence on Biomass with over 90% of total energy for households, institutions, commercial and industrial sectors being biomass energy
iv) High inefficiencies in utilization of biomass and other renewable energy resources.
v) Energy poverty that obliges for diversification of the energy mix,
vi) High power tariffs that acts as a barrier to ubiquitous use of electricity
vii) Fake/counterfeit renewable energy technologies on the market

Despite the above challenges, the Ministry of Energy and Mineral Development is still committed to deliver its mandate enshrined in the ministry objectives and policy goal: 'to establish, promote the development, strategically manage and safeguard the rational and sustainable utilization of energy and mineral resources for social and economic development'. The key renewable energy policy goal is to increase in significant proportions the contribution of renewable energy in the total energy mix.

Currently the priority areas of MEMD in delivering on the above mandate include:

i) Increase electricity generation capacity and transmission
ii) Increase access to modern energy services through rural electrification and renewable energy development
iii) Promote efficient utilization of energy through adoption of improved energy technologies
iv) Promote research and development and collaboration with international and national NGOs and CSOs for technology and standards transfer and adoption

3 *MEMD, 2016: Uganda's Sustainable Energy For All (Se4all) Initiative Action Agenda*

4.1 Performance against key undertakings for the FY 2017/2018

The FY 2017/2018 was a year during which MEMD continued implementing activities in the three priority areas contributing towards the ministerial objective and policy goal. The said priority areas are:

i) Increasing electricity generation capacity and transmission,
ii) Increasing access to modern energy services through rural electrification and renewable energy development, and
iii) Promoting efficient utilization of energy through adoption of improved energy technologies.

One cross-cutting strategy for making progress on the above mentioned priorities has been the promotion of research and development and collaboration with international and national NGOs and CSOs for technology and standards transfer and adoption.

RECSOs have undertaken a critical analysis of progress made this year per a set of undertakings and the findings have been summarized in Table 4 as follows.

Table 5: A summary of performance assessment of MEMD on renewable energy developments for the FY 2017/2018.

Undertaking for FY2017/2017	Achievements by MEMD	Comments by RECSOs	Recommendations
Undertaking 1: Biogas Technology Promotion and Dissemination	Biogas standards formulated and in place.	RECSOs APPLAUD MEMD for its commitment to the promotion of biogas as a clean alternative energy from wastes. Biogas plants and/or Bio latrines offer significant sanitary benefits and clean energy to hosting institutions as well as a slurry rich in agricultural nutrients. The on-going initiatives to promote bio-latrines/biogas plants, the support to the Uganda National Biogas Alliance, development of standards on biogas and biogas for electricity schemes at Kayei and JESA farm and highly appreciated.	i) Dissemination of the standards is critical to guide the rollout and adoption of the technology
	Baseline for biogas technology developed in partnership with Uganda Biogas Solutions and SNV.		ii) MEMD should publicize the baseline for future reference by the different actors in the sector.
	Over 300 domestic biogas systems installed through partnership with Biogas Solutions Uganda and SNV.		iii) Operation and maintenance of the installed system is critical and therefore MEMD and actors should jointly monitor.
	5 biogas systems installed in Bombo Army SS- Luweero; Namisindwa Technical School Namisindwa district; Bishop East Mukono; St. Solomon Kyatega- Kyegegwa district; and St. Michael International School – Wakiso district.		iv) These are demonstrations that the technology is feasible. MEMD and RECSOs should popularize these by organizing visits to these schools by other targeted schools and institutions. Sourcing funds for rollout of the technology is critical
	Feasibility assessments and studies for rehabilitation of Kayei biogas plant completed.		v) MEMD should undertake the rehabilitation of the Kayei biogas plant in FY 2018/2019

