RENEWABLE ENERGY CONFERENCE 2025 & EXPO

THEME: ***TRANSFORMING ENERGY SYSTEMS FOR LIVELIHOODS AND CONSERVATION***

EXECUTIVE SUMMARY

From October 20th to 22nd, 2025, the Ministry of Energy and Mineral Development, in partnership with the National Renewable Energy Platform (NREP), hosted the 5th Annual Renewable Energy Conference and Expo at the Serena Hotel in Kampala. The event's theme, **"Transforming Energy Systems for Livelihoods and Conservation,"** embodied Uganda's ambition to move beyond energy access towards sustainable livelihood enhancement.

Over three days, the conference welcomed 1,898 participants, 38% of whom were women and 33.3% were youth. Attendees represented central and local government, development partners, NGOs, civil society, private sector associations, financial institutions, and the public.

The conference drew participation from 21 countries, including Uganda, Kenya, Congo, the United Kingdom, France, Denmark, Ireland, India, Italy, Sweden, Egypt, Niger, Norway, Rwanda, Somalia, South Sudan, Tanzania, the United States of America, South Africa, China, and Zambia.

True to its name, REC25 & Expo showcased a diverse range of renewable and clean energy technologies. Exhibitors included government agencies, clean cooking technology companies, solar energy and electrification companies, e-mobility and green transport organizations, biogas and biomass solution providers, research and academic institutions, community-based groups, and non-governmental organizations, among others.

Summary of Conference Recommendations

The conference sessions revolved around nine major discussion areas, prioritizing;

- **Developing local clean cooking value chains and strengthening standards to enhance energy security.**
- **Expanding partnerships and multi-stakeholder collaboration.**
- **Improving access to finance.**
- **Promoting productive use of energy.**
- **Advancing research, data management, and evidence-based policy to drive innovation and market development.**
- **Developing policy, planning, quality, standards, institutions, and markets to support the energy transition.**
- **Investing in training and capacity building.**
- **Accelerating technology innovation development and deployment.**
- **Ensuring no one is left behind in the energy transition.**

The resulting recommendations of the deliberations held over the three days are detailed below:

1. Clean Cooking

Recommendation	Responsible Actor
• Develop local clean cooking value chains, reduce reliance on imports, and advance ethanol standards for clean cooking and biofuel blending to enhance energy security.	MEMD, UNBS, Private Sector Organizations, National Biofuels Coordination Committee
• Actively participate in standards development for innovation, strengthen local manufacturing, and integrate Uganda into regional and global value chains.	UNBS, Private Sector, Academia, TVET, MTIC
• Build capacity for standards and quality testing.	UNBS, Academia, MoLG, TVETs
• Use digital platforms like FumbaHub to enhance consumer protection and after-sales service.	Private Sector, The Public
• Certify trainers for a harmonized, standardized maintenance workforce.	TVETs, UNBS, MEMD
• Support local manufacturing of clean cooking technologies tailored for refugee and host communities.	MEMD, Refugee-Led Organizations, Development Partners
• Establish clean-cooking hubs to improve access to appliances.	MEMD, Private Sector Organizations,

2. Partnerships

Recommendation	Responsible Actor
• Mainstream social inclusion by ensuring vulnerable households access energy via decentralized solutions (mini-grids, solar home systems).	MEMD, MoLG, Development Partners
• Balance policy, finance, private sector participation, and community ownership.	Financial Institutions, MEMD, Public, Private Sector Associations, MoLG
• Promote multi-stakeholder collaboration, innovative financing, and prioritization of rural areas.	Local Governments, Financial Institutions, MDAs
• Empower political champions, engage the private sector, and civil society to deepen clean energy uptake.	Private Sector Associations, Civil Society Organizations, NREP
• Foster collaboration between government, financial institutions, development partners, private sector, and local governments.	Government MDAs, Private Sector Associations, MoLG, Development Partners
• Strengthen partnerships with community-based organizations for last-mile distribution.	CBOs, MoLG, MEMD, Development Partners, NGOs
• Establish mechanisms for regular stakeholder dialogues and joint planning.	MEMD, MoLG, NREP, NPA

3. Access To Finance

Recommendation	Responsible Actor
• Strengthen access to finance through blended instruments and risk-sharing.	MoFPED, Banks, DFIs, Development Partners
• Provide technical assistance and concessional loans for small enterprises.	Financial Institutions, DFIs, MoFPED
• Develop renewable energy loan products, promote last-mile inclusion through SACCOs, and enhance quality assurance.	Banks, SACCOs, Microfinance Institutions, Financial Regulators
• Integrate digital innovations and ensure Results-Based Financing (RBF) is adaptive.	MEMD, Donor Agencies, Financial Technology Providers
• Expand catalytic and de-risking funds and offer capacity-building for financial management/business modeling.	DFIs, Development Partners, Business Support Organizations
• Encourage financial institutions to create blended finance and patient capital instruments and risk-sharing mechanisms.	Banks, DFIs, Microfinance Institutions
• Support clients/developers in preparing bankable proposals.	Business Support Organizations, Banks, DFIs
• Expand credit lines and RBF mechanisms.	Banks, Ministry of Finance, Development Partners
• Support flexible financing mechanisms (installment, pay-as-you-go).	Financial Technology Companies, Banks, Solar Companies
• Promote financial literacy and client support.	NGOs, SACCOs, Financial Institutions, Government MDASs

4. Productive Use of Energy (PUE)

Recommendation	Responsible Actor
• Clarify tax exemptions and import procedures for productive use equipment.	URA, MoFPED, MEMD, Private Sector Associations
• Expand regional presence with decentralized branches/distribution hubs and enhance ministry policy coordination.	MEMD, Private Sector Associations, MoLG
• Promote customer training and reliable after-sales support.	Private Sector Associations, TVETs
• Emphasize digitalization, stronger data systems, and integration of energy into sub-county plans.	MEMD, MoLG, ICT Companies
• Promote cross-sector collaboration for adoption, sustainability, and economic transformation.	MEMD, MAAIF, Private Sector Associations

3. Access To Finance

Recommendation	Responsible Actor
• Design RBF schemes adaptively to account for market complexity, multiple technologies, and hybrid delivery models.	MEMD, Donor Agencies, Development Partners
• Balance simplicity and targeting in incentive structures to improve equity without excessive administrative burdens.	Development Partners, MoFPED
• Ensure fast verification and payment cycles to enable rapid recycling of capital and build market confidence.	Financial Institutions, Banks, MoFPED
• Align RBF with strong policy frameworks across tariffs, duties, licensing, and standards.	MEMD, MoFPED
• Integrate RBF with accessible working capital solutions, blended instruments, and risk-sharing mechanisms.	MoFPED, Banks, DFIs, Development Partners
• Provide technical assistance and concessional loans for small enterprises.	Financial Institutions, DFIs, MoFPED
• Develop renewable energy loan products, promote last-mile inclusion through SACCOs, and enhance quality assurance.	Banks, SACCOs, Microfinance Institutions, Financial Regulators
• Avoid over-fragmentation; prefer fewer, larger-scale, long-duration RBFs to send credible market signals.	Development Partners, MoFPED
• Combine RBF with complementary interventions such as standards development, innovation support, training, and awareness campaigns.	MEMD, Development Partners, NGOs
• Regularly review RBF levels to ensure alignment with market viability gaps and avoid concentration in certain technologies or regions.	MEMD, MoFPED, Development Partners
• Leverage digital platforms, financial technology, and innovative instruments to improve transparency, efficiency, and inclusion (e.g., pay-as-you-go).	Financial Technology Providers, Banks, Solar Companies
• Expand catalytic and de-risking funds and offer capacity-building for financial management/business modeling.	DFIs, Development Partners, Business Support Organizations
• Support clients/developers in preparing bankable proposals.	Business Support Organizations, Banks, DFIs

• Expand credit lines and RBF mechanisms.	Banks, MoFPED, Development Partners
• Promote financial literacy and client support.	NGOs, SACCOs, Financial Institutions, Government MDAs
• Pursue carbon revenues and results-based carbon finance to subsidize appliance costs and reward verifiable emission reductions.	DFIs, Development Partners, Banks, CCD-MoWE
• Integrate grants and concessional loans into public-private partnerships to accelerate adoption, particularly for institutional settings.	MEMD, Development Partners, Private Sector Associations
• Unlock green bonds and impact investments by standardizing clean cooking investment vehicles and improving pipeline preparation.	MEMD, Financial Institutions, Development Partners
• Finalize and validate clean cooking pre-feasibility study findings to enable a comprehensive GCF proposal.	MEMD, MoFPED, GGGI

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• Promote customer training and reliable after-sales support.	Private Sector Associations, TVETs
• Emphasize digitalization, stronger data systems, and integration of energy into sub-county plans.	MEMD, MoLG, ICT Companies
• Promote cross-sector collaboration for adoption, sustainability, and economic transformation.	MEMD, MAAIF, Private Sector Associations
• Develop local energy hubs using solar and mini hydro.	Private Sector, MoLG, Development Partners
• Develop performance-based supplier contracts, vendor registries, and conduct routine audits.	Government MDAs, Procurement Authorities, Industry Associations

5. Research and Data Management

Recommendations	Responsible Actor
• Integrate biodigesters into school feeding programs in vulnerable regions.	MoES, MEMD, NGOs
• Establish robust monitoring and evaluation systems to track market gaps.	MEMD, NREP, Academic Institutions, Development Partners
• Mainstream evidence-based engagement for scaling energy access with a focus on capacity and waste management.	Academic Institutions, NGOs, MEMD
• Partner with refugee-led organizations to respond to demand generated by outreaches.	NGOs, OPM, Refugee Organizations
• Educate financial institutions on solar business models.	Financial Institutions, Development Partners, Industry Associations
• Strengthen local energy data systems.	MEMD, UBOS Academic Institutions

6. Energy Access and Management

Recommendation	Responsible Actor
• Pilot organic waste-to-energy projects (anaerobic digestion).	MEMD, MoLG, Private Sector Organizations, NGOs
• Align interventions with multilateral initiatives to scale RBF and innovation.	MEMD, Development Partners, Donor Agencies
• Diversify the sector by involving more women leaders/students.	MoGLSD, Academic Institutions, NGOs, Industry Associations
• Strengthen advocacy roles for associations.	Industry Associations, Civil Society Organizations
• Expand collaboration in carbon credits/productive use.	MEMD, MoWE, Private Sector Organizations
• Engage student chapters in innovation and behavioral change campaigns.	Academic Institutions, Student Associations, NGOs, NREP

• Integrate energy into city planning.	MLHUD, Urban Authorities, MEMD
• Expand markets for hydrogen-derived agricultural products.	MAAIF, Private Sector, MEMD
• Harmonize regional standards/infrastructure for green hydrogen.	MEMD, UNBS, Private Sector Associations
• Prioritize regional clusters based on resource availability.	MEMD, MOLG, NPA
• Sustain community awareness campaigns.	MEMD, NGOs, MOLG Media Outlets

7. Policy, Planning, Quality, Standards, Institutions, and Markets

Recommendation	Responsible Actor
• Integrate energy in city planning.	MLHUD, Urban Authorities, MEMD
• Establish an inter-ministerial committee to coordinate biomass energy policy.	MEMD, MAAIF, MoWE
• Finalize and operationalize integrated reporting/monitoring for clean cooking.	MEMD, NREP, UNBS
• Strengthen forestry policy, adopt and scale forest protection bylaws, and support financing/technology transfer for sustainable biomass.	MoWE, MoLG, MoFPED, NGOs
• Leverage policy coherence, improved governance, and multi-stakeholder collaboration for the transition from biomass.	MEMD, Development Partners
• Regulators to enhance quality assurance, testing, and certification.	UNBS, ERA
• Standards/testing agencies to fast-track enforcement/public reporting on fuel quality.	UNBS, ERA, MEMD
• Create dedicated hydrogen policies, regional cooperation, investment, and benchmarking.	MEMD, Regional Bodies, NPA
• Develop green hydrogen strategies.	MEMD, Academia & Research Institutions, Private Sector Associations
• Enforce minimum energy performance standards.	UNBS, MEMD, ERA
• Develop local markets in refugee settlements.	OPM, NGOs, MEMD, Private Sector Associations

8. Training, Research, and Communities of Practice

Recommendation	Responsible Actors
• Carry out capacity-building and robust technician training.	TVET Institutions, MoES, Private Sector Associations
• Build university–industry consortia, scale informal sector skilling, attract community research funds, and integrate digital/industrial evolution into curricula.	Higher Education Institutions, Industry Associations, MoES, Donors
• Facilitate faculty internships in ministries for university–government linkages.	Higher Education Institutions, Government MDAs
• Government agencies should invest in TVET, update curricula with industry input, and establish national certification for renewable energy technicians.	MoES, NCDC, TVET Institutions, Industry Associations
• Expand support for teacher training, equipment, and scholarships for women/marginalized groups.	MoES, NGOs, Donors
• Scale up internship/apprenticeship opportunities and curriculum participation.	Private Sector Organizations, Higher Education Institutions, TVET
• Expand research programs, foster innovation, and encourage student entrepreneurship.	Academia, Research Institutions, Innovation Hubs, Donors

9. Technology Innovation, Development, and Deployment

Recommendation	Responsible Actors
• Regulators should enhance quality assurance, testing, and certification.	UNBS ERA
• Financial institutions should develop gender-responsive, flexible financial instruments, adopt blended finance, and expand risk-sharing.	Banks, DFIs, Microfinance Institutions, Donors
• DFIs should scale partial credit/technology risk guarantees, first-loss mechanisms.	Development Finance Institutions (DFIs), Donors
• Private sector developers should strengthen technical capacity and adopt robust business models.	Private Sector Companies, Industry Associations
• Academia/research actors should expand innovation hubs and gender-focused entrepreneurship training.	Universities, Research Institutions, NGOs
• Scale productive-use pilots, expand aggregation models with youth/women agents.	Private Sector, NGOs, Youth/Women's Associations

• Institutionalize a multistakeholder Biofuels Steering Board with policy/fiscal commitments.	MEMD, MoFPED, Private Sector Associations, Development Partners
• Map biofuels interventions into national plans.	MEMD, NPA
• Simplify access to PPP financing and create guarantee instruments for SMEs.	MoFPED Banks, DFIs, Private Sector Associations
• Prepare bankable project pipelines, demonstrate compliance with standards, and partner with aggregators for farmer off-take.	Private Sector Associations, Aggregators, Standards Agencies
• Provide concessional finance, guarantees, and R&D support for sustainable feedstocks.	Donors, DFIs, Ministry of Energy, Research Institutions

10. Leaving No One Behind

Recommendation	Responsible Actor
• Scale community energy literacy programs for women/youth.	NGOs, MEMD, MoGLSD Community Based Organizations
• Develop incentives for building electrical upgrades and strengthen partnerships for last-mile distribution.	MEMD, MOLG, Private Sector Associations
• Integrate clean cooking into local government budgeting/planning.	MOLG, MEMD, NREP
• Decentralize the energy function to local governments.	MEMD, MoLG
• Pass/enforce bylaws promoting clean cooking, integrate into development plans, partner with women's/youth groups.	MoLG, Community Based Organizations, NGOs
• Private sector to design targeted products, scale pay-as-you-go models, and partner with municipalities.	Private Sector Associations, MoLG
• Support leadership training for local government officers, invest in demonstration projects, and facilitate platforms for knowledge exchange.	MoLG, NGOs, Development Partners
• Integrate energy planning into District Development Plans and strengthen district energy committees.	MoLG, MEMD
• Establish regional clean cooking hubs, invest in after-sales service, continue RBF programs, and scale artisan capacity building.	MEMD, NGOs, Private Sector Associations
• Support public education and myth-busting campaigns on clean cooking.	MEMD, NGOs, Media

• Strengthen rural electrification and integrate clean cooking into district plans.	MEMD, MoLG
• Support flexible financing mechanisms.	Financial Institutions, SACCOs, NGOs
• Partner with local retailers and leverage distribution networks for accessibility.	Private Sector Associations, Local Retailers, NGOs
• Drive mindset change through community groups, media, and digital storytelling.	Community-Based Organizations, Media, NGOs
• Integrate youth voices into policy, expand school curricula.	MoES, Youth Organizations, NGOs
• Establish climate/clean energy clubs, hands-on demonstrations, and social media challenges.	Schools, NGOs, Community-Based Organizations
• Support youth-led innovations with funding and mentorship and produce youth-friendly content.	Donors, NGOs, Innovation Hubs, Media
• Develop affordable clean energy products, integrate energy in city planning, and establish clean cooking hubs.	Private Sector, MEMD, Urban Authorities

TABLE OF CONTENTS

TABLE OF CONTENTS

OFFICIAL OPENING CEREMONY

HON. SHARTSI MUSHERURE,

MP Mawogola North, Ssembabule District

Expressed that the Annual Renewable Energy Conference and Expo served as a critical convergence of policy, finance, technology, and global commitment, all focused on accelerating Uganda's transition to a clean energy economy. Emphasized that the conference's momentum should translate into tangible results to improve the lives of millions of Ugandans. Described her role as a member of parliament and the board of the National Renewable Energy Platform, noting she witnessed and directly participated in the impact of sustainable policy at the local level.

Remarked that renewable energy was not merely a luxury, but a fundamental pillar of development, especially in rural and underserved areas. Thanked MEMD for partnerships that spearheaded a biogas clean cooking project, transforming household health and reducing reliance on traditional biomass. Additionally, highlighted collaboration with the Kingdom of Buganda through NREP to successfully launch high-efficiency electric pressure cookers, making energy more affordable and practical for every home.

Described direct engagements with the Uganda Energy Credit Capitalisation Company (UECCC) management to secure support for public institutions in hard-to-reach areas. This collaboration provided essential solar lighting to schools, health centres, and administrative units within Mawogola North, ensuring darkness no longer impeded education or critical public services.

Concluded by stating that, in her experience, when policymakers and implementation partners work together, sustainable energy access is achievable.

MR. ROY BAGUMA,

Managing Director, Uganda Energy Credit Capitilisation Company (UECCC)

Introduced the UECCC as a government institution with a core mandate to catalyze financing for renewable energy project development and increase access to clean and modern energy services, pooling resources, mainly in the form of grants from development partners and the government of Uganda.

Revealed key partners as financial institutions and energy service companies (ESCOs) dealing in off-grid solar, clean cooking solutions and productive use of energy.

Shared that, so far under the UECCC clean energy price subsidy program, UECCC has been able to buy off-grid solar for lighting and charging for 353,000 households in Uganda, observed a surge in LPG sales with over 140,000 discounted sales, and increased uptake of PUE technologies with over 1,929 sales.

Called on the public to pick an interest in the program to change their lives through off-grid solar and clean cooking while generating income through PUE, encouraging those with inquiries to visit the UECCC website or physically visit the UECCC offices at Amber House.

H.E. LISA CHESNEY

British High Commissioner to Uganda

Appreciated Hon. Dr. Can. Ruth Nankabirwa Ssentamu's service and noted that her vision, leadership, and commitment continued to shape Uganda's energy future.
Remarked that shared experiences with Hon. Nankabirwa taught her what it means to be an ambassador not just for the UK but also for clean cooking.

Expressed excitement at the Renewable Energy Conference and Expo, noting that it grew larger and more impactful every year, serving as a platform where deals were struck and partnerships forged.

Reported that since the REC24&Expo, partnerships had formed between the National Renewable Energy Platform and Uganda's kingdoms and religious leaders, bringing clean cooking messages into hearts and homes.
Highlighted GridWorks piloting Uganda's first electricity transmission Public Private Partnership, the establishment of the Clean Cooking Unit, the launch of the Climate Finance Strategy, and the Regulatory Framework for Carbon Projects.

Stated that, from the UK's perspective, these achievements symbolized how the partnership with Uganda should work, hinged on collaboration, innovation, and investment leveraging private capital, smart policies, and expertise to deliver on government priorities. Shared her fondness for the Annual Renewable Energy Conference, having offered remarks at the REC24&Expo just three weeks into her posting as High Commissioner. Reflected that much had happened in a year and noted that the 5th Annual Renewable Energy Conference provided an opportunity to consider how the UK and Uganda collaborated. Emphasized that Uganda's journey to a modern, inclusive, sustainable electricity sector, under the Minister's guidance, was a model for other countries, a prime example of effective government-private sector partnership in a well-regulated market.

Likened the story of partnership and collaboration between the UK and Uganda to a novel with many chapters, noting that the best chapters still lay ahead. Outlined key milestones: the first chapter began with the unbundling of the Uganda Electricity Board (UEB), paving the way for a liberalized electricity market with early UK-supported public-private partnerships. The second chapter featured the 2005 UMEME concession, making Uganda the first Anglophone African country to privatize electricity distribution, backed by the World Bank and UK government, with UMEME investing over 700 million in network upgrades and customer connections over two decades. The third chapter saw private sector investment catalyzed through the UK and Germany co-funding the GetFit Uganda programme in 2013, using innovative results-based financing to fast-track 17 small-scale renewable energy projects, increasing Uganda's energy production by 12%. Observed that GetFit supported ERA by equipping them to manage a growing renewable energy portfolio.

The fourth chapter included investment in the GridWorks project to upgrade key substations and unlock industrial growth. Identified the latest chapter as the Launch of the Clean Cooking Unit at REC25&Expo, noting the UK's support for clean cooking because over 80% of Ugandans still relied on traditional biomass, a concern for energy, health, gender equality, nature, and climate. Affirmed that Uganda's bold target to transition 50% of the population to clean cooking by 2030 was ambitious, achievable, and essential.

Shared that Uganda gained recognition due to how the Clean Cooking Unit supported government-led leadership and a national shift in energy from biomass to cleaner alternatives like electricity. Reaffirmed the UK's commitment to continue supporting Uganda on NDC delivery, climate finance access, renewable energy generation, transmission, distribution, and clean cooking.

Congratulated the Hon. Minister of Energy, the Ministry, the National Renewable Energy Platform, and all involved in the launch of the Clean Cooking Unit (CCU). Expressed anticipation for the next chapter in UK-Uganda collaboration, envisioning it as even more exciting and electrifying than the last.

HON. DR. CAN. RUTH NANKABIRWA SSENTAMU

Minister of Energy and Mineral Development (MEMD)

Announced her delight at a productive meeting with the leadership of Nakasongola district on Nuclear Energy Development. She assured representatives that the Ministry of Energy and Mineral Development would do all it takes to ensure communities are resettled without negative impacts.

Underscored the need for Uganda to develop more power with nuclear energy for peaceful use, highlighting the country's nuclear energy generation potential of about 24,000MW, which is necessary to reach the target of 52,000MW by 2040.