Undertaking for FY2017/2017	Achievements by MEMD	Comments by RECSOs	Recommendations
Undertaking 2: Promotion of Efficient Biomass Energy Technologies such as Energy Saving Institutional stoves and Energy Saving Household stoves	12 institutional cook-stove installed in Buhara S.S – Kabale district, St. Francis Kyanamira- Kabale, Nabumali High School- Mbale; St. Thereza- Wakiso; Crested High School in Kalungu district, Kabulasoke CORE PTC, Gomba district; and Sacred Heart Secondary School, Kiteredde - Kyotera District.	We NOTE that biomass remains the biggest source of cooking and heating energy for residential and Industrial enterprises (e.g. tea and tobacco curing, ceramics, confectionery, brick and other rural based industries) in the country. We are CONCERNED that over dependency has led to over exploitation and unsustainable utilization of forest and other vegetation. Over 44 million tons of woody biomass is consumed annually against an estimated sustainable yield of 26 million tones. Nonetheless we APPLAUD the initiatives taken by MEMD to build capacity of technicians and artisans (Energy Service Providers), setting up demonstrations for efficient Biomass Efficient Technologies, developing standards on household stoves and the biomass energy strategy for scaling up adoption of BET (institutional stoves, ovens, kilns among others).	i) Operation and maintenance of these cook-stoves is critical. A comprehensive monitoring plan should be put in place by way of offering energy services provision to guide users on effective and efficient use as well as longevity/lifespan of the stoves.
	50 stove producers trained in household standards;		ii) MEMD should share contacts of the trained stove producers with RECSOs who are involved in micro-stove production. This will help in making sure stoves made using RECSOs funds meet the acceptable standards.
	MEMD and UNBS conducted training on institutional stoves standards in different regions of Uganda.		iii) The institutional stoves should be popularized. Through the proposed Memorandum of Understanding with MEMD, RECSOs should partner with MEMD to popularize these standards.
	National Standards for Household biomass stoves developed.		iv) MEMD and RECSOs should jointly popularize the standards for household biomass stoves as a way of eliminating fake stoves on the market.
	Demonstration and training conducted in 7 villages in Lumino Sub County. 24 participants were trained in construction of shielded stoves.		v) In future, RECSOs should be involved in these training sessions as they have the potential (with small funds) to support additional/required training in neighboring localities.
	Household charcoal energy saving stoves demonstrated and disseminated throughout the whole Country.		

Undertaking for FY2017/2017	Achievements by MEMD	Comments by RECSOs	Recommendations
Undertaking 3: Promotion of Improved Charcoal and Briquetting technology	National Charcoal Survey Report was launched and disseminated.	We APPLAUD the effort to improve methods for conversion of biomass into charcoal (such as improved charcoal production technologies, briquetting technologies, development of charcoal ordinances and bye-laws, standards for lump charcoal and carbonized briquettes) but NOTE that these still rely on traditional technologies and practices, with efficiencies of less than 10%. These technologies are wasteful, creating a lot of negative environmental degradation and counter the effort to promote such technologies.	i) This commendable work was achieved through the Green Charcoal Project implemented in selected districts within Central Uganda. The general recommendation is that there is need for rollout of this project in other parts of the country targeting the most highly rated charcoal producing districts in the regions.
	400 private woodlot owners in the districts of Mubende, Kiryandongo, Nakaseke and Kiboga were trained and supported in Sustainable Forest Management.		
	Over 3,630 ha of sustainable charcoal woodlots established in 2017 with a total of 4 million charcoal feedstock trees planted.		
	Awareness materials developed and disseminated e.g newsletters, and fact sheets; a) 20 radio talk shows through 4 FM stations held in the four districts. b) Features were run on television stations, and articles published in national newspapers.		
	115 Casamance kilns were disseminated in the four pilot districts of Kiboga, Mubenda, Nakaseke and Kiryandongo Districts.		
	Fourteen (14) artisans were trained in fabrication, and maintenance and installation of Casamance kilns and retorts.		
	10 retorts and 5 Namibian kilns were installed and demonstrated in the pilot districts.		