Observed a moment of silence for the fallen, calling for their souls to rest in eternal peace:

- **Rt. Hon. Raila Amolo Odinga, the former Prime Minister of Kenya, who passed on the 15th of October 2025.**
- **Eng. Simon Peter Ssekitoleko, Assistant Commissioner for Renewable Energy, who passed on the 3rd of November 2024, a day after the 4th Annual Renewable Energy Conference.**
- **Eng. Gershom Rwakasanga, Manager for Terminals Development and Operations with UNOC, who passed on the 12th of October, 2025**

Conveyed heartfelt appreciation to the partners and sponsors for their steadfast support and the delegates for their commitment to the annual conference and expo, underscoring the growing significance of the event, now in its 5th year, reinforcing shared ambition in advancing Uganda's clean energy transition.
Highlighted that the theme "Transforming Energy Systems, Livelihoods and Conservation challenges to think beyond generation and supply, focusing also on how energy transforms lives, sustains livelihoods and protects the planet.

Disclosed that modern cooking technologies are bridging the gender gap since it is easier for men to help their wives in the kitchen, since the burden of sourcing firewood has been alleviated. Expressed that conservation saves not only the planet, but the person also, especially the women who are saved from inhaling carbon dioxide with children on their backs.

Noted that the vision articulated during the 4th Annual Renewable Energy Conference and Expo, to consolidate gains and align progress under NDPIII to inform the SEDP in NDPIV, had taken shape, and Uganda gained international recognition for championing clean cooking and planetary conservation.

Expressed that in 2025, she has seen a translation into fundamental socioeconomic transformation, from plans and ambitions to accountability, by integrating a structured program review into the conference.
Highlighted progress in several key areas: the addition to national generation capacity through commissioning the Nyagak III 6.6MW Hydropower Plant, which brought power to Uganda's West Nile region, as well as other generation projects and licenses awarded.

Outlined advanced sector reforms, including reduced tariffs and the addition of approximately 200,000 new connections to the national grid. These achievements were supported by the free connections policy, which removed the prohibitive connection cost of about USD 200 per household for those with internal wiring, now requiring only an inspection fee that covers all subsequent inspections. Updated participants that not all generated power is utilized because there isn't enough transmission to end users as last-mile connections.

Disclosed that the biofuels blending program was launched, beginning with E5 (5% ethanol 95% petrol) blend, with blending points identified countrywide. Updated participants that MEMD continues to implement the National Clean Cooking Strategy, finalizing the legal framework for the Energy Efficiency Strategy.
Elaborated that productive use of energy now extends electricity access beyond lighting, powering livelihoods and supporting agro-processing, among other benefits. Stated that MEMD's target is for the Parish Development Model strategy to be supported by available and affordable electricity, enabling value addition for products generated at the parish level.

Disclosed that in the role of an enabler, the mineral sector supports the electricity sector by ensuring that critical minerals such as copper, cobalt, lithium, nickel, etc., are developed to support the clean energy transition for technologies such as solar with battery energy storage.
Announced that the redevelopment of the Kilembe mines was on course, with an investor identified, a mineral production sharing agreement signed between Uganda National Mining Company (UNMC) and the developer, the Sarai Group, with finalization of the implementation agreement ongoing.

Appreciated the development partners for walking the journey with the country, welcomed the private sector to co-create solutions and seize the vast opportunities in the energy sector, disclosing that the sector was legally opened to the private sector in 2022, and called on communities to embrace clean energy as the pathway to sustainable households and livelihoods.

Call to Prioritize key Interventions.
Encouraged the collective focus to be on sustaining momentum by deepening investment, aligning policies, strengthening partnerships and fostering innovation for the sustainable energy agenda.
Urged a reduction in the time between discussion, development and deployment, stating that regulatory bottlenecks should never be used as excuses, expressing the need for agile frameworks that maintain due diligence while remaining responsive to set targets.

Called for ecosystem strengthening through ensuring that technology transfer, local manufacturing, and capacity development are central to the sector's mission in line with presidential directives on mainstreaming local manufacture through affirmative action, stating that "Uganda shouldn't only consume technology, but invent, adapt and export it, ensuring that our people benefit both qualitatively and quantitatively from the energy transition".

Expressed thanks to the British High Commission, TotalEnergies, the European Union delegation to Uganda, the German government through GIZ, the Embassy of Sweden to Uganda, Modern Energy Cooking Services (MECS) & the Loughborough University, Global Green Growth Institute (GGGI), ICLEI Africa, UECCC, SNV Uganda, FAO and the United Nations Agencies, Mercy Corps & Last-Mile Climate, Beyond the Grid Fund for Africa (BGFA), Heifer International, Ayuda en Accion, World Resources Institute, Stanbic Bank Uganda, Equity Bank Uganda, East Africa Centre for Renewable Energy and Energy Efficiency (EACREEE), Energy Efficiency Association of Uganda (EEAU), Uganda National Alliance on Clean Cooking, Serena Hotel Kampala, the media, the World Bank, the technical teams from the Ministry of Energy and Mineral Development (MEMD) and National Renewable Energy Platform (NREP), Ministry of Finance, Planning and Economic Development.
Declared the Renewable Energy Conference 2025 and Expo (REC25 & EXPO) open, wishing all participants fruitful deliberations over the three days.

SUSTAINABLE ENERGY DEVELOPMENT PROGRAMME

SUSTAINABLE ENERGY DEVELOPMENT PROGRAMME (SEDP) PERFORMANCE REVIEW

Keynote: Hon. Can. Dr. Ruth Nankabirwa Ssentamu, Minister of Energy and Mineral Development

Hon. Dr. Can. Ruth Nankabirwa, Minister of Energy and Mineral Development, opened the session by emphasizing the vital role of REC25 & Expo in shaping the Sustainable Energy Development Programme and ensuring its inclusivity. As the Third National Development Plan (NDPIII) drew to a close, she noted that this platform presented an opportunity to reflect on progress and to strategize for the ambitious tenfold growth necessary to realize Uganda's Vision 2040.

Highlighted that energy is the cornerstone of development under the SEDP framework. The theme of the review, she said, reflected a determination to move beyond simply expanding energy access, aiming instead for initiatives that would deliver real, tangible impact.

To achieve Vision 2040, she asserted, Uganda must dramatically increase its energy generation, targeting 15,000 megawatts by 2030 and 52,000 megawatts by 2040, as set out in the nation's energy policy and transition plan. Underscored the need for sustained investment and innovation, not only to meet these ambitious targets but also to facilitate peaceful nuclear development, improve efficiency, reduce wastage, and maximize the benefits of Uganda's energy resources. Warned of the risks posed by high youth unemployment, emphasizing that a robust energy sector could be part of the solution.

Quoted H.E. the President Yoweri Kaguta Museveni, making a distinction between wealth and development, and stressed that the true measure of impact would be the productive use of the electricity made available to Ugandans. Declared that energy is the lifeblood of Uganda's industrialization agenda, and stated that the government's goal is to ensure affordable, reliable, and accessible electricity for all. Acknowledged the contribution of those investing in off-grid solutions like solar panels and announced that tax reductions on such products would encourage wider adoption.

Reflected on NDPIII's implementation and celebrated major milestones in Uganda's energy sector: increased generation capacity, improved security of supply, expanded access, and the addition of critical substations, such as the connection of electricity to West Nile. Noted that the country had reached 2.5 million connections and that reduced power tariffs were incentivizing heavy consumers. Highlighted the conclusion of the Namanve Plant UEGCL concession, marking the end of the only source of non-renewable electricity to the grid, alongside ongoing efforts to strengthen energy efficiency and clean cooking initiatives for public health.

Expressed appreciation for those participating in clean cooking demonstrations and called for continued efforts to make technologies like EPC more accessible, including through the UECCC subsidy. Looking ahead to NDPIV, emphasized the necessity of shifting focus from access to impact, diversifying the energy mix, modernizing and expanding distribution infrastructure, and accelerating the promotion of clean cooking while minimizing reliance on biomass.

Commended the unwavering partnership of development partners, CSOs, and other stakeholders, attributing many of the sector's achievements to their collaboration. Called for sustained momentum and even deeper relationships as Uganda moved to implement NDPIV. In closing, described the SEDP as inclusive and competitive, driving industry and positioning Uganda as a model for energy-led transformation in the region, and officially declared the SEDP review open.

NDP III PROGRAMME PERFORMANCE HIGHLIGHTS AND NDP IV OUTLOOK

Eng. Irene Pauline Bateebe, Permanent Secretary, Ministry of Energy and Mineral Development (MEMD)

Summarized the Ministry's vision and mission as striving to be an impactful institution within the energy sector. Stated that the energy industry maintains a mature legal and regulatory framework, enabling both private sector and development financing to supplement treasury support.

Elaborated on the recent Energy Policy of 2023, which updates the 1999 policy to address the energy transition and new technologies such as hydrogen. Called on participants to review the policy's ambitious targets, scaling from 2,052 MW to 52,000 MW.

Spotlighted the Free Electricity Connections Policy of 2018, targeting one million new Ugandan connections in the next two to three years under the EASP. Shared that the Atomic Energy Act of 2008 is under review to support Uganda's nuclear program.

Shared ongoing efforts to introduce biofuels for cleaner transportation and noted progress on Uganda's NDCs under the UNFCCC. Disclosed the ministry's robust Power Purchase Agreements, with Uganda fulfilling its commitments to support continued investment. Shared the collaborative "whole of government" approach with 23 other MDAs, emphasizing joint planning, design, and implementation. Appreciated local governments as key stakeholders in this approach.

Explained that Uganda's electricity supply industry remains liberalized since unbundling, while addressing ongoing rationalization of agencies. Outlined roles of UEGCL, UETCL, UEDCL, and others in generation, transmission, and distribution, noting industrialists consume about 66% of produced electricity.

Referenced NDPIII targets, noting primary energy consumption growth from 15.2MToE to 21.74MToE. Reported steady growth despite biomass transformation challenges, with further generation unlocking underway.
Reported transmission capacity exceeded targets, reaching 5,394 km against a goal of 4,354 km. Shared Uganda's participation in the East Africa power pool, expanding trade and interconnectivity with neighboring countries. Shared ongoing work to achieve universal energy access, with 2.5 million Ugandan electricity customers and growth driven by rural electrification and last-mile connectivity.

Described efforts to address clean energy cooking in partnership with IEA and others. Emphasized the importance of raising public awareness and overcoming cultural barriers to technologies like LPG, with initiatives such as free cylinder distribution and promotion of electric cooking, biogas, and improved cookstoves.

Disclosed achievement of a five US cent tariff for extra-large and large industries, and highlighted government commitment to lower tariffs for public amenities and clean cooking. Shared ongoing investments in large power dams to further reduce tariffs and transmission/distribution losses.

Noted continued financial constraints, with expenditures not always matching approved budgets, and attributed recent outliers to specific events such as the UMEME exit. Stressed the sector's ongoing advocacy for sufficient funding under NDPIV.

Outlined NDPIV priorities, including support for agro-industrialization, tourism, manufacturing, science, technology, innovation, and power for mining sites. Emphasized unlocking new generation capacity, including nuclear, and meeting demands from population growth, urbanization, and the need for modern cooking technologies.

Presented four key NDPIV strategies: accelerating energy diversification, modernizing supply systems, enhancing energy efficiency, and strengthening governance. Highlighted the importance of skilling, research partnerships, and ESG frameworks for sustainable development.

Identified key implementation risks: the need to grow access to universal levels, address demand-supply mismatch through diversification, resolve land acquisition challenges, reduce deforestation from biomass dependence, secure innovative financing, and combat infrastructure vandalism.

Reaffirmed MEMD's commitment to increasing and diversifying the electricity generation mix, modernizing networks, and fostering strategic partnerships among stakeholders, all to advance Uganda's development ambitions.

LAUNCH OF THE MEMD STRATEGIC PLAN (FY2025/26 – FY2029/2030)

The Ministry of Energy and Mineral Development's strategic plan, themed "Sustainable Exploitation, Development and Utilization of Energy and Extractive Resources for Industrialization, Inclusive Growth, Employment and Wealth Creation," was launched in a ceremony. This guiding document defines the programme's development agenda for the next five years. It is a culmination of a comprehensive review process grounded in the National Planning Framework, the Uganda Vision 2040, the fourth National Development Plan (NDP IV), and the Sustainable Energy Development Goals (SDGs). It aligns with global and regional initiatives, including Agenda 2030, Africa Agenda 2063, and EAC Vision 2050.

The ceremony featured a formal signing order, with the Minister officially signing and cutting the ribbon to unveil the new plan. Key dignitaries in attendance included the Deputy Head of Public Service, Ms. Jane Kyarisiima; Under Secretary, Ms. Grace Tusiime; Permanent Secretary, Irene Bateebe; Commissioners from MEMD; and Managing Directors of sister agencies.

ASSESSMENT OF THE PROGRAMME'S PERFORMANCE

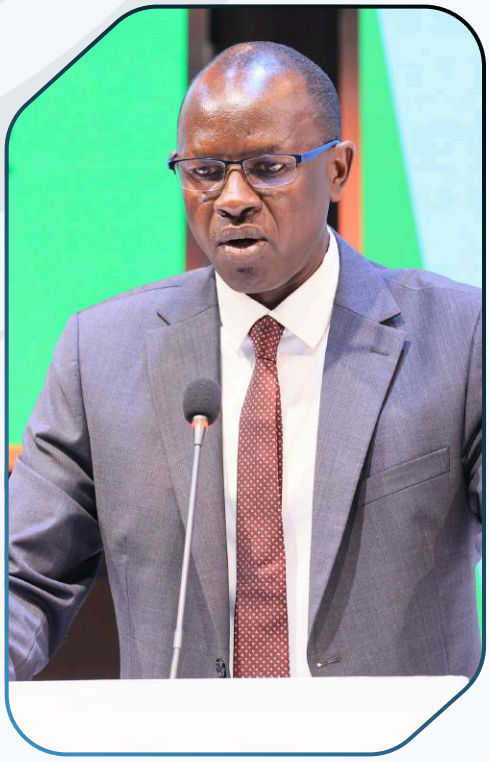
Ms. Jane Kyarisiima, Deputy Head of Public Service

Opened her remarks by reminding participants of the session theme, emphasizing its relevance for Uganda's next development phase. Reiterated the progress made under NDPIII, citing notable strides in expanding generation capacity, connecting households and enterprises, and promoting renewable energy solutions. Stressed that energy access alone is not enough; the focus must shift to translating access into real impact.

Explained that the session provided an opportunity to review SEDP performance under NDPIII, with panel discussions helping to identify emerging lessons and performance gaps, and highlighted the importance of these reflections in [NE1] shaping the implementation outlook for NDPIV.

ASSESSMENT OF THE PROGRAMME BY THE OFFICE OF THE PRIME MINISTER (OPM)

Mr. Timothy Lubanga, Commissioner M&E, OPM



Presented the programme's performance assessment, noting that 21.4% of outcome indicators were fully met, 28.6% achieved moderate progress, while 42.9% of targets were not met and 7.1% were unassessed due to lack of data.

Highlighted strong performance in transmission, with 5,319 km of high-voltage lines constructed against a target of 4,354 km, and in electricity connections, achieving 60% access (22% on-grid, 38% off-grid), as well as grid reliability at 98%. Noted moderate progress in primary energy consumption (82.7% of target), electricity cost reduction for extra-large industries (89.3%), and reducing biomass reliance in cooking (80% of target). Outlined underperformance in generation capacity (2,057 MW against a 3,500 MW target), per capita electricity consumption (218 kWh vs. 578 kWh), and clean cooking adoption (25% vs. a 50% target).

Shared overall programme achievement: 37% of targets fully met, 9% moderate, 31% not achieved, and 22.9% unassessed across 35 KPIs. Disaggregated performance by sub-programme, noting better results in generation, weaker results in renewable energy development, and challenges in energy efficiency and transmission. Identified key issues as: data gaps, high energy losses, project delays, persistent high energy costs, limited adoption of renewable and efficient technologies, low budget absorption, and frequent electricity outages. Raised the importance of strengthening M&E, enforcing regulations, improving project readiness, ensuring timely land acquisition, and prioritizing ongoing projects before starting new ones. Recommended increased collaboration among stakeholders and better alignment of financial flows with sector priorities.

ASSESSMENT OF THE PROGRAMME BY THE BUDGET MONITORING AND ACCOUNTABILITY UNIT (BAMAU)

Eng. Ronald Atuhairwe, Technical Monitoring Officer, BAMAU

Eng. Ronald Atuhairwe from the Budget Monitoring and Accountability Unit (BAMAU) presented the performance assessment for the energy sector under NDPIII. Outlined BAMAU's focus on monitoring outcomes and outputs of twelve key programmes, including the SEDP, and evaluating the extent to which budgets, planned outputs, and outcome targets were achieved.

Reported that only 80% of the budget was released for NDPIII, with 80% of the released funds spent and the remainder returned to the consolidated fund. Noted that budget expenditure has consistently fallen short, which has limited implementation of planned activities.

Shared annual programme performance by financial year: 59.5% in 2021/22, 49.7% in 2022/23, 66.4% in 2023/24, and 61.5% in 2024/25. Explained that delays in Karuma Hydropower Project, ongoing transmission projects, and rural electrification works negatively affected results in the first two years of the programme.

Highlighted several key achievements during NDPIII, including completion of the Karuma Hydropower Plant (adding 600MW), Nyagak III (6.6MW), connecting West Nile and the Kigezi region to the transmission grid, and expansion of rural electrification projects. Noted that these infrastructure additions have improved reliability and access in multiple regions. Identified persistent challenges: procurement delays, weak contract management, poorly conducted feasibility studies, land acquisition and resettlement issues, and a failure to prioritize funding for ongoing projects. Stressed the need for better quality control and oversight, stronger technical capacity, and more rigorous feasibility assessments.

Q&A Session

The Q&A discussion session following the programme performance presentations provided a platform for participants to address practical concerns and seek clarifications from the panelists. Key topics discussed included the following:

- Participants raised concerns to the Office of the Prime Minister (OPM) about their absence from Programme Working Group meetings for the SEDP and SEIDP during NDPIII, highlighting the need for better inter-agency coordination.
- Questions to BAMAU focused on the low percentage of financing released for the Land Acquisition Project (about 0.75% of required funds), with participants noting that this shortfall contributed to project delays.
- It was noted that external funding often remains untapped due to the government's inability to provide the necessary counterpart funding, resulting in the return of funds to the consolidated fund.
- Some participants highlighted that, in many cases, entities receive less than 50% of their requested budgets but are still expected to deliver as if fully funded, putting pressure on service delivery.
- The influence of politics on infrastructure development decisions was discussed, especially the tendency to begin new projects before completing ongoing ones, and the practical challenges of putting key infrastructure projects on hold.
- The need for stronger laws to allow for government acquisition of assets and subsequent compensation, especially for energy projects, was raised to address persistent land acquisition challenges.
- Supervision of projects was reported to be hampered by inadequate financing for supervisory teams, limiting effective oversight.
- Participants observed a lack of intermediate incentives or punitive measures for contractors, resulting in project management challenges.
- The importance of digitizing project implementation and monitoring was underscored as a way to improve coordination and address project delays.
- Issues surrounding community cooperation in land acquisition were discussed, with some community members agreeing to provide land but later contesting compensation in court, highlighting the need for better stakeholder engagement.
- Other issues raised included exorbitant Environmental Impact Assessment (EIA) prices, the need for decentralizing energy grants to local governments, and prioritizing energy in local government planning structures.
- The absence of ESG and other cross-cutting issues in performance reviews was noted, with participants calling for their inclusion as key indicators for development finance.

Panelists and ministry officials responded by acknowledging these challenges and outlined ongoing efforts and planned reforms, including capacity building for project and contract managers, development of a Monitoring, Evaluation and Learning (MEAL) plan, and collaboration with other government departments to address legal, financing, and project management issues. The session concluded with commitments from OPM, BAMAU, and MEMD to improve coordination, data systems, and resource allocation for more effective programme delivery in the next phase.

ROLE OF AGENCIES IN PERFORMANCE DELIVERY, CHALLENGES, AND OUTLOOK UNDER NDPIV PROGRAM THEMATIC AREAS

Eng. Cecilia Menya, C/EPD: Generation, Transmission and Diversification

Eng. Cecilia Menya's presentation opened with the disclosure that an Electricity Systems Planning and Coordination Committee had been instituted to oversee cross-sector coordination, technical oversight, and strategic alignment. Presented the integrated planning framework that ensured coordination between generation, transmission, and distribution planning to optimize capital investment and prevent misalignment.

Included among key plans were the Least-Cost Generation and Transmission Plan, the Grid Development Plan for regional integration and reliability, and the National Electrification Strategy, which aimed for universal access through grid extension, minigrids, and off-grid solutions.

Highlighted as essential was a system stability study for assessing grid reliability under various scenarios. Detailed the energy mix for the financial year 2024/25: 82.2 percent hydropower, 8.8 percent bagasse, 4.8 percent thermal, and 4.2 percent solar capacity. Outlined challenges affecting available electricity capacity, including expensive thermal generation, intermittent solar, hydrological variations impacting hydropower, and losses of 24 percent in generation, 4 percent in transmission, and 20 percent in distribution. Noted an effective generation capacity of 1,400 MW, with peak demand nearly reaching this value and highlighting the urgent need for new generation investment.

Presented major current and planned generation projects. Existing assets included the 600 MW Karuma Hydropower Plant, 250 MW Bujagali, 380 MW Kiira Nalubaale, 183 MW Isimba, and 6.6 MW Nyagak III hydropower plants, as well as several solar plants such as the 100 MW Mayuge PV, 20 MW Kabulasooke PV, 20 MW Xsabo PV, 20 MW Tororo PV, and 10 MW Soroti PV powerplants. Under development were the 392 MW Oriang and 400 MW Kiba hydropower projects, a 7,200 MW nuclear energy program in Nakasongola, 8,400 MW in Buyende, the 1 GW MASDAR solar PV project, and the 1.5 GW TotalEnergies solar PV project, among others.

Reported benefits achieved by incentivizing private sector participation through implementation and direct agreements, listing recently concluded agreements such as the 45 MW Kinyara Sugar Cogeneration, 20 MW Ituka Solar PV, 4.2 MW Kigabya, 4.82 MW Latoro, 8.6 MW Nengo Bridge, 4.8 MW Kiraboha, and 3.9 MW Lirima hydropower plants. Ongoing negotiations included Okollo, Cheptui, Kyangali, and Lower Achwa Gidiro-Sila hydropower plants.

Discussed renewable energy diversification interventions, with 88 MW of installed solar capacity and a long-term goal of 10 GW solar deployment. Promoted wind energy through risk reduction and technical expertise, while geothermal energy was targeted to contribute up to 1,500 MW, focusing on the Panyimur, Kibiro, and Katwe sites. Noted biomass energy from bagasse, accounting for 9.1 percent of the energy mix.