Undertaking for FY2017/2017	Achievements by MEMD	Comments by RECSOs	Recommendations
Undertaking 4: Promote Gasification technology	75KVA gasification unit at Nyabyeya in operation using dual fuel diesel and biomass at ratio of 2: 8 diesels to Biomass.	The effort to convert biomass material into producer gas, to generate electricity in combustion engines, and thermal energy is appreciated.	i) There is need to scale up Nyabyeya gasifier unit and demonstrate gasification for thermal applications in institutions
	Demonstration of 20 Household Gasification stoves deferred due to lack of certified stoves on the local market.		ii) Since households continue to be the largest consumers of biomass energy, MEMD should do everything possible to pilot household gasification to reduce dependence on woody biomass
	Partnership was built with Mandulis Energy to demonstrate electricity production from biogas from a 32KW gasifier system in Nwoya district.		iii) MEMD should utilize this opportunity to partner RECSOs with Mundilis Energy to demonstrate electricity from biogas for households.
	Development of strategy and plan to disseminate gasification technology is ongoing.		iv) MEMD to invite RECSOs to contribute to the development of the strategy but also in the dissemination of the technology.
Undertaking 5: Biofuels Production and Promotion	Development of regulations ongoing following enactment of the Biofuel Act, 2018.	Though with limited success, we APPRECIATE the effort to promote production of liquid fuels (bio-ethanol and biodiesel) from biomass materials with the drive to have a Bio-fuels Act in place, biofuel regulatory framework to regulate production, the effort towards blending and utilization and the biodiesel standards that were developed. We URGE government to fast track the production of bio-fuels as alternatives to the escalating energy demands and prices in the country.	i) Biofuels will play an important part in meeting the energy demand of the country and therefore MEMD should spend more in research and development of biofuels considering that the standards and the Act are now in place.
	Inventory of biofuels feedstock producers completed in mid-northern Uganda and ongoing in other parts of the country.		
	Formulation of the Biodiesel Blend Standards on going in partnership with UNBS.		

Undertaking for FY2017/2017	Achievements by MEMD	Comments by RECSOs	Recommendations
Undertaking 6: Promotion of Solar and Wind Energy	Training and capacity development of solar technicians	We appreciate that Government has continued to promote development of solar energy for grid power production such as the 4MW solar plant being established at Busitema University, over 200,000 solar home systems have been installed countrywide, there are solar PV installation such as the 42 Kw at Rubaga hospital and a number of rehabilitations of wind energy mills in Karamoja region. There is a demonstrated hybrid Bio-thermal/Solar fruit drier at Abenakyo Farm Kayunga district, and Fruits of the Nile Ltd.	i) Because of the increase in fake solar products on the market, there is need to register and certify solar technicians and traders as a way of regulating the trade.
	Demonstration of solar street lighting in selected towns in northern Uganda		ii) MEMD should now move to comprehensive rollout since demonstration show that street lighting through solar works.
	Support to UNREA and USEA		iii) RECSOs recommend the recognition of civil society in the renewable energy sector as the existing association largely focus on the technologies for the rich, yet RECSOs are more focused on pro-poor technologies and policies.
	Rehabilitation of 3 wind mills in Karamoja and Installation of wind measuring equipment in Karamoja		iv) MEMD should ensure that operation and maintenance of the windmills in Karamoja is taken care of in the financial year 2018/2019
Institutional matters	a) Technical assistance was provided to UNACC and BEETA to develop strategic plans for self-sustenance and to make significant contributions to the clean cooking agenda. b) National Biomass Energy Dialogue was held in 2017, as part of the main events for the Energy Week 2017. i) The dialogue attracted 131 key stakeholders in the biomass subsector and the National Charcoal Survey	RECSOs applaud the effort by MEMD to create channels for inter-institutional collaboration in delivering development to the citizen.	i) The recommendation is to bring on board RECSOs that form a representative voice of the voiceless at community level. ii) Secondly, there is need for enhanced partnerships with the media, above the current engagements, to raise the profile of the energy sectors and there challenges faced by the energy sector, a notch above the current.

Undertaking for FY2017/2017	Achievements by MEMD	Comments by RECSOs	Recommendations
Institutional matters	Report was officially launched. ii) Awareness materials including brochures, calendars, were developed and disseminated across the country. c) An inter-ministerial committee for clean cooking was supported to bring together key players such as Ministries of health, education, internal affairs, and environment among others to mainstream clean cooking issues in their respective activities and programs.		iii) Lastly there is need to elevate the energy sector to political priorities and therefore the need to influence political manifesto of the ruling party.

5 CROSS-CUTTING ISSUES

5.1 Climate change

MEMD has developed NAMAs on Integrated Waste Management and Biogas in Uganda; this is intended to improve waste management in towns through Integrated Waste Management and biogas production from Municipal Solid Waste, agro, industrial and sewerage wastes for energy.

MEMD has also developed a Green Schools NAMA - developed in collaboration with UNDP/GEF. This is in form of a revolving fund to install improved cooking technologies targeting 18,000 education institutions in the country.

RECSOs applaud MEMD for the NAMAs, on integrated waste management and the Green Schools NAMA. The recommendation is for MEMD to popularize the NAMAs and the related investment modalities.

On the other hand, RECSOs aligned energy in most of their climate change related interventions. Among the key areas are:

i. RECSOs have supported the Climate Change Department in the finalisation of the Draft Climate Change Bill; participated in the 23rd Session of the Conference of the Parties, pushing forward national interests in the global climate change debate and participated in the organisation of 4 Regional Post-Conference of Parties meetings to inform Ugandans about what transpired in the 23rd CoP that took place in November 2017, in Born, Germany. During these meetings, emphasis was laid on the nexus between renewable energy supply, the rate of deforestation, and the resultant climate change impact.
ii. RECSOs have continued working with the National REDD+ Secretariat pushing forward the National REDD+ Program and the Forest Investment Plan and frameworks to support the National REDD+ Strategy development and implementation. Renewable energy features prominently in the proposed strategic action for the National REDD+ Strategy;
iii. RECSOs have worked with communities to plant trees as a mitigation approach but this will in future translate into feed stock for renewable energy.

5.2 Youth and gender

Currently, the concern of the renewable energy sector is to increase energy access and address energy security issues with a gender lens. Unfortunately gender related issues and concerns are woven throughout sector priorities and commitments making it difficult to trace the actual contributions to women, youth and vulnerable groups. Going forward it is critical that there is a gender focus as provided for in the National Gender Policy.

For both the RECSOs and MEMD, there was limited attention accorded youth and gender concerns this FY 2017/2018. In fact, major consideration for youth was the establishment of institutional cook-stoves in a few selected schools and training institutions without due consideration of out-of-schools youth groups and associations of women as key targets. .

The key concern is that poor households (led by young people) use more biomass in low efficiency equipment. The collection of such biomass is often by human physical effort and utilization has health implications (eye & lung disease; spine damage; hygiene). The youth continue to have little access to modern clean energy forms.

In terms of the charcoal challenge, the youth continue to be the main agents in firewood and charcoal production and trade. Along the entire charcoal value chain, the youth a dominant and yet there are no specific policies to address their concerns, no specific government-led and CSOs-led intervention to engage them in sustainable energy production and utilization.

Women & men continue to have different energy needs linked to their gender roles Women bear the main burden of biomass collection and therefore the energy crisis affects those most. Women need light while trading in the evening road-side markets yet they have less access to credit among other challenges.

The energy poverty talked about earlier in this report, affects women because of their role to provide household energy for cooked food, boiled water and warmth, impacts of biomass collection & use affect women's health.

The key recommendation is for both RECSOs and MEMD to be gender responsive, and plan for annual projects that specifically addresses issues and concerns of women and energy.

6 SECTOR EMERGING ISSUES

Whereas there is abundant hydro, solar, biomass and geothermal resources, apart from biomass, the other resources have not been fully exploited. There are plans, strategies and on-going programs to exploit and develop all these resources but at the moment, there is increasing share of renewables in Uganda's energy mix. The issues raised in Table 5 below, are therefore issues that revolve around renewable energy, with little concentration on other forms of energy.

Table 6: Emerging issues and recommendations

Emerging issues	Recommendation
i) The undertakings on tree planting, growing and protection (feed stock) in the Ministry of Water and Environment do not mirror with the undertaking renewable energy in MEMD	MEMD, MWE and RECSOs should dialogue to develop synergies for addressing the biomass energy challenge and its related impacts.
ii) Whereas financing for large scale renewable energy project (Karuma, Bujagali, Isimba) is enormous, funding for pro-poor energy initiatives is still minimal. Even with large scale investments in those alternatives, there is no commensurate reduction in dependence on biomass energy	RECSOs and MEMD build a case for meaningful lobbying for funding/investment in pro-poor energy investments
iii) Neighbouring countries have put bans on charcoal production and trade whilst Uganda has remained the only source of charcoal in the region.	MWE/MEMD pronounce themselves on ban of charcoal across the boarders
iv) Districts have taken long to embrace the renewable energy strategy to ease the role out proposed activities at DLG level	Actors in the sector (MEMD and RECSOs) should influence the integration of Renewable Energy concerns in the performance indicators against which DLGs are evaluated.
v) Limited coordination and reporting on developments in sector (up to national level) - No precise and committed data collection/ compilation/ reporting)	MEMD should develop and popularize a one stop center and clearing house for data and information on renewable energy in the country to avoid circulating unfounded figures about the sector. MEMD/Directorate of Energy reviews its structure to provide for an information clearing house (databases, geo-spatial information etc.)