Covered the transmission network status, citing a total length of 5,383 km, 48 substations, and 7,170 MVA transformer capacity. Reported purchases by UETCL of 7,024 GWh and sales of 6,740 GWh, with current transmission losses at 4 percent. Included regional interconnection projects such as the Uganda-Rwanda, Uganda-Kenya, Uganda-DRC, Uganda-Tanzania, and South Sudan-Uganda Power Interconnection Project, the latter with an annual capacity of 600 GWh.

Reported the country's peak demand growth of 20 percent, from 1,000 MW in July 2024 to 1,203 MW in June 2025 and 1,329 MW by August 2025. Identified risks included a potential power supply deficit in the 2026/27 financial year; remediation-related outages at Isimba; water weed challenges at Karuma; insufficient future output from Kiba; rising overnight demand from data centers and e-mobility; aging infrastructure; inadequate dam safety policy; slow geothermal development; and funding shortfalls.

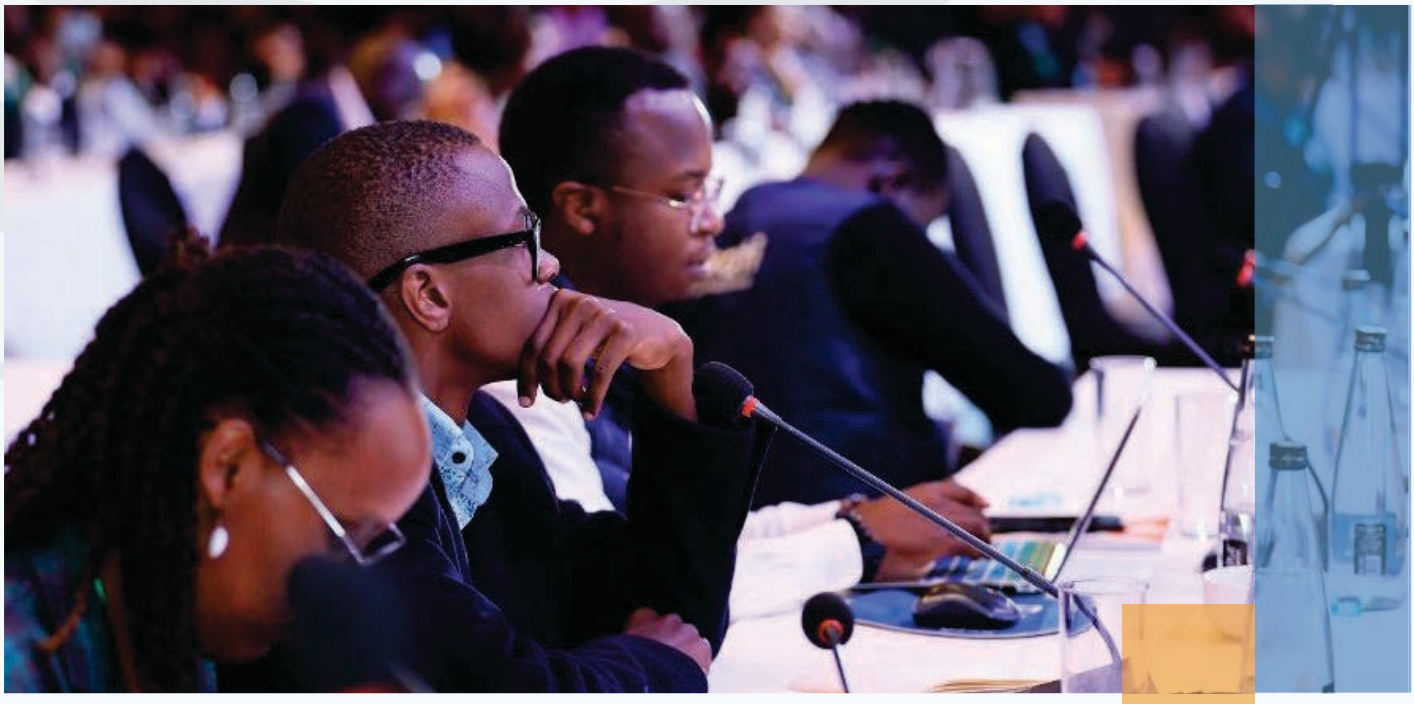
Recommended to accelerate large generation and transmission projects, balance intermittent technologies with grid-support solutions such as battery energy storage, establish a dam safety framework, advance geothermal energy, revitalize the electricity development fund, and prioritize nuclear energy for the future of Uganda's electricity sector.

Eng. Abdon Atwine, C/RuED, Distribution and Grid Modernization.

Eng. Abdon Atwine's presentation began with an overview of electricity access in Uganda. Noted the Electricity Access Scale-up Project (EASP), which is expected to increase on-grid access to 34 percent upon completion. Highlighted the ongoing Rural Electrification Access Project Phase II, aimed at expanding rural connections.

Detailed grid expansion initiatives to support parish development, targeting Northern, Eastern, Central, and Western Uganda to connect all unconnected sub-counties. Emphasized efforts to strengthen the grid in collaboration with UEDCL under the Grid Expansion and Rehabilitation program. Discussed the modernization of Uganda's electricity distribution network. Stressed the need for SCADA systems to enable remote monitoring, the phased rollout of SMART metering, and the adoption of AI-based monitoring for utilities to smartly manage the grid.

Reported progress towards implementing live line maintenance, allowing for repairs without shutting off electricity supply. Outlined the way forward for the sector, emphasizing the importance of creating awareness among stakeholders and fostering partnerships for collaborative movement. Concluded the presentation by reaffirming the need for continuous grid modernization to ensure reliable, accessible, and efficient electricity distribution throughout Uganda.



Dr. Brian Isabirye, C/ERD: Clean Cooking, PUE, and Energy Efficiency

Dr. Brian Isabirye's presentation opened with the challenges of over 80 percent dependence on biomass for cooking, which undermined forest sustainability, women's health, and productive time. Noted the high industrial energy intensity and limited productive demand that weakened grid economics.

Shared actions critical to achieving change, laid out as the NDPIV outcomes in three pathways: clean cooking (by reducing dependence on traditional biomass and improving health outcomes), productive use of electricity (to unlock value addition and enterprise growth), and energy efficiency (to lower costs, enhance competitiveness, and reduce greenhouse gas emissions).

Spotlighted the delivery models and implementation architecture for these pillars. For clean cooking, highlighted the institutional track to convert all public institutions via EPC/ESCO models, the urban track to accelerate LPG and electric cooking adoption, and the rural track to integrate advanced biomass stoves and mini-hubs with women-led micro-enterprises.

Disclosed policy interventions such as standards enforcement by UNBS, LPG tax reforms, operationalizing biofuels regulations, awareness campaigns, and provision of RBF vouchers for women-led MSMEs. Presented four priority value chains for productive use of electricity: agro-processing, cold-chains and ice plants, water pumping and solar irrigation, and small-scale manufacturing. Underscored the need for targeted delivery mechanisms including UECCC-backed Pay-as-You-Save finance models, mini-grid anchor-client models, district PUE hubs, and differentiated tariffs for daytime industrial use.

Outlined the regulatory framework for energy efficiency, covering Minimum Energy Performance Standards and labelling, mandatory audits for large consumers and public buildings, and public sector retrofitting. Revealed program components such as the Industrial Energy Efficiency Program, ESCO market development, public-sector lighting, HVAC replacement, and real-time M&E dashboards. Shared the financing framework for 2025/26–2029/30, with 30 percent concessional and carbon finance, 30 percent public investment, and 40 percent private capital.

Presented the governance and risk management framework, noting the Sustainable Energy Development Programme Steering Committee, pillar delivery units, and implementation partners including UECCC, UDB, MoTIC, UIA, UNBS, NREP, private sector, NGOs, district PUE hubs, and field teams.

Disclosed key risk mitigation strategies, such as developing market readiness through enforcement and quality control, building institutional capacity, leveraging carbon finance, and coordinating activities for cross-sectoral alignment. Shared actions to strengthen monitoring and accountability, including digital dashboards, annual third-party verification, integration into ERA tariff reviews, and quarterly steering committee reviews with corrective action protocols.

PANEL DISCUSSION:

THE ROLE OF THE ELECTRICITY SUPPLY INDUSTRY AGENCIES IN DELIVERY OF THE NDPIV AND THE TEN-FOLD GROWTH STRATEGY OBJECTIVES

Speakers:

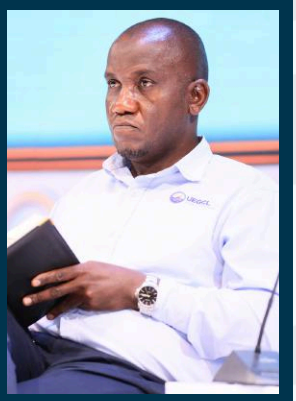
- **Mr. Moses Bekabye,** Technical Advisor, MoFPED
- **Ms. Sylvia Cheptoris,** Registrar, Electricity Disputes Tribunal
- **Eng. Protaze Tibyakinura,** Chief Engineering & Technical Services Officer, UEDCL
- **Eng. Musa Mukulu,** Electrical Engineer, UEGCL
- **Mr. Isaac Kinhonhi,** Manager, Planning and Research, ERA
- **Eng. Richard Matsiko,** Ag. CEO, UETCL

PANEL DISCUSSION:

Mr. Moses Bekabye

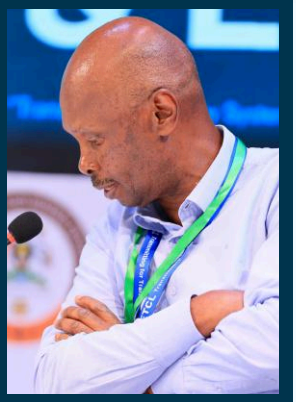
Ms. Sylvia Cheptoris

Eng. Protaze Tibyakinura



Eng. Musa Mukulu

Mr. Isaac Kinhonhi



Eng. Richard Matsiko

Explored the role of the Electricity Disputes Tribunal, which is limited to civil disputes such as billing, contracts, and wayleaves, but does not include criminal matters. Discussed the tribunal's responsibilities in ensuring compliance with the Electricity Act, issuing awards, directives, judgments, and reviews. Noted plans to establish regional offices to better serve stakeholders and to pursue digital integration for improved service delivery.

Revealed the significant reduction of dimmed energy in 2025. Shared UETCL's focus on grid expansion into the countryside, especially where embedded generation exists but grid capacity is insufficient. Emphasized the commitment not only to extend the grid but to ensure power supplied is affordable, safe, and reliable.

Disclosed the need for considerable resources in the generation sector to meet ambitious policy targets. Shared ongoing collaborations with the private sector to scale up solar energy in the short-term, plans for rehabilitation and capacity increase at Owen Falls Dam in the medium-term, and the development of new hydroelectric power stations including Kiba, Oriang, and Agago HPPs. Highlighted the critical role of nuclear energy for Uganda's generation future. Noted the operational flexibility of hydropower, which allows generation to begin on a unit basis before full commissioning.

Stressed that the effectiveness of the electricity sector depends on the strength of the generation sub-sector, as transmission and generation are meaningless without effective delivery to end-users. Underscored UEDCL's commitment to recovering all generation and transmission costs and servicing loans.

Reported the achievement of connecting 149,000 households over 200 days to address a backlog of 120,000 pending connections, along with the development of a five-year investment plan to build a robust distribution network capable of handling 52,000 MW.

PANEL DISCUSSION:

DEVELOPMENT PARTNER PERSPECTIVE ON PROGRAM FINANCING, TECHNICAL COOPERATION, AND NDPIV ALIGNMENT

Speakers:

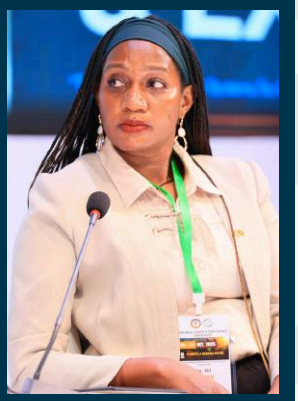
- **Mr. Juvenal Muhumuza,** Commissioner, Development Assistance, MoFPED
- **Eng. Joseph Kapika,** Senior Energy Specialist, World Bank
- **Mr. Marc Trouyet** Country Director, French Development Agency
- **Ms. Daphne Ayiekoh,** National Project Manager, Energy and Innovation, Swedish Embassy

PANEL DISCUSSION:

Mr. Juvenal Muhumuza

Eng. Joseph Kapika

Mr. Marc Trouyet



Ms. Daphne Ayiekoh

Discussions highlighted the World Bank's support for Uganda through the generation and supply pillar, including the development of the Least-Cost Generation Plan, advancing regional integration, supporting last-mile connections for both grid and off-grid electrification, and mobilizing private sector financing. Emphasized the importance of reforms to maintain sector viability and sustainability, and looked forward to continued partnership with the Government of Uganda.

Shared Sweden's role as a long-term partner, funding a floating solar feasibility study to diversify the energy mix, and supporting UEDCL's SCADA program and installation of low-voltage feeders to improve safety and system control. Noted support for off-grid initiatives through BGFA to address SDG 7, with continued assistance planned until 2029. Described Sweden's contribution to energy efficiency, particularly through SNV in the built environment and agricultural value chains to enhance SME resilience under NDPIV.

Presented AFD's observations on sector performance challenges, including the need for digitalization, formalized equipment data, and AI integration for utilities.

Highlighted the importance of enabling each utility to raise debt independently via investment vehicles to attract private capital, and preparing for climate change and energy transition challenges. Shared that AFD funded the study forming the backbone of Uganda's Energy Transition Plan, and noted that its loans are project-specific and aligned with NDPIV priorities.

Outlined AFD's four areas of involvement: Energy Transition, with support for business models for clean cooking and a 2026 policy-based loan for clean cooking and carbon credits; Diversification of Sustainable Energy, including prior investment in Bujagali, current rehabilitation of the Nalubaale-Kiira complex, and geothermal benchmarking; Innovation, such as optimization tools for Nile powerplants, sensor deployment, and startup support; and Access to Electricity, with France and the EU supporting distribution networks to connect over 40,000 new consumers.

Shared technical cooperation plans, including Sweden's five-year bilateral plan to promote job creation, trade, and sustainability, and research support for evidence-based data. Noted that technical cooperation underpins World Bank support, including the development of the Country Climate and Development Report launched in September 2025. Underscored that analytics and evidence are fundamental for decision-making and sector alignment with NDPIV.

LAUNCHES

CLEAN COOKING UNIT, NATIONAL INTEGRATED CLEAN COOKING STRATEGY, NATIONAL ELECTRIC COOKING STRATEGY, CLEAN COOKING ECO SYSTEM ATLAS, FUMBAHUB KNOWLEDGE MANAGEMENT SYSTEM, UGANDA BIOGAS AND ELECTRIC COOKING PROJECT

Presiding Delegation

- **Hon. Dr. Can. Ruth Nankabirwa Ssentamu,** Minister of Energy and Mineral Development
- **Hon. Okasaai Opolot,** Minister of State for Energy
- **HE Lisa Chesney,** British High Commissioner to Uganda
- **HE Monzer Selim,** Ambassador of Egypt to Uganda
- **H.E. Maria Hakansson,** Swedish Ambassador to Uganda
- **Eng. Irene Pauline Bateebe,** Permanent Secretary, MEMD
- **Mr. Marc Trouyet,** Country Director, AFD
- **Mr. Pablo Martinez,** Country Director, Global Green Growth Institute
- **Hon. Shartsi Musherure,** MP Mawogoola North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Fumba Hub


RENEWABLE
ENERGY CONFERENCE
&EXPO 2025
NREP

SUSTAINABLE EXTRACTIVES INDUSTRY DEVELOPMENT PROGRAMME

SUSTAINABLE EXTRACTIVES INDUSTRY DEVELOPMENT PROGRAMME PERFORMANCE (SEIDP) REVIEW

Keynote: Hon. Dr. Can. Ruth Nankabirwa Ssentamu, Minister of Energy and Mineral Development

The Minister welcomed participants to the review of the Sustainable Extractives Industry Development Program, encouraging candidness in evaluating the program for alignment, sharing challenges, and identifying synergies for implementing NDPIV. Emphasized that the extractives industry is inherently destructive and requires patience, as extracting oil and minerals involves dismantling natural formations for socioeconomic development.

Called for patience from Ugandans to dispel misinformation, elaborating that restoration after extraction takes time and often affects settlements due to resource locations under people's land and property. Shared that safeguards for communities and environmental protection have been instituted, and urged that the program review should keep these priorities in mind. Assured that project-affected people have been taken care of.

Highlighted MEMD's central role in achieving the 10-fold growth strategy, with Oil & Gas, Minerals, and Electricity positioning the Ministry at the heart of Uganda's economic development. Stated that the program aimed to reflect on NDP III lessons and highlight what is needed in NDPIV, stressing the need to move from simply recognizing Uganda's resource endowment to realizing tangible improvements in economic development, literacy, and life expectancy.

Outlined key milestones, including the enactment of the Mining and Minerals Act of 2022 to protect and benefit local communities, with special provisions for artisanal miners such as licensing and registration. Noted the launch of a digital cadastral system for mineral licensing, the operationalization of the Uganda National Mining Company, and the registration of 6,000 artisanal miners. Cited international certification for traceability and significant growth in extractives tax revenue, from 11.3 billion shillings in 2022/23 to 25.2 billion in 2023/24 and 39.3 billion in 2024/25. Recognized Uganda's benchmark law prohibiting raw mineral exports and promoting value addition.

Addressed petroleum sector developments, announcing that final investment decisions have opened up the sector, with CNOOC and Total drilling and the EACOP pipeline 80 percent complete. Stated that all pipes for the pipeline are in-country and insulation is underway, with the first oil expected by mid-2026 if all factors remain constant. Shared ongoing oil refinery planning and partnerships, such as Alpha MBA with UNOC and Kabalega Industrial Park. Noted the downstream legal amendments positioning UNOC as Uganda's bulk importer of oil products to stabilize pump prices, and underscored the importance of LPG for clean cooking.

Reaffirmed government commitment to capacity building through the Petroleum Institute in Kigumba and private sector skilling centers, as well as PAU's efforts to include Ugandan companies in the sector. Stated that as the country enters NDPIV, the focus is shifting from resource extraction to the impact on Ugandans' lives. Declared the review open.

ASSESSMENT OF THE PROGRAMME'S PERFORMANCE

Mr. Patrick Ocailap, Deputy Secretary to the Treasury, MoFPED

Moderator Patrick Ocailap opened the discussion by emphasizing the centrality of the day's topic to Uganda's development agenda. Stated that Uganda's 10-fold growth strategy sets an ambitious target to expand the economy from 62 billion USD to 500 billion USD by 2040.

Highlighted the positive outlook based on recent sector news, suggesting that with concerted effort it is possible to meet or even exceed targets. Identified sectoral opportunities in agro-industrialization, tourism, minerals, and science, technology, and innovation (ATMS), all of which are supported by approximately 15 enablers beginning with peace and safety to drive NDPIV achievement.

Emphasized that mineral-based pillars directly contribute to industrialization, noting gold's 1.1 billion USD export earnings in 2022 and the potential for Uganda to become a regional hub for mineral processing. Outlined policy opportunities, including finalizing the Mineral Development and Value Addition Policy of 2025 to attract foreign direct investment as was achieved in the oil and gas sector, investing in geological mapping, and verifying results through market studies by the National Planning Authority. Stressed the need for a sequenced implementation plan with clear timelines, establishment of a sovereign mineral fund to finance infrastructure, and strong coordination to create a sustainable extractives framework under the 10-fold growth strategy.

Shared projected impacts which included increasing annual export earnings from 10 billion to 15 billion USD by 2040 and doubling formal employment in the logistics sector. Concluded by reaffirming the importance of today's discussion in shaping a sustainable and prosperous future for Uganda.

NDPIII PROGRAMME PERFORMANCE HIGHLIGHTS AND NDP IV OUTLOOK

Eng. Irene Pauline Bateebe, Permanent Secretary, MEMD

The Permanent Secretary's presentation began by highlighting the program performance review for the Sustainable Extractive Industries Development Programme (SEIDP). Stated the mission to transform Uganda's resource potential into tangible impact. Emphasized the establishment of a robust legal and regulatory framework, with mature fiscal regimes in both mining and petroleum, and noted ongoing work on model production-sharing arrangements for large-scale mining.

Acknowledged collaboration across government, investors, and stakeholders, and the move from separate mineral and petroleum programs under NDP III to a consolidated approach in NDP IV.

Reported that under the Mineral Development Programme, the goal was to increase exploitation and value addition of selected mineral resources for job-rich industrialization. Established approximately 429 million tonnes of iron ore, 6.5 million tonnes of copper, and 20 million tonnes of coal to date. Estimated about 619.6 million tonnes of rare earth elements and critical minerals for the energy transition, located mainly in eastern Uganda and neighboring districts. Clarified these are potential rather than proven reserves, spanning regions across south-western, central, north-eastern, eastern, and northern Uganda.

Shared progress in mineral licensing, including the introduction of online systems. Awarded 385 exploration licences, issued 107 mineral dealer licences, and granted 152 prospecting licences, all expected to translate into production, value addition, exports, and national benefit. Emphasized that all mineral trading, particularly in gold, must be conducted by entities with valid licences issued by the Ministry.

Presented achievements in mineral value addition, such as commissioning the Wagagai Gold Mine and expanding steel production capacity. Noted that Uganda now has nine operational gold refineries capable of refining gold to 99.99 percent purity, and growing capacity in cement, tin, vermiculite, and other minerals. Recognized that these figures form the baseline for NDP IV.

Appreciated Ministry of Finance support, highlighting that UNOC was capitalized to the tune of USD 421 million, enabling progress on EACOP and the oil refinery. Stated that the figures presented do not include capitalization of the Uganda National Oil Company.

Reported that Uganda has approximately 6.5 billion barrels of oil initially in place, about 20 percent of estimated petroleum potential, with around 1.4 billion barrels recoverable. Estimated 500 billion cubic feet of gas, targeted for power generation, domestic LPG, and industrial use. Highlighted the planned oil refinery at 60,000 barrels per day, the 39.57 square kilometre Kabaale Industrial Park, and key production expectations from the Kingfisher (40,000 barrels/day) and Tilenga (190,000 barrels/day) projects. Noted EACOP's progress, with 292 of 1,443 kilometres of pipeline completed after the Final Investment Decision.

Stated that Ugandan participation in employment exceeds 90 percent in non-specialized roles. Reported that national petroleum consumption is now at 2.8 billion litres annually, with pump prices stabilized at 4,800 to 5,000 shillings per litre. Emphasized that production, value addition, and commercialization will be scaled up under NDP IV, with a focus on human capital, local enterprise participation, and vocational skills development.

Outlined that over the five-year period of NDP IV, the integrated mining and petroleum program requires approximately 12 trillion shillings, with about 11 trillion expected from Government and the balance from private sector and development financing. Committed to expanding exploration, de-risking the sector, increasing commercialization, and strengthening governance and innovation. Concluded by affirming the Ministry's commitment to driving impact through the extractives sector.

ASSESSMENT OF THE PROGRAMME'S PERFORMANCE BY BAMAU

Eng. Ronald Atuhairwe, Technical Monitoring Officer, BAMAU

Highlighted increased funding flows from the European Union over the last three years, especially for energy contributions and associated cash flows now managed under the Ministry of Finance. Noted BAMAU's advice to direct these resources toward petroleum sustainability and the Sustainable Petroleum Development Programme, resulting in increased allocations and additional funding for the oil refinery, reflected in the budget trends for the final three years.

Assessed fiscal performance, noting that overall budget execution has improved under Sustainable Petroleum Development. Analysed three sub-programmes comprising eight activities, observing an upward trend in budget absorption and utilization.

However, reported that upstream exploration and downstream petroleum activities continue to face funding constraints, affecting both execution levels and implementation pace. Turned to Mineral Development, where five thematic areas were assessed. Reported that the fiscal trend for Mineral Development has been declining, constraining budget execution. Attributed this to large mineral development projects coming to an end, though noted modest improvement in fiscal performance in the most recent financial year.

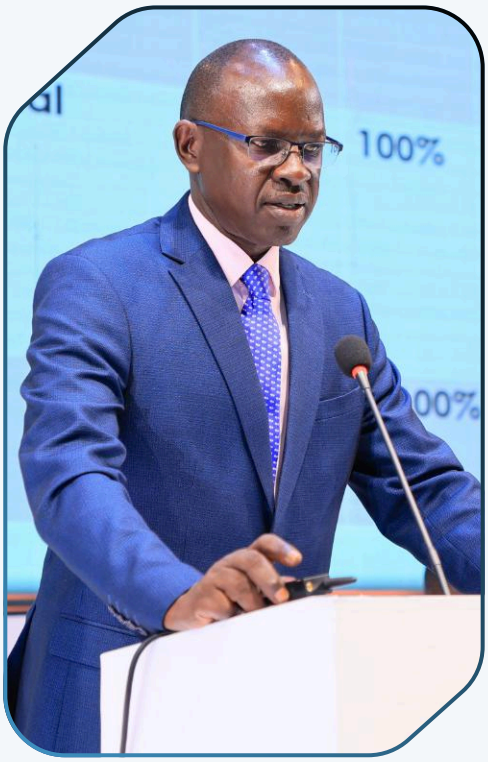
Observed that physical outputs have gradually improved, particularly in the last financial year, despite persistent financing gaps and institutional challenges. Pointed out that not all program components registered similar progress due to these ongoing issues.

Identified key challenges for both Mineral Development and Sustainable Petroleum Development, many of which are agency-related and linked to infrastructure and institutional capacity. Cited the high cost of achieving financial closure as a major constraint, particularly for midstream petroleum projects, requiring government intervention. Noted that upstream petroleum facilities experienced weak fiscal execution in earlier years, but recorded notable improvement in the last financial year. Shared that recent site visits revealed tangible progress, reflecting improved execution.

Highlighted ongoing funding gaps, especially for regional development initiatives, with some not progressing as planned due to limited releases. Noted the issue of underutilized energy infrastructure for refugee settlements, which remain idle at Ministry of Energy offices in Entebbe, indicating a need for better alignment between releases and implementation readiness.

Discussed the high prevalence of informal artisanal and small-scale mining in the mining sector, characterized by low productivity and weak compliance. Stated that operationalizing the national mining company is expected to support formalization, improve coordination, and enhance value addition, leading to improved fiscal and physical performance outcomes.

Concluded with key recommendations: called for closer monitoring of budget execution to prevent slippage, particularly approaching critical delivery milestones; recommended continued focus on upstream petroleum projects and formalization of artisanal and small-scale mining; suggested prioritizing budget allocations for both Mineral Development and Sustainable Petroleum Development programmes; and emphasized the need for timely and adequate releases, given the capital-intensive nature of the sector, to ensure allocations translate into tangible results.



ASSESSMENT OF THE PROGRAMME'S PERFORMANCE BY THE OFFICE OF THE PRIME MINISTER

Mr. Timothy Lubanga, Commissioner Monitoring & Evaluation, OPM

OPM's presentation focused on assessing the Sustainable Development of Petroleum Program in comparison to NDP III targets. Reported that at outcome level, the program achieved close to 60 percent of its targets, reflecting a significant improvement over the previous year. Performance was rated satisfactory for about 6 percent of indicators, while targets were not met for only 17.6 percent of actions and outcomes.

Highlighted outstanding results in attracting foreign direct investment, where the NDP target was 1.1 trillion shillings but actual resources attracted amounted to 2.5 trillion shillings, far exceeding the target. In oil and gas contracts awarded to local companies, the target was 200, yet 678 contracts were awarded.

For days of fuel and stock levels, the target of 10 days was met. In job creation, the target was 20,000 jobs in the oil and gas industry, but the program managed to create 54,954 jobs. Summarized overall performance across various areas, noting that for all targets, performance was generally moderately satisfactory, with only a few areas where targets were not met. For Key Result Area 10 on the supply of piped petroleum products, actual performance was higher than the target. The same was true for Key Result Area 6 on local company participation in oil and gas and increased private sector investment.

Noted areas for improvement, such as Key Result Area 1 on increasing oil and gas revenue, where actual revenue fell slightly short of the $265 billion target. For employment contribution, the sector lacked data on the proportion of national employment from oil and gas. In exploration licensing, only two licences were issued against a target of five by the end of the last financial year.

Observed that performance in downstream petroleum sub-programs was strong, with 100 percent of actions executed. In contrast, upstream performance met 46 percent of targets, with the same proportion not met. Budget execution was efficient, with 74.6 percent of the budget actually released, though this highlighted the need for improved budget disbursement.

Identified key challenges and recommendations as follows:

Delayed finalization of the Data and Repository Centre. Recommended fast tracking the completion of the National Oil and Gas Data and Repository Centre for Uganda (responsibility: MEMD, PAU).

Slow local content development and accreditation of more vocational training institutions. Recommended strengthening local content regulations to build private sector capacity and encourage local participation in the oil and gas sector, as well as fast tracking accreditation of more vocational training institutions to international standards (responsibility: MEMD, PAU, MoES, UNOC).

Fuel reserve management, with the 10 days of stock levels noted as not strategic. Recommended minimizing over-reliance on the private sector for reserves by restocking government reserves in Jinja and incentivizing private sector operations such as Mahathi Infra Services (responsibility: MEMD, MoFPED, UNOC).

Concluded that when funds are released, the program demonstrates strong absorption and utilization. Emphasized the importance of timely and full budget releases to enable the program to meet critical national targets under NDP III and beyond.

The performance of the Mineral Development Programme was assessed against NDP III targets and key result areas.

On the mineral development programme, reported that on increasing the volume and value of refined gold exports from USD 450 million to USD 787 million, performance far exceeded the target. However, on the volume of copper produced, the target was to reach 2,000 metric tonnes, but by June this was not achieved. Highlighted recent progress in copper production, with optimism for future reporting periods.

Noted that reducing the volume and value of imported inorganic fertilizers consistently fell below NDP targets, largely due to the underperformance of the Sukulu Phosphate Fertilizer Plant in Tororo. On the reduction in the volume of imported iron and steel, outcomes are also still far from the desired target.

Reported that the number of trained geoscientists reached 165 against a target of 200, representing 82.5% performance. On the contribution of processed minerals to manufactured exports, noted a drastic decline from 18.5% in 2021 to just 1.5% in 2022/23, well below the NDP target of 7.1%.

Shared that the value of investments in exploration and processing of selected minerals amounted to USD 1.93 billion, just below the USD 2 billion target. Iron ore production, despite a drop of 29.6%, still significantly exceeded the annual target by a good margin.

Highlighted near doubling of targets in the development of functional and sustainable physical infrastructure and mineral beneficiation facilities, with 116 operational facilities far surpassing the target of 10. For skilled and competitive human resources, 1,150 personnel were trained against an annual target of 135, greatly exceeding expectations due to enforcement of the Mining and Minerals Act.

Noted that some outcome data was not available for the reporting period.

OPM's presentation on key challenges for the minerals development programme by raising the issue of under-declaration of production volumes by some mining operators. Recommended imposing strict penalties, including fines and suspension of licences, particularly for repeat or notorious offenders.

Raised the challenge of value addition, specifically citing the Sukulu Phosphate Plant in Tororo, which is currently operating at low capacity. Recommended a coordinated, multi-sectoral approach to address the challenges facing this facility.

Recommended strengthening staffing levels across the programme, particularly for planning, monitoring, and tracking of results, to improve the quality of implementation and reporting.

Highlighted the need by OPM to further strengthen governance, coordination, and results tracking, and reported the rollout of the National Development Plan Monitoring and Evaluation System. Encouraged the programme to actively engage with this system.

Disclosed plans to conduct training for planners and heads of departments at the Civil Service College in Jinja over the coming weeks to address gaps in advance data availability. Appealed to the programme, Ministry, and M&E teams to fully support the digitization of tracking and reporting of programme outcomes in a timely and consistent manner.


THEME:
RENEWABLE

SECTOR SPOTLIGHT PRESENTATIONS

TEN-FOLD GROWTH STRATEGY

Mr. Godfrey Byamukama, Assistant Commissioner (Private Sector and Investment) MoFPED

Stated that the strategy aims to expand Uganda's export basket and tourism offering, consolidate the country's human, financial, physical, and natural capital stocks for greater connectivity and capacity in international trade, and build a knowledge economy as a new source of economic growth based on technological advancements. Emphasized the goal of leveraging Uganda's central continental location to transform the country into a competitive investment, trade, and tourism center in Africa, starting with the EAC region.

Explained that extractives are one of the anchor sectors under ATMS for the Ten-Fold Growth Strategy. Noted that the government has identified mineral-based industrial development, including oil and gas, as a key accelerator for achieving growth targets.

Highlighted that the strategy focuses on boosting productivity in key tradeable sectors, which can contribute approximately 2.5 percentage points of GDP growth per year. Outlined specific reforms and policies supporting the strategy, including the new Mining and Minerals Act, the establishment of the state mining company, and initiatives to support value addition and beneficiation. Stressed the need for all stakeholders to understand their roles in the programmatic approach to budgeting, to deliver on targets, ensure sustainability, and build capacity within the sector.

GEOLOGICAL EXPLORATION, RESOURCE ASSESSMENT, PRODUCTION AND COMMERCIALIZATION OF MINERAL RESOURCES

Ms. Agnes Alaba, Commissioner, Mines, MEMD

Presented on recent advancements and priorities in Uganda's mining sector. Reported the completion of airborne geophysical surveys and geological mapping of Karamoja, with 100% acquisition of gravity, magnetic, radiometric, and electromagnetic data, as well as geological mapping at 1:250,000, 1:100,000, and 1:50,000 scales.

Highlighted uranium exploration for energy and other applications, noting airborne radiometric data revealed 54 priority anomalies, with key targets identified in Boma, Lwesakala, Kyabogo (Sembabule), Katara (Buhweju and Gomba), and Busanyi (Kiboga). Discussed geothermal resources, with 27 identified areas estimated to hold 1,500 MW_e and 6,000 MW_{th}, and detailed ongoing surface studies at Kibiro, Panyimur, and Buranga, as well as plans for exploration drilling at Kibiro and Panyimur.

miner formalization, stating that artisanal miners contribute over 90% of Uganda's mining production and employ more than 60% of the workforce. Outlined the strategy to transform artisanal mining into a formal, safe, and environmentally responsible economic activity, and shared that biometric registration of artisanal and small-scale miners was launched in 2021 in Gulu, with 7,316 recruited, 70.7% male and 29.3% female.

Outlined NDPIV development priorities, including mineral exploration and quantification, formalization of artisanal miners, development of Kirwa Wolfram mine, expansion and operationalization of the minerals laboratory, setup of a mineral production monitoring system, and establishment of mineral markets and buying centers.

Identified key implementation issues, including inadequate financing, understaffing, insufficient infrastructure for value addition, access to land for exploration and mining, and illegal mining activities.

PETROLEUM EXPLORATION, RESOURCE ASSESSMENT, PRODUCTION AND COMMERCIALIZATION OF OIL RESOURCES

Mr. Frank Mugisha, Ag. Commissioner, PEDPD: Petroleum Exploration, Resource Assessment, Production and Commercialization of Oil resources

Reported that 40% of the Albertine Graben has been explored, with ongoing geological, geochemical, and geophysical surveys in frontier basins leading to the discovery of 6.5 billion barrels of oil and 600 billion cubic feet of gas. Shared that Uganda has made 21 oil discoveries, 18 of which have been appraised, and 9 production licenses were awarded between 2012 and 2016. Stated that over 14% of these discoveries will form the basis for petroleum production expected in July 2026. Announced that a third licensing round by direct application is planned for 2026, alongside continued frontier exploration.

Provided a petroleum resource assessment, estimating 6.5 billion barrels of oil in place, 1.4 billion barrels recoverable, and 600 billion cubic feet of gas. Projected that the recoverable resource will support peak production of 230,000 barrels of oil per day, with 40,000 barrels per day from Kingfisher and 190,000 barrels per day from Tilenga.

Outlined progress on the Tilenga Project, which comprises six oil fields, 420 wells, and 29 well pads. Noted that 154 of 170 pre-first-oil wells (91%) have been drilled using three ZPEB rigs, facilities construction is 58% complete, and overall progress stands at 60%. Stated that 4,948 of 4,954 project-affected persons have been compensated. Highlighted the construction of a 190,000 barrels per day central processing facility and anticipated annual LPG production of 30,000 tonnes.

Shared updates on the Kingfisher Project, which comprises four pads, 31 wells, and about USD 2.5 billion in costs. Reported a target capacity of 40,000 barrels of oil per day at peak. As of September 2025, 20 of 19 pre-first-oil wells had been drilled (105%), with 80% of facilities completed, including the central processing facility and infield flowlines, and overall progress at 73%. Noted that the 40,000 barrels per day central processing facility is under construction, and annual LPG production of 20,000 tonnes is expected.

Discussed commercialization efforts, including the East African Crude Oil Pipeline (EACOP), a 1,443 km, 24-inch heated pipeline to Tanga valued at approximately USD 5.6 billion. Reported that cumulative welding progress has surpassed 1,033 km, with overall engineering, procurement, and construction at approximately 72%, engineering at 95%, procurement at 90%, and construction at 47%. Estimated that revenues in excess of USD 250,000 per day will be earned from 15% equity in EACOP.

Outlined progress on refinery development, including the 60,000 barrels per day refinery project at Kabalega Industrial Park in Hoima. Announced that all land was acquired and an implementation agreement with Alpha MBM and UNOC was signed on March 29, 2025, with Alpha MBM holding 60% equity and Government of Uganda through UNOC holding 40%. Stated that the refinery company has been incorporated, enabling contracts for early works, and that key project agreements are expected to conclude by the end of 2025.

Outlined plans to secure cabinet approval of the National Petroleum Policy, operationalize the Local Content Development Fund, launch the third licensing round in 2026, open new areas for exploration, conclude the gas utilization strategy, finalize requirements for the refinery Final Investment Decision, and deliver first oil by mid-2026.

DOWNSTREAM PETROLEUM SECTOR'S STRUCTURE, PERFORMANCE, AND CHALLENGES.

Rev. Frank Tukwasibwe, Commissioner for the Petroleum Supply Department (PSD)

Described PSD's collaborative licensing and regulatory work with NEMA, KCCA, local governments, and UNBS. As of October 17, 2025, reported 602 licensed oil marketing companies, 272 import licenses, and 122 active importers through UNOC. Stated that 376 retailers operate 1,563 service stations, each employing about 10 Ugandans and contributing to a total of 16,000 jobs in retail petroleum.

Highlighted the fuel marking and quality monitoring program launched in 2009, which ensures genuine, safe fuel for consumers and has achieved fuel quality compliance greater than 99.4% since 2017.

Emphasized PSD's role in promoting cleaner fuels and energy transition, including LPG promotion for clean cooking and transport, public sensitization campaigns under MEMD, and proposals to align tax policy and provide solar subsidy incentives to support clean energy adoption.

Reported stable and reliable fuel supply and regionally competitive pump prices. Noted that over 600 licensed operators contribute to employment and tax revenues in the sector. Outlined key challenges, including resource constraints within PSD and enforcement (impacting field inspections, data management, and enforcement), limited fuel storage capacity relative to national demand, dependence on external import corridors that expose Uganda to regional logistics risks, and underdeveloped LPG infrastructure and affordability barriers.

Identified opportunities for institutional strengthening through technical capacity and digital systems, targeted investment (such as in LPG and fuel reserves), and increased regional collaboration.

PANEL DISCUSSION:

THE ROLE OF THE EXTRACTIVES INDUSTRY AGENCIES IN DELIVERY OF THE NDPIV AND THE TEN-FOLD GROWTH STRATEGY OBJECTIVES

Speakers:

- **Ms. Linda Biribwoona,** Chairperson Board of Directors, PAU
- **Dr. Michael Mugerwa,** General Manager, UNOC
- **Dr. Gerald Banaga-Baingi,** Executive Director, UNMC
- **Mr. Edmond Kansiime,** Manager-Strategy, PAU

PANEL DISCUSSION:

Ms. Linda Biribwoona

Dr. Michael Mugerwa

Dr. Gerald Banaga-Baingi

Mr. Edmond Kansiime

The session brought together key agencies to discuss their strategic roles and mandates in advancing Uganda's extractives and energy sector under NDPIV. The session opened with the Uganda National Oil Company (UNOC) emphasizing its 15% shareholding in upstream oil operations and its responsibility for facilitating industry surveys, commercialization, and partnerships across the sector. UNOC also highlighted its leadership in the refinery project, noting the significant job opportunities expected to arise from its operationalization.

The Uganda National Mining Company (UNMC) followed by outlining its catalytic mandate to unlock the country's mineral wealth. UNMC described its core functions, which include managing the state's interests in mining ventures, developing and implementing a strategic plan, and participating in mining contracts. The company emphasized its commitment to value addition, production sharing, and equity stakes in flagship projects, all aimed at driving sustainable sector growth.

Throughout the panel, the agencies reaffirmed their dedication to strengthening institutional collaboration, operational efficiency, and value creation, setting a clear direction for SEIDP's contribution to Uganda's fourth National Development Plan.

PLENARY Q&A INTERACTIVE DIALOGUE

Speakers:

- **Mr. Humphrey Asiimwe,** CEO, UCEM
- **Ms. Lynn Gitu,** Project Manager, planetGold
- **Mr. Henry Mukasa,** Project Manager-SDMU, GIZ
- **Dr. John Ilukor,** Economist, World Bank

PANEL DISCUSSION:

Mr. Humphrey Asiimwe

Ms. Lynn Gitu

Mr. Henry Mukasa

Dr. John Ilukor

The panel addressed several core challenges and opportunities for Uganda's minerals and energy sector. Opened by highlighting persistent financing constraints and the need to mobilize and deploy capital efficiently, panelists noted that government timelines require timely financing to avoid stalled progress. Discussed the growing importance of blended financing models, combining public funding, private investment, and development finance, with public–private partnerships and catalytic financing becoming essential to achieving government priorities.

Addressed the issue of human resource and skills gaps, emphasizing that industrialization and beneficiation begin with building the right expertise. Stressed the need to train and retain professionals such as mining engineers, metallurgists, and geologists, who are critical for both operations and regulation. Highlighted the importance of formalizing the Artisanal and Small-Scale Mining (ASM) sub-sector, which contributes a significant share of mineral production. Called for support to ASM actors, stronger networks, community awareness, and improved compliance.

Emphasized the need to strengthen governance, data systems, and institutions. Urged the government to focus on improving existing programs, particularly in environmental management, revenue generation, and accountability. Pointed to the foundational role of credible, accessible data for planning, financing, and regulation. Noted the challenge of limited inter-sectoral collaboration and the need for stronger coordination across related sectors such as energy, transport, and agriculture.

Discussed the importance of perception and legitimacy, explaining that mining must be recognized as a legitimate, investable business. Stressed that project decisions should be guided by data analytics and realistic projections, not assumptions, and that delays in value chain development increase inefficiencies and poverty. Addressed sequencing and infrastructure, cautioning against waiting for ideal conditions and instead advocating for strategic investment that can itself drive infrastructure development.

Highlighted prioritization, value addition, and digitization as critical for sector advancement. Urged Uganda to focus on a few priority minerals, add value to meet international market demands, and digitize processes to attract investment. Encouraged clear communication of priorities and readiness to the global market.

Discussed technical cooperation as a complement to financing, noting the importance of knowledge transfer, innovation, and building a shared pool of technical expertise within the region. Pointed to opportunities for regional training, certification, and standards, as well as the central role of job creation across extraction, processing, and regulation.

Shared the GIZ perspective on technical support, focusing on technology transfer, local adaptation, capacity building, market linkages, and ESG benchmarking. Highlighted the value of cross-learning and benchmarking against international best practices for sustainable sector growth.

Concluded with closing reflections on NDP IV targets, the need for clarity and execution, and the willingness of development partners to collaborate, engage, and support well-articulated plans. Reinforced that the extractives sector can play a pivotal role in Uganda's green industrial revolution if organized, formalized, and supported by appropriate policies, skills, data, and investment.

CLEAN COOKING

FOR HOW LONG SHOULD THE POROUS BORDERS BE BLAMED: ADDRESSING STANDARDS AND QUALITY OF COOKING TECHNOLOGIES

Keynote: Eng. James Nkwamwesiga, ED, UNBS

Reported that clean cooking is a flagship programme at UNBS, which had recently been showcased internationally in Kigali, and disclosed that UNBS, under Richard Ebong, also chairs the ISO standards development committee.

Highlighted the critical role of standards in achieving Uganda's National Development Plan targets, emphasizing their importance in driving export promotion, import substitution, and industrialization to support GDP growth.

Explained that UNBS's mandate under the Ministry of Trade, Industry, and Cooperatives focuses on ensuring the competitiveness of locally produced goods and services through standardization, positioning the Bureau as a high-power, high-interest stakeholder in Uganda's industrial development.

Stressed the need for active participation in standards development to enable innovation, strengthen local manufacturing through reverse engineering, and integrate Uganda into regional and global value chains.

Noted that standards play a key role in de-risking the economy, supporting MSMEs, and opening access to the East African and AfCFTA markets, and called for the development of local clean cooking value chains, a reduction in reliance on imports, and advancement of ethanol standards for clean cooking and biofuel blending to enhance energy security.