Emerging issues	Recommendation
vi) Local Councillors (who are the political leaders at LLG) have limited understanding of clean energy/renewable energy approaches and are a hindrance at adoption. No policy emphasis on clean energy/renewable energy at LLG	RECSOs support MEMD in: a) Undertaking an orientation of local leader to appreciate clean energy/renewable initiatives. b) Engaging councils to develop DLG and LLG clean energy/renewable policies at that level. c) Engage councillors to advocate for budgetary allocations at that level.
vii) The solar sub-sector is largely informal and difficult to regulate with increasing numbers of fake products on the market (batteries, panels, solar lamps)	a) MEMD develops guidelines and other regulatory framework to formalise dealings in the sub-sector. b) MEMD upscale law enforcement to confiscate fake products, close dealers, and rally for citizen vigilance in addressing the vice. c) UNBS sets up national standards that actors should adhere to. d) MEMD registers and certifies service providers in the sector.
viii) Lack of capacity to produce quality products (cook-stoves and briquettes), limited consumer protection and weak regulation on quality and standards of products	a) Undertake a training of trainers (and certify such trainers) b) Recruit or appoint energy focal point persons at sub-county level for enforcement.
ix) There is low level of awareness among the different categories of stakeholders about improved biomass and solar energy technologies	Joint effort is required between private sector, CSOs, the media, MDA, DLGs to raise awareness about quality products and services but also to develop, activate and sustain the market for technologies
x) Pricing of solar home systems is high and considered by the communities as exploitative and is the reason for continued use of kerosene candles in rural areas. Technologies are therefore not penetrating to the would-be users.	a) Government should provide subsidies for these products and if possible rural solar schemes should be put in place to enhance uptake and reduce dependence of BET. b) MEMD regulates the pricing of biomass energy technologies c) MEMD develops a Statutory Instrument that guides the pricing of the technologies d) RECSOs popularizes the above Statutory Instrument
xi) Limited production capacities (e.g of biofuels)	MEMD and RECSOs undertake a deliberate effort to promote biofuels. RECSOs and MEMD develop communication and public information materials on bio-fuels.

Emerging issues	Recommendation
xii) The overall governance of the renewable energy sector has challenges and the symptoms are: – Electricity and gas are both un affordable and inaccessible by many – The market is not aware if solar panels are genuine and conform to the standards and specifications, which they bare. – It is hard to ascertain the quality and performance of the cook stoves – We continue to use biomass at the expense of efforts to conserve forests.	There is need for a candid discussion of the renewable energy governance to address concerns of transparency, accountability, efficiency, equity, fairness as principles alongside an assessment of policy, institutional arrangements and monitoring and evaluation as key pillars.
xiii) Lack of cohesive forum for stakeholder engagement	Stakeholder engagement is critical in providing feedback to MEMD and this should be galvanized through a collaborative framework arrangement with RECSOs and their eventual participation in the energy week and other fora organized by MEMD.
xiv) There is a lot of agriculture residues across the country and these present an opportunity for different forms of renewable energy	MEMD and RECSOs build the capacity of youth as artisans in converting agricultural residues into energy products.
xv) A number of exotic tree species are promoted for energy woodlots at the expense of indigenous species and this presents a challenge to conservation of our genetic/ indigenous resources	MEMD considers a reality check on species promoted for biomass woodlots and considers promotion of indigenous species that off similar opportunities despite the consideration that indigenous species are slow growers and are rejected by the farmers.

7 POLICY AND PRACTICE RECOMMENDATIONS

The sector is committed to increasing electricity generation capacity and transmission, increasing access to modern energy services through rural electrification and renewable energy development, promoting efficient utilization of energy through adoption of improved energy technologies and promoting research and development as well as collaboration with international/ national NGOs/CSOs for technology and standards transfer and adoption. Table 6 summarizes the policy recommendations/considerations arising out of the challenges experienced this financial year.