PANEL DISCUSSION:

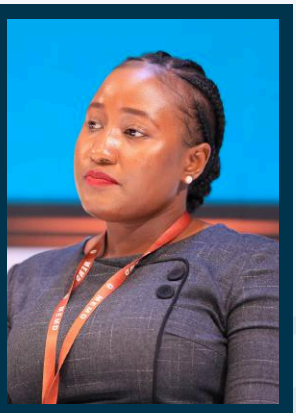
FOR HOW LONG SHOULD THE POROUS BORDERS BE BLAMED: ADDRESSING STANDARDS AND QUALITY OF COOKING TECHNOLOGIES

Speakers:

- **Mr. James Baanabe,** Former Director**,** MEMD & Energy Consultant
- **Ms. Justine Akumu**, Senior Clean Cooking Officer, CCU, MEMD
- **Mr. Jim Ssebaduka**, Chairperson, UNACC
- **Mr. Edwin Kwesiga**, Head of Electric Business in Uganda, Burn Manufacturing
- **Mr. Richard Ebong**, Manager of Legal Metrology, UNBS
- **Ms. Agnes Naluwagga**, Regional Testing and Knowledge Center Coordinator, CREEC

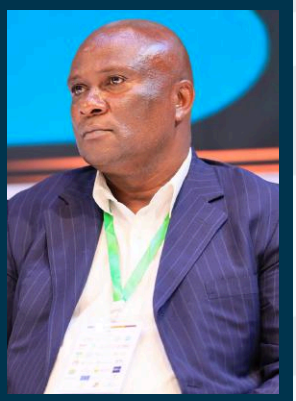
PANEL DISCUSSION:

Mr. James Baanabe



Ms. Justine Akumu

Mr. Edwin Kwesiga



Mr. Jim Ssebaduka

Mr. Richard Ebong

Ms. Agnes Naluwagga

The discussion opened by exploring how the National Integrated Clean Cooking Strategy (NICCS) integrates quality and safety, and how the inter-ministerial committee fosters adoption. Panelists explained that ensuring quality and safety starts with making affordable, accessible appliances that meet rigorous health, environmental, and climate standards.

Described a collaborative process where UNBS, together with ministries and agencies, sets and regularly reviews standards to ensure that cooking appliances meet strict health, environmental, and performance criteria. Emphasized that these standards are both technical and practical, aiming to make products on the market affordable and safe for consumers.

Noted that the inter-ministerial committee, alongside stakeholders such as the Ministry of Trade and the private sector (represented by UNACC), actively promotes compliance through energy labeling, supplier requirements, and support for micro, small, and medium enterprises. Highlighted ongoing efforts to raise awareness and provide compliance support, reinforcing the importance of sector-wide collaboration.

Moved the discussion to the status and challenges of standardization for clean cooking technologies. Outlined that Uganda has established standards for technologies like domestic biogas and biomass cookstoves, with ongoing development for emerging products such as electric pressure cookers. Explained that regional harmonization is promoted through EAC requirements, while approved foreign standards may be used in the absence of local equivalents. Acknowledged that limited outreach and enforcement resources present ongoing challenges for ensuring compliance.

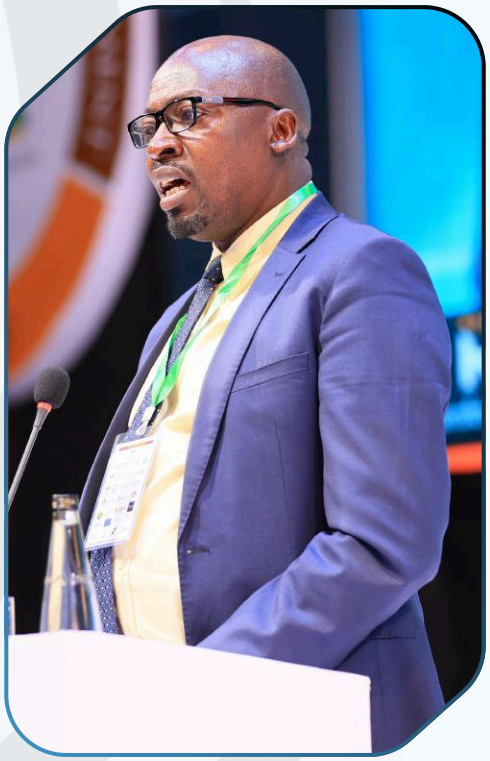
Addressed Uganda's capacity to test and certify clean cooking products by noting that four laboratories, i.e., CREEC, CIRCODU, Nyabyeya, and UNBS, play essential roles in verifying quality. Pointed out that equipment and expertise need to keep pace with technological advancements and increasing demand. Added that the recognition of private labs by UNBS has expanded testing capacity, even as high costs and training needs persist.

Shifted attention to practical enforcement in the marketplace. Stated that UNACC members must provide certificates of compliance, and that outreach across many districts helps drive awareness and standardization. Shared that manufacturers such as BURN are investing in local production and collaborating with regulators to harmonize standards, though challenges from unregulated imports remain.

Clarified that while UNBS does not issue manufacturing permits, it facilitates certification and adapts international protocols such as ISO for national use. Indicated that the forthcoming Energy Efficiency Bill is expected to strengthen compliance. Noted that collaborative projects with organizations like ICLEI and NEMA are promoting clean cooking in informal settlements and tackling air quality issues.

Concluded by emphasizing the importance of capacity building through academic institutions, ongoing customer support, and active local government engagement. Reinforced that these efforts are essential for ensuring long-term adoption and sustained improvement in Uganda's clean cooking sector.

UGANDA-UK CLEAN COOKING SCALE AND SUPPORT SUB PROGRAMME: STOCKTAKING AND LAUNCHES.



Keynote: Dr. Brian E. Isabirye, Commissioner, Energy Resources Department, MEMD

Stressed the importance of advancing Uganda's clean cooking sector through a competitive and highly commercialized market. Highlighted the government's objective to build effective value chains and emphasized that suppliers must be actively involved at every stage to make clean cooking products accessible to consumers. Underscored the critical role of coordinated financing from both government and development partners, as well as the necessity for appropriate technical knowledge to align efforts across the sector.

Noted that government initiatives, such as the mandated establishment of the Clean Cooking Unit, are designed to harmonize interventions and strengthen coordination within the sector. Concluded by formally welcoming all participants to the session and setting a collaborative, purposeful tone for the discussions ahead.

Keynote: Dr. Pablo Martinez, Country Representative for Uganda, GGGI

Expressed gratitude for the opportunity to participate in the session and acknowledged the collaborative efforts of all stakeholders in advancing clean cooking solutions in Uganda. Highlighted GGGI's commitment to supporting Uganda's energy transition and emphasized the organization's focus on promoting sustainable, inclusive, and market-driven approaches.

Noted the importance of strong partnerships with the government, the private sector, and development partners to accelerate access to clean cooking technologies. Stressed the need for innovative financing mechanisms and capacity building to drive adoption and scale.

Concluded by reaffirming GGGI's dedication to working alongside Uganda to achieve its clean energy and climate goals.

Keynote: Mr. Steven Hunt, Senior Energy Innovation Advisor, Foreign Commonwealth and Development Office (FCDO)

Explained that early thinking on RBF for clean energy was influenced by the success of advanced market commitments in the vaccine sector, where pooled demand, guaranteed markets, and payment for delivered results reduced costs, stimulated innovation, and expanded access in developing countries.
Recalled lessons from the German solar feed-in tariff, which addressed the initial viability gap for solar energy through guaranteed prices, stimulated investment, and drove rapid cost reductions, while underscoring the importance of adjusting incentives as markets mature.
Clarified that energy access markets are more complex than vaccine markets due to multiple technologies, service levels, and the hybrid public–private nature of delivery, requiring more adaptive RBF design.

Described the DFID-funded Results-Based Financing for Low-Carbon Energy Access Programme, implemented with Energising Development and multiple partners, which supported 17 RBF schemes across approximately 10 countries and generated extensive operational learning. Highlighted key design trade-offs between simplicity and targeting, noting that while differentiated incentives can improve equity and service quality, excessive complexity increases administrative burden and costs.

Noted persistent challenges with financial intermediaries, explaining that banks were not always well positioned to manage RBF mechanisms and that procurement processes often delayed implementation. Emphasized the importance of fast verification and payment, observing that RBF schemes with rapid disbursement cycles performed better by enabling capital to be recycled quickly into the market. Observed that early RBF programmes were often too small, fragmented, and geographically dispersed to send strong market signals or secure sustained government engagement.

Pointed out that weak policy alignment sometimes resulted in RBFs offsetting distortions such as import tariffs rather than addressing underlying barriers, and stressed that RBF alone cannot compensate for weak markets or financing environments. Identified the Nigeria National Electrification Program as a major evolution in RBF practice, highlighting its scale, government leadership, World Bank financing, and integration of solar home systems, mini-grids, and clean cooking within a single national framework.

Explained that there is no optimal or universal RBF level due to variations in delivery costs and household affordability and advised against excessive modelling in favour of adaptive adjustment based on market response.
Shared a practical rule of thumb, noting that rapid, uncontrolled growth may indicate over-subsidization, while limited uptake suggests incentives are too low.

Stressed the central importance of working capital, explaining that early progress in Nigeria was slowed by financiers' uncertainty over RBF credibility, but that confidence improved as the financial ecosystem matured.
Highlighted innovations that improved market performance, including digital RBF platforms, integrated working-capital facilities, and guarantee mechanisms such as Infra-Credit that enabled mobilization of local-currency finance from pension funds.

Emphasized the transformative role of digitization in replacing paper-based verification systems, improving transparency, efficiency, and scalability for governments, financiers, and developers. Reflected on alternative market-design approaches, including concession areas and minimum-subsidy tenders, noting that these proved slow and politically complex compared to bottom-up RBF mechanisms.

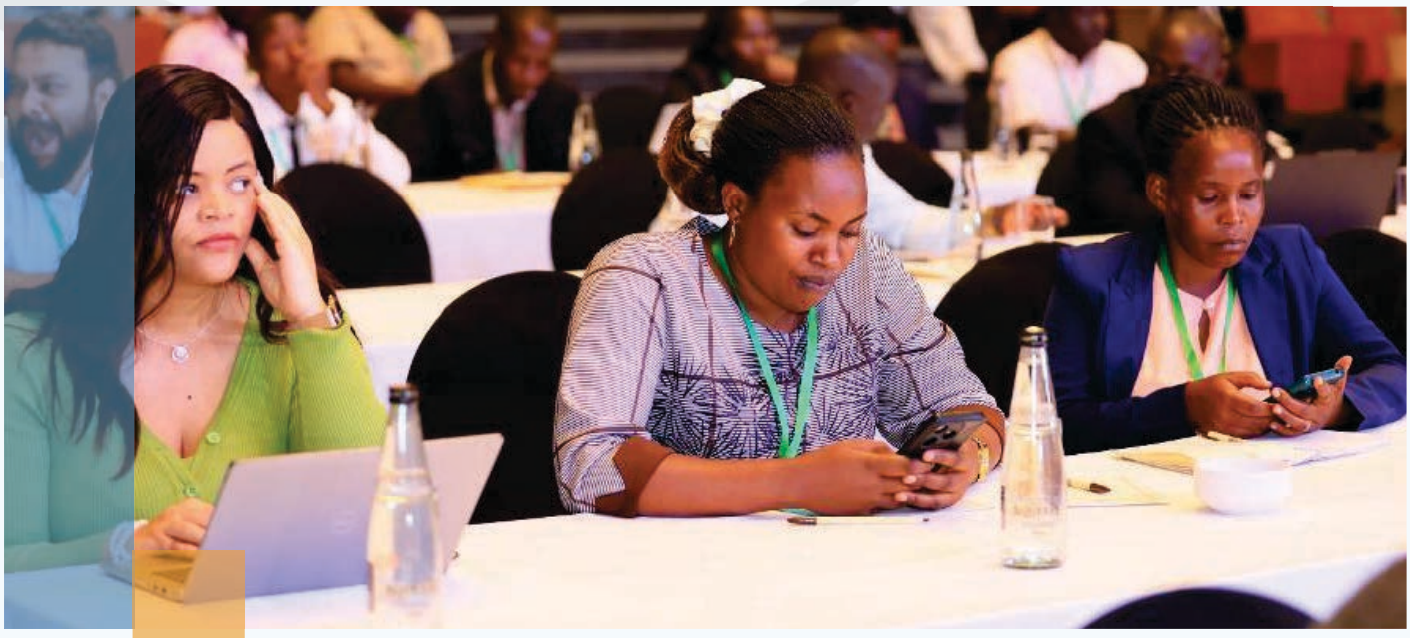
Shared reflections relevant to Uganda, stressing that clear, credible, and long-term market signals are essential, implying fewer RBFs with larger scale and longer duration to influence investment behaviour. Underlined the importance of strong policy alignment across tariffs, duties, licensing, and standards, and highlighted the coordinating role of institutions such as the Clean Cooking Unit and MEMD.

Emphasized the need to integrate RBF with accessible working-capital solutions, noting that RBF without financing linkages is unlikely to succeed. Warned that slow processing and delayed payments can undermine market confidence and potentially harm the sectors RBFs are intended to support.

Stated that RBF must be implemented alongside complementary interventions, including standards development, innovation support, training, and awareness raising. Recommended regular but not continuous review of RBF levels to maintain alignment with the viability gap and prevent excessive concentration in specific technologies or regions.

Cited the SNV-led BRILHO programme in Mozambique as a positive example of combining simple RBF structures with targeted top-ups for harder-to-reach populations. Affirmed strong support for RBF as a financing instrument while urging stakeholders to actively pursue carbon revenues as a complementary, long-term form of results-based finance.

Concluded that RBF is not a silver bullet, but a targeted transfer mechanism that values climate, health, and environmental externalities, aligns incentives around delivery, reduces funder risk, and levels the playing field for cleaner and more beneficial energy solutions.



PANEL DISCUSSION:

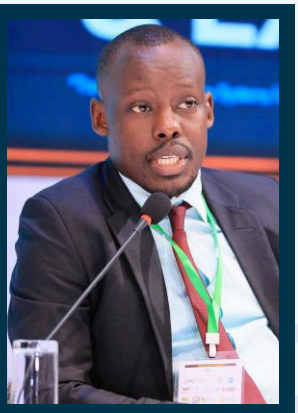
UGANDA-UK CLEAN COOKING SCALE AND SUPPORT SUB PROGRAMME: STOCKTAKING AND LAUNCHES

Speakers:

- **Ms. Tina Wamala,** PR, BHC
- **Eng. Herbert Abigaba,** Principal Energy Officer, CCU, MEMD
- **Mr. Ronnie Ssejuko**, Project Manager, GGGI
- **Mr. David Sheridan**, Senior Specialist, Sustainable Energy, ICLEI Africa
- **Ms. Lydia Nandawula**, Climate Policy Officer, FCDO
- **Dr. Nicholas Mukisa**, Deputy National Coordinator, NREP

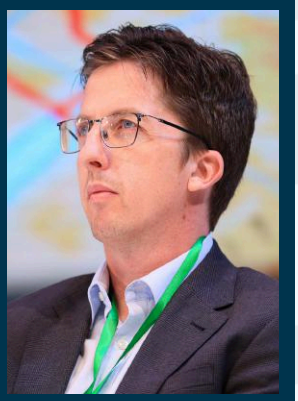
PANEL DISCUSSION:

Ms. Tina Wamala



Eng. Herbert Abigaba

Mr. Ronnie Ssejuko



Mr. David Sheridan

Ms. Lydia Nandawula

Dr. Nicholas Mukisa

During the session, it was reported that the Clean Cooking Unit (CCU) is mandated to coordinate leadership, knowledge systems, financing, market development, and quality assurance, all guided by performance scorecards to support Uganda's target of transitioning over 50% of the population to clean cooking within five years. Emphasized clean cooking as a cross-cutting priority for health, climate, and gender, drawing attention to the significant burden placed on women and children by traditional cooking practices. Noted that while demand for modern cooking technologies is rising, supply has lagged, making ongoing work with the Uganda National Bureau of Standards (UNBS) critical to address delays in e-cooking standards and to prevent substandard products from entering the market.

Expressed enthusiasm about the sector's momentum and encouraged stakeholders to register on FumbaHub, highlighting the CCU as an institutional mechanism for advancing clean cooking in line with national energy policy targets. Explained that high-level government attention and policy integration are essential for progress, positioning energy as a key driver of inclusive growth and social transformation.

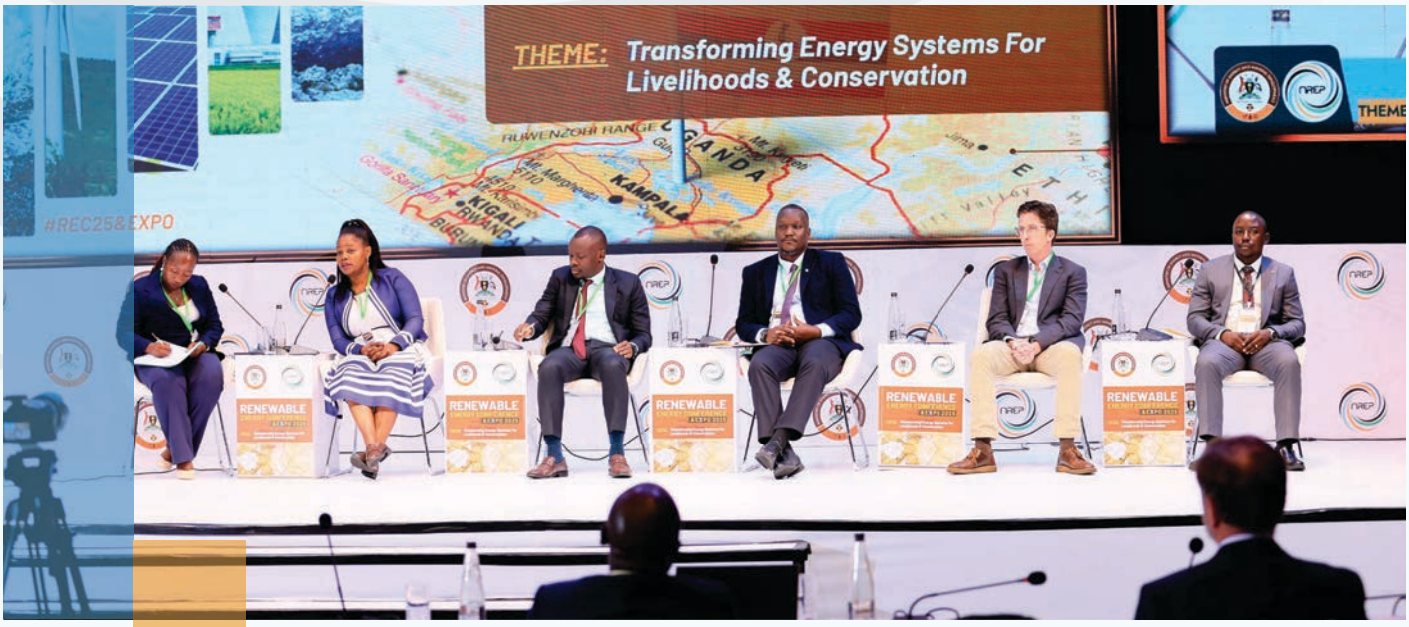
Explained that the CCU serves as a stakeholder convenor, with each actor playing a distinct role in addressing the National Integrated Clean Cooking Strategy (NICCS). Stated that government leads implementation, while the private sector drives market development. Highlighted financial institutions as key to the clean cooking agenda, despite many still learning about renewable energy, with initiatives like GGGI's Greenpreneur Programme helping MSMEs build business capacity. Noted the inclusion of cultural and religious institutions as important partners in achieving CCU objectives.

Discussed that ICLEI supports local governments by working with authorities and the private sector, including financing to reach last-mile consumers. Revealed that ICLEI has engaged urban authorities in the Greater Kampala Metropolitan Area, collaborating with the Ministry of Energy and Mineral Development to support decentralization. Shared that door-to-door sales are effective for promoting clean cooking technologies, drawing on ICLEI's extensive experience in climate and sustainability action.

Highlighted NREP's leadership in developing a knowledge management system for the sector, mapping key actors, projects, and financiers to address data gaps and support policy formulation. Explained that the platform enables verification of legal registration, facilitates feedback from both top-down and bottom-up, and supports consumer protection and after-sales services. Encouraged participants to create accounts on FumbaHub to access and share information, reducing duplication of efforts.

Discussed the UK Government's outlook, emphasizing the need for the CCU to strengthen coordination, enhance stakeholder engagement, and bridge sector gaps. Stressed the importance of maintaining awareness through ongoing demonstrations and ensuring interventions are inclusive. Noted the entry of carbon financing and new international interest in Uganda's clean cooking sector, identifying the CCU as a key resource mobilizer.

Cited challenges such as reliability, high tariffs, quality issues with electric cooking solutions, and the presence of substandard products. Proposed stronger regulations, consumer protection, and product safety assurances as responses to rising demand. In response, stakeholders highlighted ongoing supply-side support, the role of aggregators in scaling access to electric pressure cookers, and regulatory measures such as product labeling by UNBS. Addressed power reliability issues through the National Integrated Clean Cooking Strategy, infrastructure improvements, and targeted collaborations, with innovation and resource optimization prioritized to support sector scale-up.



PANEL DISCUSSION:

PARTNERSHIPS FOR LIVELIHOOD TRANSFORMATION IN HUMANITARIAN CONTEXTS: CLEAN COOKING, PRODUCTIVE USE OF ENERGY, AND SKILLING

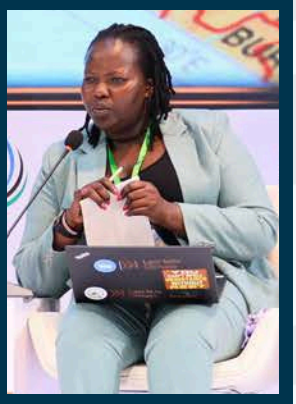
Speakers:

- **Ms. Ruth Komuntale,** Managing Director, ECOCA, East Africa
- **Ms. Anne Nyambane**, Refugee Response and Sustainable Energy Specialist, FAO
- **Ms. Sojung Kang**, Associate Environment and Energy Officer, UNHCR
- **Ms. Irene Ayoo**, Partnership Officer, Last Mile Climate

Ms. Ruth Komuntale

Ms. Anne Nyambane

Ms. Sojung Kang



Ms. Irene Ayoo

The session began by emphasizing the importance of practical skills and awareness for enabling refugees and host community members to participate in the renewable energy value chain. Highlighted the need to equip communities with technical capacities in installation, operation, maintenance, repair, and e-waste management, and identified the current lack of trained local technicians as a critical gap.

Noted that renewable energy offers business opportunities and that partnerships with refugee-led enterprises can help bring technologies closer to end users, encourage adoption, and address affordability constraints.

Encouraged private sector actors to collaborate with refugee businesses and microfinance institutions, and stressed the importance of integrating skills development, market engagement, and trade within these communities to make renewable energy technologies accessible and sustainable. Stressed the need for improved after-sales service, greater private sector participation, and culturally sensitive awareness and behavioral change communication.