Table 7: Policy gaps and recommendations

Policy gaps	Recommendation for MEMD	Desired action from RECSOs
Lack of regulations due to the informal nature of the Biomass energy subsector	Develop appropriate regulations for the Biomass energy subsector.	RECSOs support MEMD in popularizing the regulations
Limited or Lack of appropriate regulations/guidelines for charcoal production and trade.	MEMD in collaboration with MWE develops charcoal regulations/ guidelines	Once the guidelines are in place, RECSOs popularize the guidelines at DLG level.
DLGs have a funding gap from the Centre to support rollout of renewable energy work plans	MEMD and RECSOs engage MoFPED on funding for renewable energy	RECSOs develop a policy brief to inform discussions on funding DLG work plans on renewable energy.
Lack of an Energy Officer and DLG level	MEMD engages MoLG to review DLG structures to include Energy Officer for effective and efficient monitoring of renewable energy investments	RECSOs develop a Briefing Note to inform discussions between MEMD and MWE
Limited synergies and proper coordination between Ministries, Departments and Agencies involved in different biomass initiatives;	Continued demonstration of the efficacy of Biomass Energy Technologies and leveraging on existing platforms (JSR, Energy Week, JTR, Inter-ministerial committees on energy among others).	RECSOs identify(s)/creates and utilizes spaces for engagement leading to building synergies and improving coordination of the energy sector.
Limited financial capacity to produce and supply the required technologies to satisfy the available demand;	Strengthen the operations of the inter-ministerial committee on clean cooking and biomass issues.	RECSOs engage parliamentarians on the issues of RE and the need for increased/improved financing mechanisms.
High upfront investment costs for efficient biomass energy technologies for users.	Capacity building of artisans on management of the biomass resource and technology management.	

Lack of specific incentives for growing of crops dedicated for energy production.	Develop appropriate financing mechanisms for acquisition of BETs and increased feedstock production.	RECSOs popularize and disseminate information about planting/growing crops for energy production.
Limited research in clean energy/renewable energy technologies within the country	MEMD engages the private sector for demand driven research	RECSOs undertake policy research especially that relating to pro-poor policies on energy.

8 REFERENCES

MEMD, 2007	Renewable energy policy for Uganda
MEMD, 2014	Ministry of Energy and Mineral Investment Strategic Investment Plan 2014 -2019
MEMD, 2016	The National Charcoal Survey for Uganda 2016
MEMD/UNDP, 2013	The Biomass Energy Strategy
MWE, 2003	The Forestry Policy
MWE, 2013	The National Forest Plan

ANNEXES

Annex 1. Self-Assessment Tool for CSO Performance for the FY 2017/2018 in the Renewable Energy Sub-sector

1. CSO expertise and experience in the sector area

Name of Respondent:	
Name of Organization:	
Physical location:	
Tel. Contact:	
Email address:	
Districts of operation:	
Organization Category:	(a) CBO (b) Local NGO (c) National NGO (d) International NGO

2. CSO expertise and experience in the sector area

i) Is your organization involved in renewable energy
ii) What are you engaged in (cook stoves, solar systems, briquettes, charcoal, hydropower) – please add as appropriate
iii) What is the mandate of the organization (Please tick and add to the list where necessary)
    a. Implementing projects on cook-stoves, solar systems, briquettes
    b. Capacity building and training of communities (where?)
    c. Awareness raising through public information and education materials
    d. Advocacy and lobbying for policy
    e. Engaging with the media (indicate subject of engagement)
iv) What did you organization concentrate on this financial year?
v) What are the Key Results (within your organisation) for this financial year?

vi) What challenges do you face as an organization working in the renewable energy sector?

3. Networks, Collaborations and Partnerships

e) Do you have on-going projects in the renewable energy sub-sector (If Yes, elaborate below)
f) Which existing networks in the energy sector do you work with?
g) What is your source of funding (a) own resources (b) DLGs (c) Central Government (d) Development Partner (e) contractual arrangements
h) Provide an indicative figure for each option ticked in (c) above (only for the current FY).
i) Roughly how much did your organization spend this year on renewable energy projects
j) Do you have collaboration with government Ministry, Departments and Agencies working in the renewable energy sector (elaborate)

4. Interesting case to talk about

k) Do you have an interesting story to tell, with nice photos that can appear in a report? If yes, please send it to piuswamala@gmail.com or gasterk@yahoo.com

Guidance on writing the case

i. Title: make sure it's short, catchy and conveys the idea to the reader.
ii. The Situation: Describe the before and after situation of the intervention.
iii. Description of the intervention: What did your organization do? Acknowledge the support of others if any.
iv. The Change /outcome or the Uniqueness: Story you wish to highlight the outcome and future impact.
v. Lessons learnt: What the lessons are and how these can be replicated.
vi. Challenges and how they were overcome or planning to overcome them
vii. Conclusion

5. Contribution to Sector Performance (CSOs want to demonstrate their contribution in developing the energy sector).

Broad sub-sector activities	Specific activities implemented (including specific geographical area, number of stakeholders engaged, major results/ outcomes and any relevant statistics)	Lessons learnt: What are the key issues we can take forward/replicate	Funds used and source (UGX) (If USD provide conversion rate)
Direct contribution (e.g. Distribution of energy saving stoves, construction of biogas plants)			
Awareness and Sensitization (E.g. newsletters, posters, stickers, Radio/ TV programing etc.)			

Community participation (e.g. Community and school engagements			
Capacity Building (e.g. trainings conducted, category of participants)			
Policy, planning, lobbying and advocacy (e.g. engagement of DLG, Engagement of Parliamentarians			
Research/studies/ surveys (e.g. Scientific research, Policy Research			
Media Engagement (Stories covered by the media, articles in the newspaper or on radio)			
Cross cutting issues (e.g. HIV AIDS, Gender)			
Key challenges (Political interference, limited funds, etc.)			
Specific recommendations			

Annex 2. List of CSOs & Networks contributing to the Report

No.	Name	Organisation	Address	Email	Telephone
1	Pax Sakari	Rural Initiative for Community Empowerment West Nile (RICE-WN)	P. O. Box 481 Arua| Plot 3B Mvara Oluko Road	ricearua@yahoo.com	+256773472234
2	Ben Bataringaya	Community Volunteer Initiative for Development (COVOID)	Nyakasharu Ward, Rubirizi Town council, Rubirizi District	benbataringaya@gmail.com/ covoidorg@yahoo.com	0772002879/ +256 414 691733
3	Baita Francis	Kiima Foods	Box 263, Kasese	Kiimafoods@Yahoo.Co.Uk/ Kulebaita@Gmail.Com	077 2 382498
4	Jackson Mutegeki	Kitara Civil Society Organisations Network	P. O. Box 80 Kagadi	jmutegeki@gmail.com	+256773199270
5	Kangula Lawrence	Midwestern Region Centre for Democracy and Human Rights	Kasigwa Road Masindi Municipality	micod2008@yahoo.com	+256 772 505 333
6	Muhumuza Rubanzana Fred	Bwambara Advocacy for Development Foundation (BADEF) and Hope for the Innocent Child development Foundation (HICDEF)	Bikurungu, Bwambara, Rukungiri, Uganda	rubanzanamuhumuza@gmail.com	0779933725
7	Mugisa Nicholas Robert	UNCIDA UGANDA	P.O Box 1112, Bundibugyo	uncida@gmail.com	0782846612/ 0786598433
8	Okwonga Moses	African Youth Forum Against Poverty (AYFAP)	P.O Box 77, Nebbi Municipal, Anyirib Road,	pamungumoses@gmail.com, ayfapuc@gmail.com	0782530789, 0706861829
9	Ezale Abubaker	Maracha District Farmers Association	P.O Box 40, Maracha	ezaleabubaker@gmail.com	0775014142/0777583504
10	Tibeeha John Bosco	BUCCID	Bufunjo, Kyenjojo	Addressjohnboscotibeeha@gmail.com	0779388727
11	Tuhairwe Fred	Global Green Growth institute	P.O Box 1 Mbarara District	fred.tuhairwe@gggi.org	0773034686
12	Kimbowa Richard	Uganda Coalition for Sustainable Development	P. O. Box 27551 Kampala	rkimbowa@ugandacoalition.or.ug	+256414269461
13		Send a Cow Uganda Limited	P. O. Box 23627		0702700627