Highlighted key challenges facing refugee and host communities, including limited access to basic services, lack of grid connectivity, the high cost and unavailability of off-grid solutions, low awareness, and the time spent collecting firewood. Pointed to ongoing investments such as the World Bank's Energy Access Scale-Up Project (EASP) aimed at expanding clean energy access in these settings.

Shared lessons from the SOLCO skilling program in refugee settlements, emphasizing the value of strong collaboration with partners and Refugee-Led Organizations (RLOs). Noted that refugee communities make significant contributions when meaningfully engaged, and that diversity requires co-creation of solutions with communities.

Stressed the need for accredited TVET curricula in renewable energy maintenance and e-waste management and highlighted the importance of gender inclusion in design processes. Underscored that successful interventions must integrate skills development, technology access, and an enabling environment, achievable only through inclusive partnerships.

Reported barriers to clean cooking adoption, including limited product availability due to supply-side financing constraints, strict regulations in humanitarian settings, and low awareness. Observed that the Clean Cooking Unit (CCU) is positioned to engage with local communities and that refugees are integrated within the Nationally Integrated Clean Cooking Strategy (NICCS) for both short- and long-term planning. Pointed to the applicability of innovative financing mechanisms and the potential for clean cooking to promote self-reliance, income generation, and digital learning.

In the Q&A, proposed local manufacturing of clean cooking solutions and deliberate support for refugee-hosting local governments. Shared ongoing efforts to integrate clean energy into refugee response plans, involve local authorities, and address forest degradation, with organizations such as SOLCO and ECO Adapt providing clean cooking solutions and supporting forest restoration to strengthen climate resilience and agricultural productivity.

PANEL DISCUSSION:

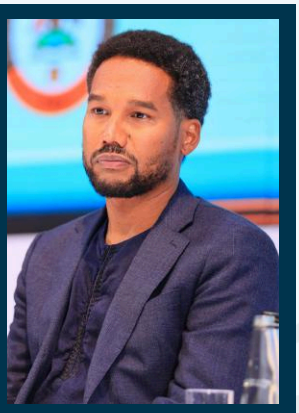
COOKING TRANSITION: TAKING CLEAN COOKING TO INSTITUTIONS

Speakers:

- **Mr. Joseph Arineitwe Ndemere,** Director General, CIRCODU
- **Mr. Jacob Fodio-Todd,** Research Associate, MECS
- **Ms. Justine Akumu,** Senior Energy Officer, MEMD
- **Ms. Barbara Nankya Mutagubya,** MD, Sanyu Babies Home
- **Mr. Egide Ntakirutimana**, Energy for Food Security Advisor, WFP

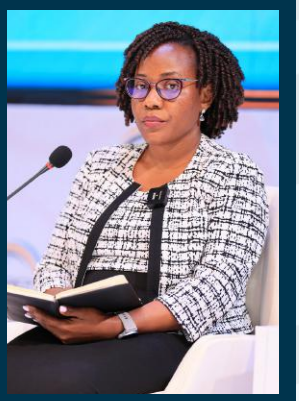
PANEL DISCUSSION:

Mr. Joseph Arineitwe Ndemere



Mr. Jacob Fodio-Todd

Ms. Justine Akumu



Ms. Barbara Nankya Mutagubya

Mr. Egide Ntakirutimana

The session focused on the unique challenges and opportunities of institutional clean cooking, particularly in schools, orphanages, and other large facilities. Discussed how institutional cooking drives high costs and environmental impacts due to the large populations served and emphasized that achieving universal clean cooking access requires prioritizing institutions alongside households. Identified persistent challenges such as weak coordination across ministries and agencies, limited local government involvement, high upfront technology costs, lack of clear standards, and the need for structured financing and reliable maintenance systems.

Emphasized the value of research-informed and context-specific clean cooking technologies, including electric cooking, electric boilers, efficient biomass systems, LPG, biogas, and pellets, aligned with institutional menus and supported by backup power. Noted that some schools previously used electricity for cooking, highlighting the importance of understanding and addressing factors behind this regression. Stressed the need for tailored technology selection, infrastructure upgrades, and aligning solutions with institutional needs to ensure reliability and effectiveness.

Explored sustainable financing options for institutional clean cooking, including equity support to ESCOs, revolving funds using firewood savings, PayGo models, and Results-Based Financing (RBF). Reported ongoing work to address limited collateral and high interest rates through lower rates and partial guarantees. Highlighted the importance of scaling successful domestic sector interventions to institutions and demonstrating viable, sustainable financing models.

Provided a real-world example from Sanyu Babies' Home, where the transition to electric cooking was achieved using solar-powered electric pressure cookers, enabled by a grant-supported partnership. Attested to dramatic improvements: reduced cooking times, more nutritious and timely meals, improved staff health and kitchen conditions, and significant environmental benefits such as saving nearly 2,000 trees in under a year.
Underscored the need for government-certified trainers to standardize maintenance training and for national awareness campaigns to promote practical and achievable clean cooking solutions in institutions.
Shared global lessons from initiatives like MECS, which stress the importance of understanding local cooking practices, menus, and infrastructure to successfully implement a range of clean cooking technologies in schools.

Highlighted the World Food Programme's efforts to integrate clean cooking into school feeding programs, promote technology-neutral approaches, redesign kitchens, and use schools as innovation hubs.
Stressed that coordinated public-private partnerships and cross-ministerial collaboration are essential for scaling up clean cooking and addressing financing and infrastructure challenges.

In the Q&A, revealed that clear energy baselines and understanding institutional power consumption are crucial for planning, with ongoing efforts to upgrade institutions to three-phase connections and introduce an e-cooking tariff. Emphasized the importance of user-friendly technology, comprehensive training for both cooks and management, and the potential of the transition to create green jobs rather than eliminate existing roles.

PARTNERSHIPS

UN AGENCIES DELIVERING AS ONE FOR SDG7

Opening Remarks: Ms. Zainab Kakungulu, Project Coordinator, FAO

Opened the session by emphasizing the United Nations' shared commitment to expanding energy access in Uganda. Expressed delight that the UN family had the opportunity to come together and showcase the collective work being done to advance sustainable and inclusive energy solutions. Noted that while each UN agency operates under its own mandate, many are jointly contributing to SDG 7.

Explained that FAO integrates clean energy into agriculture and food systems, UNICEF advances solarization in schools and health centers, IOM supports energy solutions in displacement settlements, and UN Women, UNDP, UNIDO, WFP, UNEP, and UNHCR each provide complementary interventions across gender, industry, environment, humanitarian response, and policy support. Underlined that these diverse interventions exemplify the Delivering as One approach, strengthening collective impact and accelerating Uganda's energy transition.

Dr. Brian E. Isabirye, Commissioner, ERD, MEMD

Welcomed the partnership between the Government of Uganda and the United Nations, noting that energy remains the backbone of Uganda's socio-economic transformation. Highlighted the importance of the session's theme, describing the UN Delivering as One approach as both inspiring and instructive, and a demonstration of meaningful collaboration.

Pointed out that, like UN agencies, government ministries often operate under diverse mandates and emphasized that the Delivering as One model showcases the power of coordinated action.
Commended FAO for its leadership in advancing the Food-Energy Nexus and acknowledged ongoing collaborations with UNDP, UNIDO, UN Women, IOM, UNHCR, and the Resident Coordinator's Office. Called for strengthened synergies in pursuit of SDG 7, reinforcing that energy is at the heart of Uganda's development and climate resilience agenda.

Mr. Jean-Marie Biakwele, Team Lead, Policy & Food Systems, FAO Uganda

Stressed that Uganda faces the dual challenge of expanding clean energy access while safeguarding food systems, climate resilience, and rural livelihoods. Noted that most smallholder farmers still operate in low-energy environments, which limits irrigation, post-harvest handling, and value addition. Highlighted that 94% of households continue to depend on biomass, contributing to deforestation, emissions, and adverse health effects among women and children.

Showcased FAO's Energy-Smart Agri-Food Systems approach, which supports solar irrigation, solar grain drying, cold storage, greenhouse farming, and biogas systems, and has trained over 1,500 farmers, technicians, and extension workers.

Emphasized opportunities for deeper collaboration across the UN system, including clean energy in schools and health centers with UNICEF and WFP, circular energy models in refugee settlements with IOM, gender-responsive innovations with UN Women, and standards and financing partnerships with UNEP and UNDP. Concluded by reaffirming FAO's commitment to joint programming and coordinated investments that advance just, inclusive, and sustainable energy transitions that leave no one behind.

Keynote: Mr. Leonard Zulu, Resident Coordinator, United Nations in Uganda

Opened the keynote by providing the global and national context for energy access, highlighting that 685 million people around the world still lack electricity, with Sub-Saharan Africa accounting for 83% of this deficit. Emphasized that 2.1 billion people continue to rely on polluting fuels, a burden that disproportionately affects women and children across Africa.

Noted that in Uganda, only 20% of the population is connected to the national grid, while 38% use off-grid solutions such as mini-grids and solar home kits. Stressed that 94% of households in Uganda cook with biomass, with 73% using firewood and 21% using charcoal, driving deforestation and posing severe health risks, all of which are being intensified by climate change.

Highlighted Mission 300, a World Bank and African Development Bank initiative aimed at connecting 300 million Africans to electricity by 2030 and shared that Uganda is preparing to join Cohort 3 and develop a National Energy Compact. Emphasized the UN's One UN commitment to integrating SDG 7 (Affordable and Clean Energy) with SDG 9 (Innovation and Infrastructure), SDG 13 (Climate Action), and SDG 5 (Gender Equality).

Outlined priority focus areas including solar irrigation, clean cooking in schools and refugee settlements, renewable energy for agro-industrialization, energy for WASH systems, standards and policy support, and support for women- and youth-led clean energy enterprises.

Closed with a call to action, stressing that achieving SDG 7 requires not just technology, but also finance, partnerships, inclusion, and ecosystem protection. Reaffirmed the UN's commitment to supporting Uganda's green, inclusive, and climate-smart future.

PANEL DISCUSSION:

UNLOCKING PRODUCTIVE USE OF ENERGY AND SCALING UP CLEAN COOKING FOR INCLUSIVE AND CLIMATE-RESILIENT LIVELIHOODS

Speakers:

- **Dr. Paul Nduhuura,** Head Research and Capacity Building, NREP
- **Ms. Juliet Nakato**, Gender Mainstreaming and Coordination Officer UN Women
- **Mr. Tom Sengalama**, Team Leader-Nature, Climate, Energy and Resilience, UNDP
- **Mr. Lalit Patra**, Wash Manager, UNICEF
- **Ms. Anne Nyambane**, Refugee Response and Sustainable Energy Specialist, FAO
- **Ms. Fumie Azirimu**, Partnerships Advisor, UNOPS

PANEL DISCUSSION:

Dr. Paul Nduhuura

Ms. Juliet Nakato

Mr. Tom Sengalama

Mr. Lalit Patra

Ms. Anne Nyambane

Ms. Fumie Azirimu

The session emphasized the central role of energy in driving inclusive socioeconomic growth, pointing out that access to energy is not just about lighting but is also an essential enabler of opportunity, productivity, and dignity. Invited panelists to reflect on how productive energy use models can be scaled, how policy and financing frameworks can ensure equity, and how partnerships can be expanded beyond government and UN agencies.

Discussed the integration of renewable energy into agricultural value chains, including the adoption of solar-powered irrigation systems, use of solar drying units to reduce post-harvest losses, and application of solar-powered egg incubators for poultry production. Shared the establishment of solar-powered weather stations and cold storage for veterinary vaccines, and emphasized a focus on sustainable biomass management, reforestation, and landscape restoration. Stressed that these interventions are particularly targeted at women, youth, and vulnerable communities, demonstrating how renewable energy can foster inclusive agricultural transformation and climate resilience.

Outlined clean energy solutions for schools, healthcare facilities, and community water systems, providing examples of solar installations supporting uninterrupted healthcare, vaccine storage, and surgical operations. Detailed the positive impact of solar-powered water and sanitation for schools, including a reported increase in attendance from pilot programs. Highlighted the need for capacity-building, robust technician training, and government-led planning to ensure long-term sustainability.

Focused on gender-responsive energy interventions, noting that energy poverty disproportionately affects women and girls, with a high percentage of households relying on biomass for cooking.

Highlighted the low rate of women's participation in the energy workforce and stressed the need to challenge gender stereotypes that restrict women's inclusion in technical roles. Recommended embedding gender in national energy policies, implementing care-sensitive infrastructure, providing gender-inclusive financing, and using gender-disaggregated data for decision-making. Shared examples of projects such as solar solutions for refugee and host communities, distribution of improved cookstoves, and support for women-led renewable energy enterprises.

Presented interventions addressing gaps in electrification coverage and clean cooking access, particularly in rural areas. Summarized work in electrifying rural health centers, supporting clean cooking in hospitals, deploying energy systems at border posts, and piloting solar-powered irrigation and waste-to-energy biogas projects. Emphasized the need for multi-stakeholder collaboration, innovative financing, and prioritization of rural areas to ensure energy access supports productive use and service delivery.

Shared experience in sustainable energy solutions with a focus on long-term operational sustainability. Cited implementation of renewable energy projects with an emphasis on lifecycle planning, local capacity building, market development, and e-waste management. Described operational models such as Design-Build-Operate (DBO) and Results-Based Financing (RBF), which blend donor funding with private sector investment. Stressed the importance of social inclusion, with a focus on ensuring vulnerable households access energy through decentralized solutions such as mini-grids and solar home systems, and highlighted the value of balancing policy, finance, private sector participation, and community ownership.

Audience questions addressed system sustainability, forest management, productive energy use in remote areas, and end-of-life disposal of energy technologies. Panelists responded by emphasizing community-based approaches, enhanced technical training, robust maintenance planning, and gender-sensitive interventions. Highlighted the importance of local solar technician training, support for Water User Committees and sustainable forestry, gender-inclusive technical training, public-private partnerships for solar and mini-grid development, and the significance of hybrid financing and lifecycle management models.

PANEL DISCUSSION:

AGENCIES SCALING UP CLEAN COOKING FOR INCLUSIVE AND CLIMATE-RESILIENT LIVELIHOODS

Speakers:

- **Mr. Michael Kiza,** Energy and Climate Finance Expert, UNIDO
- **Ms. Sojung Kang**, Associate Environment and Energy Officer, UNHCR
- **Ms. Ann Grace Akiteng**, Finance and Accounting Officer, UNACC
- **Mr. Robert Akankwasa**, National Program Officer, IOM
- **Mr. Egide Ntakirutimana**, Energy Advisor, WFP
- **Mr. Paul Onyait**, Director, Action Against Hunger

PANEL DISCUSSION:

Mr. Michael Kiza

Ms. Sojung Kang

Ms. Ann Grace Akiteng

Mr. Robert Akankwasa

Mr. Egide Ntakirutimana

Mr. Paul Onyait

The session addressed the safety, protection, and dignity aspects of clean cooking for refugees, particularly women and girls, emphasizing the health risks from indoor air pollution and the interventions focused on improved cookstoves, artisan training, and livelihood integration. Discussed UNEP's global and regional initiatives such as the Solar Cooking (SolCo) and EcoAdapt programmes, which target low-carbon cooking technologies and environmental restoration, and align closely with Uganda's energy access and climate adaptation goals.

Emphasized the importance of multi-stakeholder partnerships in humanitarian contexts, with NORCAP/GPA highlighting the role of public, private, and non-profit actors, including refugee-led organizations, and the need for access to finance and delivery models tailored for refugee-hosting communities. Outlined WFP's transition from biomass to clean cooking in school meal programs, scaling up improved cookstoves and electric solutions to benefit both students and households, and detailing strategies for capacity-building, monitoring, and community engagement.

Presented last-mile clean cooking solutions in refugee settlements, focusing on demand creation, private sector engagement, affordability support, and supply chain strengthening, with evidence from high LPG adoption rates in targeted communities.

Described UNACC's work to raise awareness, expand regional hubs, promote electric pressure cookers, and drive policy advocacy for market development and affordability. Highlighted IOM's approach to linking clean cooking, circular economy, and e-waste recovery by training youth, creating battery packs, and scaling cooking hubs in settlements, which resulted in significant reductions in biomass consumption.

Concluded with participant reflections that surfaced the need for inclusive policy support, private sector engagement, alternative fuels, off-grid solutions, and centralized data. Key themes included the importance of multi-agency and whole-of-society coordination, innovation, geographic inclusion, financing, and continuous learning. The session's moderator underscored the significance of this rare multi-agency collaboration, pointing to commitments for ongoing joint action to advance Uganda's clean cooking and sustainable energy agenda.

PRODUCTIVE USE OF ENERGY (PUE)

PURE FOR PROGRESS: LAUNCH & DIALOGUE ON UGANDA'S MARKET OUTLOOK

Mr. Paddy Bakengana, Senior Programs Associate, USEA

Presented findings from a 2024 assessment conducted by USEA with support from GOGLA, which surveyed 45 PUE companies to map the sector's business models, sales performance, and promoted technologies. Explained that PUE refers to energy use that drives value creation and productivity beyond basic lighting, supporting livelihoods in agriculture, health, tourism, hospitality, and transport.

Described that most companies surveyed were small to medium enterprises, with large enterprises dominating sector operations and showing signs of growth and consolidation. Outlined that larger firms diversify across multiple segments, use various payment models (cash, PAYGO, loans, check-off systems, fee-for-service), and are better positioned for remote outreach, while smaller firms face operational and logistical constraints.

Noted that commercial and industrial clients are highly engaged, but households and institutions like schools and health centers offer untapped potential. Common technologies include solar water pumps, irrigation systems, solar refrigeration, and cold storage, with solar lanterns and water pumps leading product uptake.

Emphasized key factors for success, such as flexible financing models (especially PAYGO), innovative credit mechanisms, community ownership approaches, bundled solutions with training and after-sales support, and robust evidence and impact documentation to build investor and policymaker confidence. Identified that sector growth is driven by solar irrigation and cold storage, but limited access to finance, inconsistent tax policies, and delays with the Uganda Revenue Authority constrain expansion. Also highlighted that most companies are Kampala-based, limiting rural access, and recommended decentralization of operations.

Presented actionable recommendations to strengthen access to finance through blended instruments and risk-sharing, clarify tax exemptions and import procedures, provide technical assistance and concessional loans for small enterprises, expand regional presence with decentralized branches and distribution hubs, and enhance policy coordination across ministries. Concluded that scaling productive use of energy in Uganda requires a supportive ecosystem, innovative business models, greater finance, and policy alignment to unlock PUE's potential for inclusive economic growth.

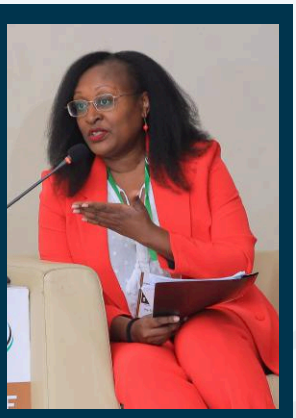
PURE FOR PROGRESS: LAUNCH & DIALOGUE ON UGANDA'S MARKET OUTLOOK

Speakers:

- **Ms. Gloria Kuyoh,** Project Manager-PUE, GOGLA
- **Eng. Elizabeth Kaijuka Okwenje**, Ag. Assistant Commissioner for Physical Renewable Energy, MEMD Development
- **Ms. Precious Barbara Ndinawe**, Head of Sales and Operations, Bright Life by Finca International
- **Ms. Joyce Nkuyahaga**, Energy Specialist, Energy Sector Management Assistance Program (ESMAP), World Bank
- **Mr. Fred Tuhairwe**, Program Manager, PUE, UECCC
- **Mr. Paddy Bakengana**, Senior Programs Associate, USEA

PANEL DISCUSSION:

Ms. Gloria Kuyoh



Eng. Elizabeth Kaijuka Okwenje

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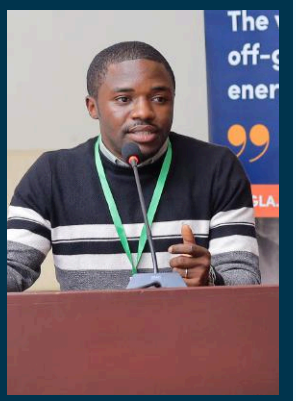


Mr. Paddy Bakengana

The session brought together a diverse range of stakeholders, including government officials, development partners, private sector actors, and financial institutions, to explore Uganda's PUE landscape and the development of the forthcoming National PUE Strategy. Panelists highlighted the importance of policy alignment and fiscal incentives, such as VAT exemptions and import duty waivers, to promote the adoption of renewable energy technologies. Shared that the Ministry, with World Bank support, is developing a cross-sectoral PUE Strategy covering agriculture, trade, health, education, and transport, and aims to produce a costed implementation plan for scalable deployment of productive energy solutions.

Discussed Uganda's current national energy access rate, which stands at 57% and is split between grid and solar energy, with most systems being lower capacity (Tier 1 or Tier 2). Emphasized the need for higher-capacity solutions to ensure greater productivity and economic value. Pointed to the Energy Access Scale-Up Project (EASP) as the largest PUE program in Uganda, with $9 million allocated specifically to PUE, and stressed the importance of coordinated programming with other initiatives like the Beyond the Grid Fund for Africa to accelerate market uptake.

Panelists addressed operational, behavioral, and financial barriers to PUE adoption. Noted that high costs of technologies, such as solar refrigerators, limit uptake, making flexible financing models like PAYGo and credit-based approaches crucial. Stressed the need for customer training and reliable after-sales support to ensure sustained use. Outlined financial mechanisms, including results-based subsidies that can cover up to 60% of costs for PAYGo users, and highlighted partnerships with microfinance institutions and SACCOs to extend reach into rural areas. Reported that UECCC collaborates with over 90 energy service companies to expand access for households and small enterprises.

Concluded that scaling PUE solutions in Uganda requires a holistic approach that combines supportive policy, innovative financing, robust market development, technical assistance, and practical demonstrations. Emphasized that strong cross-sectoral collaboration is essential to ensure adoption, sustainability, and economic transformation through productive energy use.

PANEL DISCUSSION:

ECONOMIC TRANSFORMATION: PUE IN AGRI-BUSINESS

Speakers:

- **Ms. Sumaya Mahomed,** Utilities Innovation Director, Power for All
- **Mr. Arinda Franklin Okeyamba**, Finance and Projects Manager, FRES Uganda
- **Ms. Helen Kyomugisha**, Programme Component Manager, EnDev, GIZ
- **Mr. Brian Kawuma**, PUE Consultant
- **Mr. Vincent Sseremba**, CEO, Tulima Solar

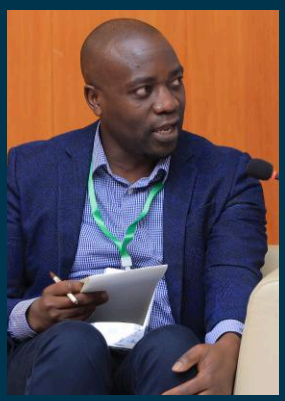
PANEL DISCUSSION:

Ms. Sumaya Mahomed

Mr. Arinda Franklin Okeyamba

Ms. Helen Kyomugisha

Mr. Brian Kawuma



Mr. Vincent Sseremba

Noted that Uganda's dairy sector had long been dominated by smallholder farmers facing persistent challenges with milk handling, storage, and market access due to unreliable cold-chain infrastructure, shared how these bottlenecks led to frequent spoilage and reduced incomes for rural producers. Reported that FRES Uganda, through the Community Energy GRIDS for Agri-Business Transformation initiative, implemented solar mini-grid systems for dairy cooperatives, demonstrating the transformative role of renewable energy in rural value chains.

Explained that FRES Uganda's energy-as-a-service model covered upfront capital costs, allowing cooperatives to pay affordable access fees and removing key financial barriers. Indicated that solar-powered chilling systems replaced costly diesel generators, enabling cooperatives to cut operational costs by up to 60 percent and improve cooling reliability. Highlighted that the new installations also supported other productive uses, such as small-scale milling, retail shops, and administration, tailored to local needs.

Observed that initial deployments reached three cooperatives in Kazo and Kiruhura Districts, with standardized system designs ensuring replicability and impact. Emphasized that capacity building, user training, and demonstration sites were critical for stimulating demand and accelerating adoption of Productive Use of Energy (PUE) technologies. Shared that demonstration hubs enabled farmers to witness practical benefits, while farmer champions played a key role in influencing peers and building trust.

Stated that continuous sensitization and co-design with farmers strengthened ownership and long-term sustainability. Pointed out that high distribution and operational costs in last-mile areas remained a key barrier, but companies like Tulima Solar addressed these through tailored system designs, flexible Pay-As-You-Go (PAYGo) models, and strategic partnerships with financial institutions for green financing.

Highlighted that subsidies at the end-user level helped build market traction, particularly for smallholder farmers facing cash flow constraints. Noted that expanding PUE solutions required not only innovative financing but also reliable after-sales service and ongoing technical support.

Identified persistent challenges such as knowledge gaps, affordability, and limited awareness, while also recognizing the success of inclusive business models and strategic partnerships. Recommended scaling up through blended finance, capacity building, and collaboration across government, private sector, and development agencies to unlock broader economic transformation in Uganda's agri-business sector.

PANEL DISCUSSION:

ANNUAL DISTRICT LOCAL GOVERNMENT SUB-REGIONAL FORUM

Speakers:

- **Ms. Jackie Nandawula,** Energy Advisor, GIZ
- **Mr. Drama Patrick**, District Energy Focal Person, Moyo District LG
- **Mr. Nixon Kasolo**, GIS Officer, MEMD
- **Ms. Joan Atalla Ogwal**, District Energy Focal person, Alebtong District
- **Mr. Lemeriga George**, District Planner, Obongi District LG
- **Mr. Alfred Ogwal**, District Representative, Dokolo District
- **Mr. Edison Tusiime**, Principal Statistician, MEMD
- **Mr. John Bosco Oribakiriho**, Decentralisation Advisor, GIZ
- **Mr. Ben Odong**, Head, Uganda Clean Cooking Centre, ICLEI

PANEL DISCUSSION:


Ms. Jackie Nandawula


Mr. Drama Patrick


Mr. Nixon Kasolo

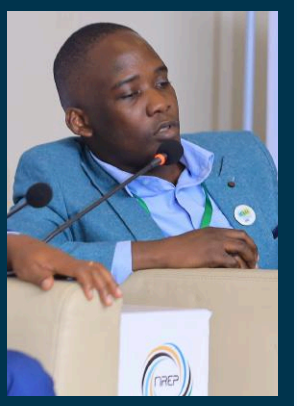

Ms. Joan Atalla Ogwal

Mr. Lemeriga George


Mr. Alfred Ogwal


Mr. Edison Tusiime


Mr. John Bosco Oribakiriho


Mr. Ben Odong

The session opened with a detailed presentation by Nixon Kasolo emphasizing that energy planning is only as effective as the data supporting it. Demonstrated how GIS, Kobo Toolbox, QGIS, KoBo Collect, and GPS devices are enabling districts to capture and analyze energy access information accurately. Disclosed how through standardized templates and training, including sessions held in Nebbi district, focal persons have begun mapping firewood dependency, institutional energy use, and electrification gaps. Practical examples, such as schools near electricity poles in Moyo that remain unconnected, showed how GIS mapping supports targeted decision-making. Nixon concluded that evidence-based planning enhances resource allocation, strengthens environmental conservation, and ensures energy interventions respond to real district needs.

Showcased district-level tools developed in partnership with MEMD and GIZ to gather institutional, streetlighting, and private-sector energy data. Explained that the Public Institutions Tool assesses energy sources in schools and health centers, while the Streetlighting Tool helps urban councils prioritize lighting for markets and growth centers. Shared that a new private sector tool is also under development to capture business energy use and inform enterprise-support programs.

Stressed that systematic data collection guides districts in identifying gaps, planning renewable energy investments, and improving service delivery efficiency.

Outlined a project supporting integrated, evidence-based planning in refugee-hosting districts. Implemented with partners such as the Ministry of Local Government, NPA, U-PoST, and Ministry of Finance, the project was to strengthen local planning systems and emergency preparedness. Standard tools, Village Proposal Forms, Parish Priority Forms, Inventory Forms, and Basic Information Forms where to ensure that energy needs are captured from the village to the district level, including co-signing by refugee leaders in mixed settlements. Emphasized that digitalization, stronger data systems, and integration of energy into sub-county plans will ensure equitable service delivery and improve resilience in refugee-hosting areas.

Explained that local government energy budgeting integrates national datasets such as U-Bus with district-level priorities collected from consultations and institutional assessments. Budget allocations are shaped through stakeholder meetings, departmental priority setting, and analysis of community needs. Underscored that effective energy budgeting must blend national frameworks with local realities to ensure that plans are both aligned and community driven.

Outlined the Ministry of Energy's strategies for expanding clean, affordable, and reliable energy. Shared that, guided by NDP4, the ministry is advancing major generation projects, including a 200 MW plant downstream of Karuma and long-term plans for an 8,400 MW installation to boost supply for rural and productive use. Highlighted the push for private-sector participation in energy infrastructure and emphasized the need for districts to contextualize these national priorities. Informed delegates that by integrating energy planning into district and sub-county development plans, local governments help ensure that national investments translate into community-level impact.

Stressed the need to strengthen energy data systems at the local level. She recommended linking energy indicators to existing monitoring systems, integrating data into BFPs and performance reports, and exploring platforms like PDM-MIS for better district data management. Shared practical examples from Alebtong, such as improved institutional cookstoves at Aloi High that halved fuel costs and enabled schools to invest in income-generating equipment. She also advocated for local energy hubs using solar and mini-hydro technologies, accountability structures in institutions, trained caretakers, performance-based supplier contracts, vendor registries, and routine audits to sustain energy infrastructure.

Explained how GIZ's energy mainstreaming approach has expanded from 13 districts to multiple new cohorts due to high demand. Disclosed that the Energy Mainstreaming Guidelines are now being used not only by the government but also by faith-based institutions, reflecting their practical value. Shared that the pilot had influenced national frameworks, including NDPIII and the Sustainable Energy Development Programme, while strengthening district ownership, improving data flows, and creating a community of practice among district energy actors. Advocated for expanding the pilot, strengthening council-level sensitization, and investing in planning officers who bridge technical data with political decision-making.

Introduced ICLEI Africa's ENACT program, which operates across Uganda's Greater Kampala Metropolitan Area and has already reached more than 40,000 beneficiaries. He noted that initial project-style interventions proved less sustainable compared to a government-to-government partnership model, which anchors clean cooking and energy access within formal systems. Highlighted the need to balance capacity building with visible implementation, empower political champions, and engage private-sector and civil-society actors to deepen community uptake of clean energy technologies.

PANEL DISCUSSION:

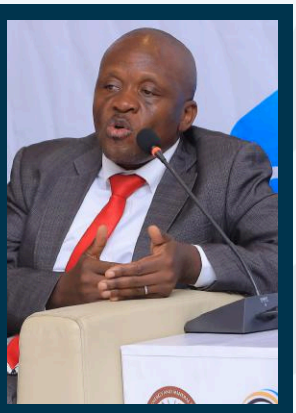
PRODUCTIVE USE OF SOLAR ENERGY FOR CROP PRODUCTION AND VALUE ADDITION

Speakers:

- **Mr. Alex Mayamba,** Technical Director, KAB Consult
- **Mr. Titus Lwera** , District Agriculture Officer, Nakaseke District
- **Mr. Fred Migadde**, Manager Agriculture Finance, Centenary Bank
- **Mr. Godfrey Ssendagala**, Lead Farmer
- **Dr. Alex Mayamba**, Technical Director, KAB Consult
- **Mr. Canary Williams Bogere**, Commercial Manager, Tulima Solar
- **Ms. Joy Musimenta** Project officer, New Energy Nexus
- **Ms. Catherine Nakato**, Founder and Managing Director, KAB Consult
- **Eng. Amos Tamusuza**, Energy Officer, ERD, MEMD

Mr. Alex Mayamba

Mr. Titus Lwera



Mr. Fred Migadde

Mr. Godfrey Ssendagala

Dr. Alex Mayamba

Mr. Canary Williams Bogere

Ms. Joy Musimenta

Ms. Catherine Nakato

Eng. Amos Tamusuza

This session brought together smallholder farmers, solar technology suppliers, financial institutions, insurance providers, government representatives, and development partners to share practical lessons from the “Enhancing Smallholder Tomato Farmers’ Income” project.

Demonstrated how solar-powered irrigation and productive use of energy (PUE) technologies not only increased crop yields and land use efficiency but also drastically reduced operating costs and improved household incomes.

Highlighted that year-round cultivation became possible due to reliable solar irrigation, enabling farmers to grow high-value crops, diversify their production, and reduce their dependence on rain-fed agriculture. Noted that group-based purchasing and shared use of solar pumps made these systems more accessible and affordable, especially for women and youth, while local government subsidies and public-private partnerships further boosted adoption.

Showcased financial innovations such as season-sensitive loans, group lending, and produce-based repayment models introduced by banks to lower collateral barriers and improve credit access.

Identified persistent challenges, including high upfront investment costs, limited availability of affordable financing, lack of after-sales support, improperly sized pumps, battery management issues, and the prevalence of counterfeit products. Documented participants' calls for better information on certified solar standards, expanded technical training, and insurance products that cover farm produce and not just equipment.

Showcased district-level tools developed in partnership with MEMD and GIZ to gather institutional, streetlighting, and private-sector energy data. Explained that the Public Institutions Tool assesses energy sources in schools and health centers, while the Streetlighting Tool helps urban councils prioritize lighting for markets and growth centers. Shared that a new private sector tool is also under development to capture business energy use and inform enterprise-support programs.

Emphasized the potential of solar-powered PUE technologies to expand into value addition activities like drying, milling, and processing, with technical experts advocating for solar to power entire agricultural value chains.
Reported on the environmental and health benefits—reduced emissions, improved air quality, and climate resilience that solar solutions deliver, and underlined the vital role of partnerships across the value chain in scaling up impacts.

Summarized recommended actions such as expand subsidy programs and publicize certified solar technologies; scale up group-based purchasing and lending; establish local service and maintenance hubs; strengthen after-sales support; and provide comprehensive training for farmers in PUE and battery management.
Concluded that KABConsult's integrated partnership and innovation model provides a compelling blueprint for nationwide scale-up of solar-powered, climate-resilient agriculture, with a focus on affordability, inclusivity, and sustainability.

RESEARCH AND DATA MANAGEMENT

PANEL DISCUSSION:

LESSONS AND OPPORTUNITIES FOR BIODIGESTER MARKET DEVELOPMENT: A TALE FROM AFRICAN BIOGAS COMPONENT PROJECT

Speakers:

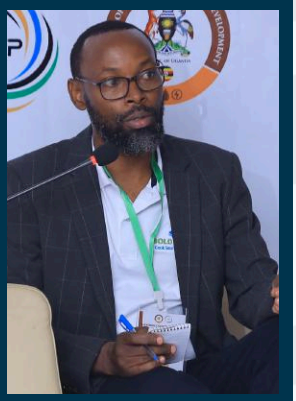
- **Ms. Esther Nyanzi,** Project Manager, ABC, SNV
- **Mr. African Muhangi**, Administration Manager, Care International
- **Ms. Susan Atyang**, Intervention Manager, aBi Development
- **Mr. Rodgers Atwiine**, MD, Bold Biogas
- **Mr. Michel Muvule Pinto**, Programme Coordinator, BSUL
- **Mr. Egide Ntakirutimana**, Energy Advisor, WFP

PANEL DISCUSSION:

Ms. Esther Nyanzi

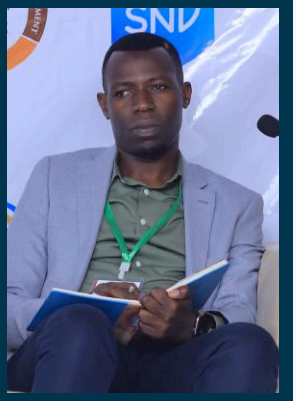
Mr. African Muhangi

Ms. Susan Atyang



Mr. Rodgers Atwiine

Mr. Michel Muvule Pinto



Mr. Egide Ntakirutimana

The session opened by emphasizing the importance of context-specific innovations, community involvement, and continuous learning. The moderator set the tone for capturing practical lessons and aligning interventions with the realities of refugee-hosting districts.

Presented a case study from a refugee settlement where initial solar cooking efforts failed but biodigesters proved viable as a community-supported alternative. After piloting two digesters, strong local interest led to an expansion to 43 units, with households contributing a portion of the cost and managing the systems through an association using digital savings and share tracking.

The model evolved into a revolving loan scheme for further scale-up and income generation, with bio-theory byproducts used for both construction and livelihoods. Gender dynamics were highlighted, with women responsible for cooking and men for bio-theory production, and the importance of pairing clean cooking with food security was underscored.

From a technical perspective, noted Uganda's installation of over 12,000 biodigesters and the need for community-centered approaches, diverse technology options, and high construction quality. Emphasized collaboration between private-sector actors and communities to strengthen supply chains, maintain installations, and ensure long-term benefits.

Discussed integrating biodigesters into school feeding programmes, supporting hundreds of schools in regions like Karamoja. Stressed the importance of aligning solutions with local needs, addressing adoption barriers, building technical capacity, and leveraging schools and cooperatives as hubs for vocational and economic development.

Provided a financing perspective, describing co-financing models where beneficiaries cover a substantial part of the cost and organizations provide grants. Highlighted the substantial energy savings, capacity building for users and technicians, work with financial institutions to design green finance products, and the importance of digital payment models and gender-responsive design. Stressed co-creation with communities as essential for scale.

Explored implementation best practices, such as using local materials, community labor, and iterative design improvements through consultative workshops. Highlighted productive energy use cases like solar drying, milling, and milk cooling, and the critical role of training and systems tailored to the unique environment of refugee settlements.

Addressed broader scaling challenges, such as low awareness, mistrust, cost barriers, supply chain constraints, and the need for demonstration digesters to build confidence. Noted ongoing efforts to promote local production, improve technician skills, ensure quality assurance, and link small enterprises to carbon markets.

Concluded with lessons from school-based biodigester pilots, where successful installations depended on stable feedstock availability and strong local partnerships. Identified challenges like weak ownership and maintenance lapses during school holidays, and highlighted the need for new partnership and ownership models to ensure sustainability throughout the academic year.

SUNSCALE CLEAN ENERGY FOR STRONGER COMMUNITIES AND BETTER LIVES IN NORTHERN UGANDA

Speakers:

- **Eng. Elizabeth Kaijuka Okwenje,** Ag. Assistant Commissioner for Physical Renewable Energy, MEMD
- **Ms. Ella Kobusingye Tirwomwe**, Regional Energy & Market Advisor, Ayuda en Acción Uganda
- **Mr. Francis Mwesigye**, Chief Economist & Director, Economic Research & Knowledge Management, UDB
- **Ms. Agnes Naluwagga**, Regional Testing and Knowledge Center Coordinator, CREEC
- **Mr. Ivan Taremwa Bwengye**, Energy Advisor, EnDev
- **Mr. Canary Williams Bogere**, Commercial Manager, Tulima Solar

PANEL DISCUSSION:

Eng. Elizabeth Kaijuka Okwenje

Ms. Ella Kobusingye Tirwomwe

Mr. Francis Mwesigye

Ms. Agnes Naluwagga

Mr. Ivan Taremwa Bwengye

Mr. Canary Williams Bogere

Opened with an introduction to Ayuda En Acción's mission and strategic pillars: Education, Employment and Entrepreneurship, Protection and Rights, Green Economy and Climate Adaptation, and Humanitarian Action. Fostered an interactive environment by encouraging participants to share questions and reflections from field experiences, setting the stage for a discussion on the SunScale project's impact on inclusive, sustainable energy access in Uganda.

Presented an overview of the SunScale Project, launched in 2022 to increase renewable energy access for refugee and host communities through partnerships with development agencies and the private sector. Emphasized the use of a Market Systems Development approach, which facilitates private sector participation in underserved areas rather than direct product distribution.

Described interventions piloted in several districts, including solar water pumps for smallholder farmers and clean cooking technologies for households and institutions. Highlighted benefits such as improved cost efficiency, environmental protection, gender integration, and strengthened local market systems.

Shared results from a comprehensive evaluation of the two-year pilot, noting that a significant majority of cooperatives adopting SunScale-supported technologies reported improved renewable energy access, increased agricultural productivity, and higher income due to solar irrigation. Clean cooking adopters experienced major household benefits, including workload reductions and substantial economic empowerment for women. Local energy agents and product outlets were established to build resilient last-mile markets.

Discussed ongoing challenges, particularly weak financial linkages and gender barriers. Communities expressed mistrust toward banks, and financial institutions were reluctant to lend to refugees. Gender norms limited women's decision-making power in some areas. Recommended establishing a robust monitoring and evaluation system to track market gaps and implementing targeted gender interventions to enhance women's participation in energy enterprises.

Commended SunScale's effectiveness in reaching end users and linked its work to the development of a national Productive Use of Energy Strategy. Outlined financial instruments for de-risking investments, such as guarantee funds and partnerships with fintechs to digitize credit scoring for VSLAs. Highlighted the importance of long-term, evidence-based engagement for scaling energy access, with a focus on capacity building and waste management. Emphasized the need for customer engagement, strong infrastructure, and market facilitation to scale solar solutions in refugee settlements.

Concluded that coordinated market facilitation, targeted financial support, capacity building, and gender inclusion are vital for the sustainability and scale-up of renewable energy solutions in humanitarian and remote settings.

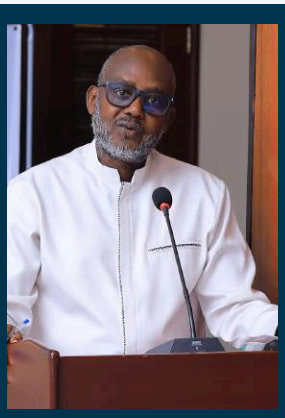
SESSION REMARKS:

SUSTAINED PROJECT (SUPPORTING STRONGER ACCESS TO INNOVATIVE ENERGY SOLUTIONS IN DISPLACEMENT SETTINGS)

Speakers:

- **Mr. David Gatare,** Country Director, Mercy Corps
- **Dr. Brian E. Isabirye**, Commissioner, ERD, MEMD
- **Mr. Peter Otala,** Manager, SUTAINED Project, Mercy Corps
- **Ms. Anne Borren**, Second Secretary- Migration, Youth, Climate and External Communication, Embassy of the Kingdom of Netherlands to Uganda

SESSION REMARKS



Mr. David Gatare

Dr. Brian E. Isabirye

Mr. Peter Otala

Ms. Anne Borren

The session opened with remarks by Mr. Gatare who highlighted that the launch of SUSTAINED Phase II marked an exciting new chapter, building on the lessons and results from Phase I, which tackled systemic barriers in demand, supply, and the enabling environment for clean energy access. Reported that Phase II would deepen these market systems approaches, with a focus on strong community engagement, strategic partnerships, and policy advocacy to drive sustainability and scale. Stressed the urgency of addressing low clean cooking access, noting that only 15% of Ugandans used clean solutions and over 90% of refugees remained dependent on firewood. Appreciated the strong collaboration between MEMD, NREP, the Netherlands Embassy, and private sector partners that made the programme possible.

Dr. Isabirye congratulated the consortium for aligning SUSTAINED with national renewable energy policies and coordination frameworks. Noted that Phase II supports national objectives of energy security, equity, gender inclusion, and reducing environmental pressures from biomass use. Commended Phase I for demonstrating tangible impact in adoption of clean cooking, productive use of energy, and livelihood improvements in settlements.

Ms. Borren reaffirmed commitment from development partners to support Uganda's clean energy transition. Recognized that previous funding challenges had shortened Phase I but positioned Phase II as an opportunity to consolidate gains and scale innovations. Introduced new financing facilities to connect humanitarian needs with market-driven solutions, emphasizing that "the SUSTAINED project is an opportunity to ensure sustainability through a more inclusive MSD approach to access to renewable energy."

Mr. Otala summarized the achievements of Phase I, including increased renewable energy knowledge, expanded productive use adoption, improved financial literacy, and the avoidance of 20,000 tons of CO_2 emissions. Highlighted lessons learned such as the importance of e-waste management, culturally tailored engagement, differentiated training, male champions for clean cooking, affordable finance mechanisms like PAYGo, product demonstrations, quality assurance, and multi-sector coordination.

Outlined that Phase II will expand geographically and deepen its market systems approach with increased funding. Priorities include stronger PAYGo financing, better financial linkages, climate finance, integration of WASH and energy, climate-smart agriculture, gender inclusion, and more private sector engagement. Stressed the importance of partnering with refugee-led organizations and developing local markets in priority areas.

Concluded with a call to scale up solutions that work, affirming that SUSTAINED Phase II seeks to make clean energy access more affordable, sustainable, and transformative for refugees and host communities, ensuring that no one is left behind in Uganda's energy transition.