14	Karubanga B Julius	Abakabaleega Farmers and Environmental Protectors Association	Bujawe Central Forest Reserve	jkarubanga@yahoo.com	0773482881
15	Jonathan Kisakye	Tree Talk Plus	Plot 842, Lugolobi Close Kampala	jkisakye@treetalkplus.org	0704564941
16	Gertrude Kenyangi	Support for Women in Agriculture and Environment (SWAGEN)	P.O.Box 12223, Kampala ot P.O.Box 1906, Mbarara	ruralwomenug@gmail.com	+256 750 685332
17	Paolyel Onencan	Bulisa Initiative for Rural Development Organisation (BIRUDO)	P.O. Box 534, Masindi	paolyel@birudo.org	0772994527
18	Peace Kansiime	SNS	P.O box 8339 Kampala	pkansiime@snv.org	+256 754 563 206
19	Racheal Nalule	Environment Alert	P.O. Box 11259 Kampala	envalert@envalert.org	+256(0) 414 510 547/+256(0) 414 510 215
20	Robert Bakiika	Environment Management for Livelihoods Improvement (Bwaise Facility)	Plot 1725, Block 203,Bwaise-Nabweru Road	info@bwaisefacility.org	256414692153
21	Ibrahim Mutebi	WWF Uganda	P.O BOX 8758 Kampala	imutebi@wwfuganda.org	0200510800
22	Kyarikunda Ambrose	YOCADA Community	Ruteete		0781472578
23	Baita Francis	KIIMA Foods	P.O. Box 263 Kasese	skiimafoods@yahoo.co.uk/kulebaita@gmail.com	077 2 382498

Box 3. About the National Renewable Energy Civil Society Organizations (RECSOs) Network.

1.0 Introduction

This is a loose semi-formal Network that brings together civil society organizations, academic institutions, individuals and Networks engaged in the promotion and development of activities and practices in the Renewable energy sub sector at all levels (i.e. national, local, sub-regional and community). These CSOs and Networks are currently being mobilized and coordinated by Environmental Alert for structured engagements with Government through the relevant Ministries, Authorities and Departments. This process started September 2017 with the identification, mapping and profiling of the CSOs and Networks in renewable energy for purposes of potential partnerships and effective coordination. However, in September, 2018, the Network was formalized where members agreed to have it as a loose semi-formal Network. Further information on this is available at: http://envalert.org/wp-content/uploads/2018/11/popular-version-of-the-reprot-on-strengtheneing-coordination-for-RECSOs.pdf. Currently, the Network has an interim committee responsible for its governance issues. The Network is currently being hosted by Environmental Alert.

2.0 Objectives of the network

i. To advocate for promotion, compliance and accountability of government with respect to its policy commitments and private sector activities in respect to renewable energy;
ii. To ensure that individuals, institutions, CSOs and Networks engaged in Renewable energy progressively develop capacity in policy analysis, advocacy and independent monitoring;
iii. To engage in policy lobbying for conducive policy environment for renewable energy access and sustainable utilization.

3.0 Scale of Network outreach

Currently, the Network has a total of 36 profiled CSOs and Networks at national level and 90 NGOs and CBOs are engaging at the sub-regional level across 20 districts in the Albertine Rift including: Kasese, Bushenyi, Rubirizi, Mitooma, Rukingiri, Kabarole, Kisoro, Bundibugyo, Masindi, Hoima, Buliisa, Kagadi, Kyenjojo, Ntoroko, Arua, Nebbi, Koboko, Moyo, Adjumani and Maracha district.

The renewable energy CSOs, which participated in this review include:

Rural Initiative for Community Empowerment West Nile (RICE-WN), Community Volunteer Initiative for Development (COVOID), Kiima Foods, Kitara Civil Society Organisations Network, Midwestern Region Centre for Democracy and Human Rights, Bwambara Advocacy for Development Foundation (BADEF), Hope for the Innocent Child development Foundation (HICDEF), United Children Integrated Development Action Uganda, Bufunjyo Concerned Citizens For Development, African Youth Forum Against Poverty (AYFAP), Maracha District Farmers Association, Global Green Growth institute, Uganda Coalition for Sustainable Development, Send a Cow Uganda Limited, Abakabaleega Farmers and Environmental Protectors Association, Tree Talk Plus, Support for Women in Agriculture and Environment (SWAGEN), Buliisa Initiative for Rural Development Organisation (BIRUDO), SNV Netherlands Development Organisation, Environment Alert, Environment Management for Livelihoods Improvement (Bwaise Facility), WWF Uganda, Youth for Community Capacity Development Association.

For more information contact: The Secretariat RECSOs, C/O Environmental Alert, Kabalagala off Ggaba Road, P.O. Box 11259, Kampala; Tel: +256414510547, Email: ed@envalert.org, envalert@envalert.org,

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