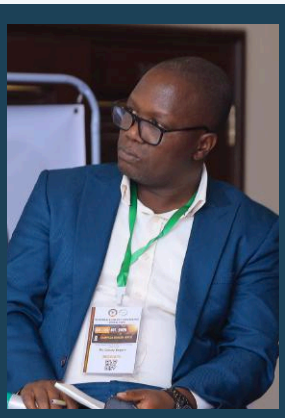
SUSTAINED PROJECT (SUPPORTING STRONGER ACCESS TO INNOVATIVE ENERGY SOLUTIONS IN DISPLACEMENT SETTINGS)

Speakers:

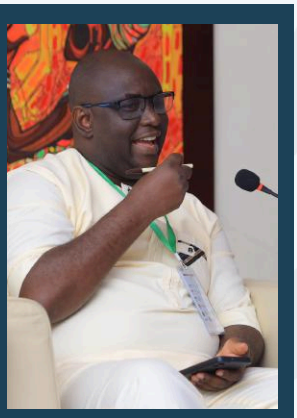
- **Mr. Canary Williams Bogere,** Commercial Manager, Tulima Solar
- **Mr. Allan David Arinteireho**, Product Manager, VisionFund
- **Mr. Siraji Maraga**, Energy & Extractive Industries Coordinator, Oxfam
- **Ms. Dina Nabawesi**, Initiative Manager, Climate Justice, CARE International
- **Mr. Ronald Kaweesa**, Business Manager, ECOCA East Africa
- **Mr. Taban Rashid**, Project Manager, CECI

PANEL DISCUSSION:

Ms. Purity Kendi

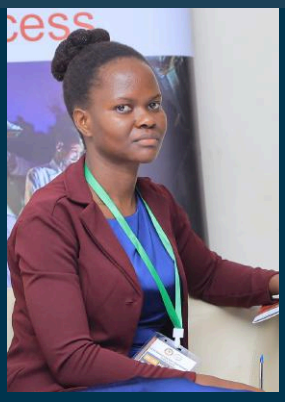


Mr. Canary Williams Bogere



Mr. Siraji Maraga

Mr. Allan David Arinteireho



Ms. Dina Nabawesi

Mr. Ronald Kaweesa

Mr. Taban Rashid

Moderated by Ms. Purity Kendi, the session discussed the transition from Phase I to Phase II and the partnership models that enabled progress in energy market development in refugee-hosting communities. Presented the trinity partnership model from Phase I, which combined international NGOs for strategic direction and policy alignment, private sector actors to deliver efficiency and affordability through mechanisms such as solar pump price subsidies, and refugee-led organizations to drive last-mile delivery and community engagement. Credited this collaborative approach with fostering strong demand and high adoption of clean energy solutions across settlements.

Highlighted demand-creation strategies including male engagement groups, multimedia messaging through radio and drama, community events, and culturally tailored dialogues with religious and community leaders. Explained how demonstrations allowed households to see products in use, which helped shift perceptions around clean cooking and productive-use technologies. Acknowledged persistent gender barriers, cultural norms, and affordability constraints, but noted the market potential and growing private sector interest as promising developments. Emphasized partnerships with local structures as key to responding effectively to activated demand.

Explored market opportunities and incentives for productive use of energy (PUE) in refugee districts. Described how PUE solutions create quick economic benefits through commissions, income generation, and environmental gains appreciated by local authorities.

Provided practical examples of how subsidies, after-sales support, loan partnerships, and integration with agricultural extension services removed affordability and accessibility barriers, enabling companies to exceed targets. Identified high upfront import costs, expensive credit, taxes, and market uncertainty as challenges, but articulated the positive impact of subsidies in accelerating adoption and recommended supply-side tax relief to stimulate growth.

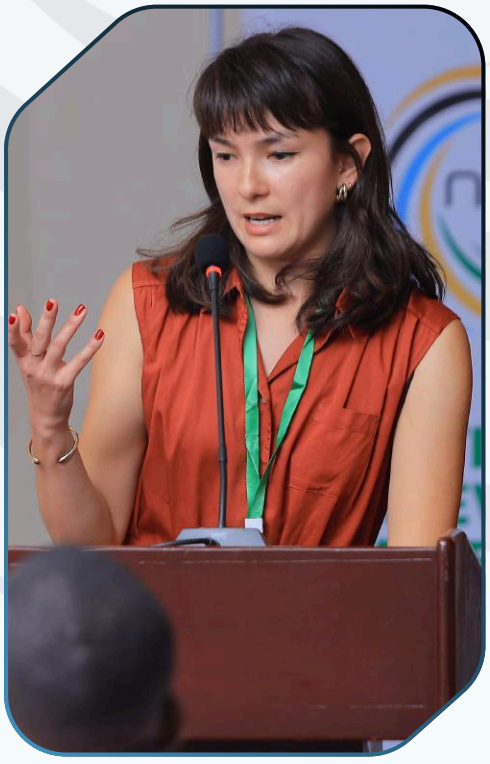
Addressed financial solutions tailored for refugee markets, including flexible group-based lending models and integrating product delivery with loan disbursement. Recognized the importance of financial literacy and client support for responsible use and repayment.

Concluded that successful PUE adoption in refugee-hosting districts depends on well-designed subsidies, strong local partnerships, demand- and supply-side incentives, flexible financing, and culturally informed behavioral change strategies, providing a clear roadmap for scaling interventions in SUSTAINED Phase II.

HUMENERGI FINANCING FACILITY LAUNCH

Mr. Steven Hunt, Senior Energy Innovation Advisor, FCDO

Highlighted the UK government's commitment to enabling partnerships between governments, humanitarian agencies, and private investors. Presented the Human Energy Fund, co-financed by the UK, Netherlands, and LightRock, as a pilot mechanism designed to address working capital constraints and payment delays faced by private enterprises in refugee-hosting areas. Explained that the goal is to move beyond emergency support to build enduring systems for clean energy access.

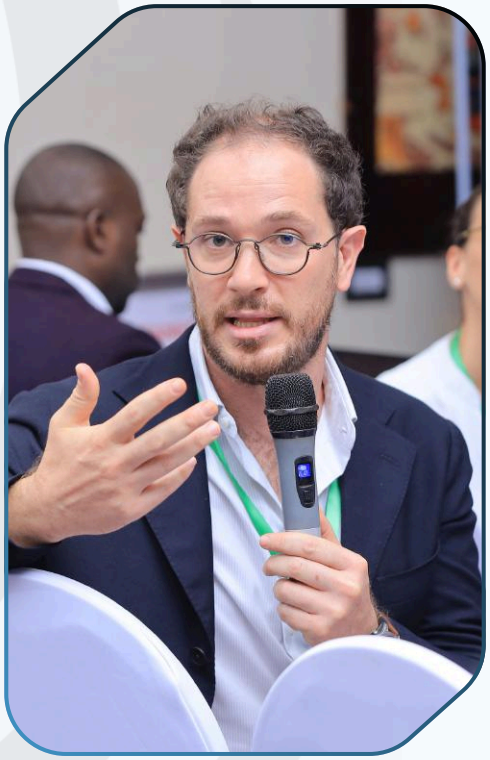


Ms. Megan Taeuber, THEA Program Manager, Mercy Corps

Described the THEA program, which operates in Uganda, Ethiopia, and Bangladesh, focusing on research, policy, piloting, and scaling market-driven energy solutions. Explained that THEA supports refugee-led organizations and local enterprises through micro-grants and capacity-building initiatives, aiming to shift from purely grant-based to private-sector inclusive models. Presented findings from market research in Bidibidi refugee settlement, revealing that 89% of households rely on firewood, lighting access remains low, and refugees spend more on inferior products than host communities. Identified barriers such as low affordability, high logistical costs, and restricted access for private companies as key challenges to market growth.

Mr. Paul Quigley, presented research showing that enterprises face challenges such as limited consumer awareness, affordability constraints, high logistics costs, and difficulties accessing credit, with over 80% reporting lack of collateral and high interest rates. Emphasized that addressing these systemic gaps requires a combination of finance, technical support, and supportive policy frameworks.

Mr. Michael Andrea Ranzanici, Consultant, Humenergie Facility



Introduced the Humenergie blended finance model, designed to provide working capital, inventory finance, and pay-as-you-go solutions for off-grid energy enterprises in displacement settings. Explained that the facility offers loans of USD 25,000 to 100,000, with 12–24-month tenures and concessional interest rates, alongside pre- and post-investment technical assistance to strengthen governance, operational efficiency, and investment readiness.

Noted that the first loans are planned for early 2026, with a pipeline of enterprises already identified. Stated that Humenergie is intended to complement existing actors such as UECCC, BRAC Uganda, and Refugee Investment Facilities.

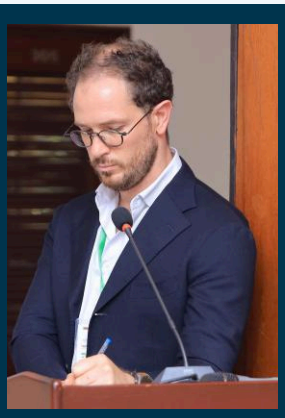
PANEL DISCUSSION:

#1: INNOVATIVE FINANCE FOR CLEAN ENERGY IN DISPLACEMENT SETTINGS

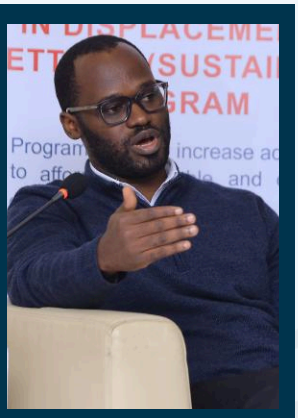
Speakers:

- **Mr. Michael Andrea Ranzanici,** Consultant, Humenergie Facility
- **Mr. Perez Magoola**, Project Leader, Open Capital
- **Mr. Ben Butele**, Refugee Programme Coordinator, UECCC
- **Ms. Ruth Komuntale**, MD, ECOCA East Africa
- **Ms. Joyce Nkuyahaga**, Energy Specialist, World Bank (ESMAP)

PANEL DISCUSSION:

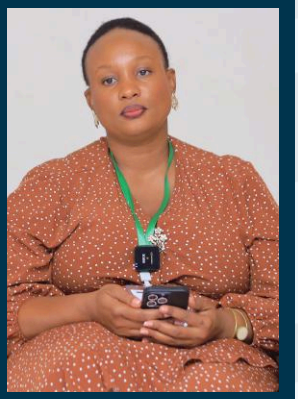


Mr. Michael Andrea Ranzanici

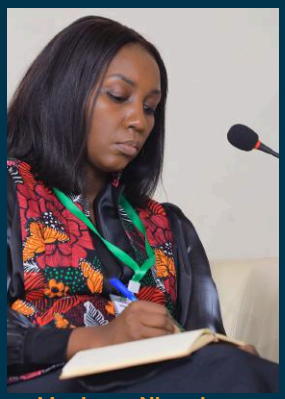


Mr. Perez Magoola

Mr. Ben Butele



Ms. Ruth Komuntale



Ms. Joyce Nkuyahaga

The panel focused on innovative financial and technical approaches to expanding clean energy access in Uganda's refugee-hosting and hard-to-reach areas. Panelists highlighted Uganda's progressive refugee-inclusive energy policies, noting that refugee settlements are integrated into national electrification plans, and shared that the World Bank's Electricity Access Scale-up Project (EASP) combines results-based financing, targeted credit lines, and technical assistance to support private sector engagement in off-grid and solar solutions.

Disclosed that since the program's inception, electricity access in refugee-hosting districts has increased from 25% to 27%, narrowing the gap with the national average. Shared remaining key barriers, including risk perception, small loan sizes, limited commercial incentives, and financing gaps for SMEs, while opportunities include refugees' creditworthiness, long-term residence in settlements, and donor-backed blended finance mechanisms.

Panelists introduced a blended finance facility designed to address these challenges, offering short-term loans to support working capital, inventory, and logistics for off-grid energy companies, with flexibility on collateral requirements. Shared that repayment is linked to performance through results-based financing mechanisms, reducing default risk.

The discussion highlighted that financing must reflect market realities, particularly the longer repayment capacities of refugee households. High import duties on renewable energy components, such as electric cookers, were identified as a barrier to affordability, leading to calls for policy reforms and the use of locally tracked assets as collateral. Blended financing approaches, subsidies, and pay-as-you-go models were noted as critical for improving energy access in these settings.

PANEL DISCUSSION:

#2: FINANCIAL AND TECHNICAL ASSISTANCE FOR LAST MILE DISTRIBUTORS

Speakers:

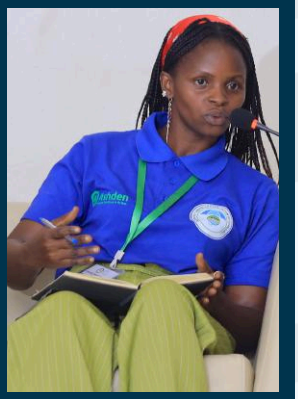
- **Ms. Megan Taeuber,** THEA Program Manager, Mercy Corps
- **Mr. Ambrose Mbuvi,** Business Advisor, Global Distributors Collective
- **Mr. Anthony Okello**, Project Coordinator, Asheden
- **Ms. Sandra Suuti**, Technical Advisor, Bioenergy Umbrella Association of Kyangwali
- **Mr. Vincent Sseremba**, CEO, Tulima Solar

PANEL DISCUSSION:

Ms. Megan Taeuber

Mr. Ambrose Mbuvi

Mr. Anthony Okello



Ms. Sandra Suuti

Mr. Vincent Sseremba

The panel focused on the role of last-mile distributors and local enterprises in expanding clean energy access. Discussed how low incomes among refugees and limited access to finance constrain market penetration, and described interventions such as enterprise health checks, catalytic grants, mentorship, and capacity-building provided by support organizations. Shared experiences from solar irrigation and agro-processing projects, emphasizing the importance of partnerships with finance providers and NGOs, as well as financial literacy training for customers to ensure long-term adoption and sustainability.

Showcased refugee-led organizations as critical actors in clean energy delivery, highlighting how microgrants, technical assistance, and flexible financing models can help scale operations. Described community-driven solutions including household biogas systems and waste-to-value initiatives supported through in-kind loan models. Underscored the transformative potential of trust, opportunity, and partnership, demonstrating that refugees can be problem-solvers who drive local solutions.

Concluded that sustainable energy access in refugee and host communities requires a combination of flexible, blended financing, technical assistance, and capacity-building. Stressed that partnerships between government, private sector, NGOs, and refugee-led organizations, along with policy reforms to reduce barriers such as import duties, are essential for unlocking transformative clean energy solutions.

PANEL DISCUSSION:

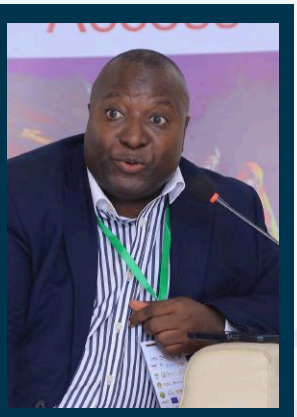
SUSTAINABILITY ENERGIZING REFUGEE AND HOST COMMUNITIES AMIDST FUNDING CUTS

Speakers:

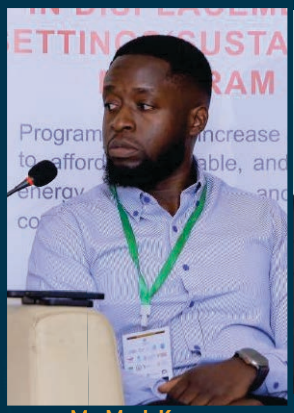
- **Ms. Purity Kendi,** Energy Access Technical Advisor, Mercy Corps
- **Dr. Emmy Wasirwa**, Managing Director, Wana Energy Solutions
- **Mr. Mark Kyaze**, Project Manager, ACE
- **Ms. Justine Akumu**, Senior Clean Cooking Officer, MEMD
- **Mr. Simon Marot**, Executive Director, AYAN
- **Mr. Egide Ntakirutimana**, Energy Advisor, WFP

PANEL DISCUSSION:

Ms. Purity Kendi



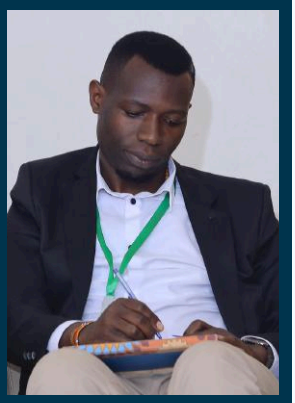
Dr. Emmy Wasirwa



Mr. Mark Kyaze

Ms. Justine Akumu

Mr. Simon Marot



Mr. Egide Ntakirutimana

This session explored innovative strategies for sustainably expanding clean energy access in refugee-hosting and surrounding communities amidst funding constraints. Provided a global perspective on the SOLCO (Solar Cooking Consortium) initiative, describing it as a multi-stakeholder platform aiming to transition households from biomass to solar electric cooking, targeting 250,000 households across East Africa by 2027, with 150,000 in Uganda. Emphasized SOLCO's collaborative approach, engaging UN agencies, government entities, refugee-led organizations, NGOs, and private sector partners to drive systemic, inclusive, and scalable solutions.

Presented the Ugandan context, highlighting SOLCO's inception in 2023 and launch in 2024. Explained the platform's market systems development approach, supporting partners in mobilizing resources from global climate finance, private capital, and local financing mechanisms. Emphasized local leadership, with refugee-led organizations activating demand, local businesses supplying technologies, and NGOs facilitating coordination.

Described the establishment of governance structures, stakeholder mapping, and digital platforms to consolidate data from previous clean cooking projects. Cited key projects, such as the Sustain Project in Yumbe and ICARE-supported interventions in Kiryandongo, as demonstrations of impact, including full household transitions to solar cooking and community-based assembly and repair centers.

Noted that, from a policy perspective, SOLCO aligns with Uganda's National Clean Cooking Strategy and Energy Transition Plan, integrating innovative delivery models and enabling private-sector participation. Highlighted technology-driven, customer-centered approaches, including multifunctional solar devices and digital tools that track usage, payments, and energy savings to address affordability and improve user experience.

Shared lessons from energy companies on the importance of market research, feasibility studies, and flexible "Energy-as-a-Service" models to match community capacities and income realities.

Emphasized the centrality of community engagement and local participation, illustrating this with user-led cooking demonstrations, mobile "Energy Junctions," and radio outreach, which foster trust, awareness, and adoption of solar cooking technologies. Underscored refugees' agency as active co-creators rather than passive recipients, showing that community-led demonstrations effectively stimulate demand and behavioral change.

Addressed financing and sustainability, highlighting blended and concessional financing mechanisms to reduce investment risks and improve affordability, including pay-as-you-go schemes, long-term installment plans, and carbon finance opportunities. Emphasized that energy access in humanitarian contexts is also a protection issue, particularly for women and girls. Stressed the importance of collaborative efforts among governments, private sector innovators, and humanitarian actors to scale solutions, ensure sustainable maintenance, and consolidate smaller projects into unified platforms eligible for carbon credits.

Concluded that sustainable clean energy access in refugee-hosting communities requires integrated approaches combining policy alignment, innovative technologies, flexible financing, and community engagement. Stressed that success depends on collaboration across multi-stakeholder platforms, empowerment of refugee-led organizations, leveraging digital tools, and addressing affordability challenges, ultimately ensuring inclusive, scalable, and dignified energy solutions.

PANEL DISCUSSION:

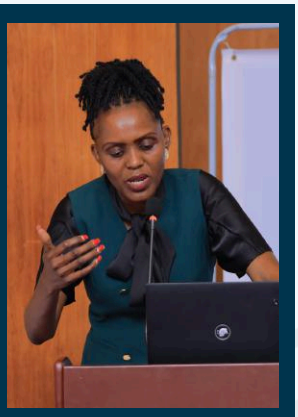
POTENTIAL OF RE-GENERATIVE AGRICULTURE AND PRODUCTIVE USE OF RENEWABLE ENERGY (RA-PURE) NEXUS

Speakers:

- **Ms. Peninnah Mbabazi,** Climate Justice Programme Associate, Centre for Economic and Social Rights
- **Dr. Mary Susan Abbo**, MD, CREEC
- **Eng. Esther Fiona Atek**, Energy Officer, ERD, MEMD
- **Ms. Virginia Ssemakula**, Pillar Head Energy, Environment and Climate Change, Equity Bank
- **Mr. John Ssebufu**, Community Development Offcier, Kulika Uganda
- **Mr. Douglas Baguma**, Chairperson, USEA

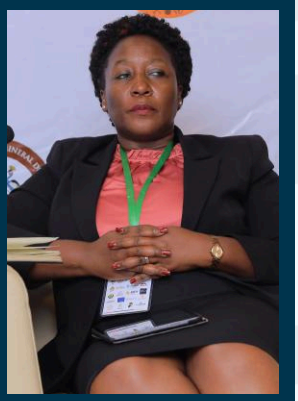
PANEL DISCUSSION:

Ms. Peninnah Mbabazi



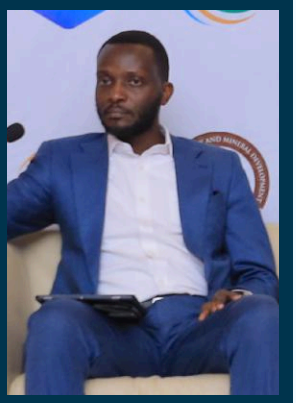
Dr. Mary Susan Abbo

Eng. Esther Fiona Atek



Ms. Virginia Ssemakula

Mr. John Ssebufu



Mr. Douglas Baguma

Emphasized efforts to harmonize knowledge across stakeholders through stronger coordination, improved information sharing, and the mapping of high-impact opportunities within the Productive Use of Renewable Energy (PURE) space. Highlighted the need to develop bankable PURE projects that attract investment and drive growth across value chains.

Called for a robust knowledge management tool to systematically rank opportunities, document best practices, and guide strategic decision-making in the sector. Pointed to the Power for Food Partnership as a successful example, improving livelihoods and food security through energy-enabled agricultural solutions, and identified catalyzing partnerships, strengthening capacities, and driving transformative change as priorities for sustained impact.

Referenced Uganda's Vision 2040 and the Energy Policy 2023, both of which recognize energy as a fundamental driver of economic transformation, particularly in modernizing agriculture through irrigation, mechanization, and value addition.

Stated that mini-grids are a key pathway for expanding clean energy access, stimulating rural economic development, and supporting enterprise growth. Shared the ministry is developing a Productive Use of Energy (PUE) strategy to guide implementation, strengthen market systems, and ensure that energy access delivers tangible socio-economic benefits.

Emphasized the importance of partnerships to mobilize investment, enhance technical capacity, and foster innovation, as well as the value of demonstration hubs for showcasing viable technologies, supporting skills development, and promoting evidence-based scaling.

Explained that USEA now represents more than 300 solar companies and is focused on shifting public perception of solar energy beyond lighting to powering irrigation, agro-processing, commercial machinery, and industrial operations. Highlighted consumer-friendly business models such as Pay-As-You-Go (PAYGO), co-ownership, and lease-to-own arrangements, which lower upfront costs and expand access to PURE technologies. He pointed out USEA's ongoing work on solar product standardization to eliminate substandard products and restore consumer confidence. Stressed the need for financial institutions to better understand solar business models to create suitable financing instruments and to see solar enterprises as viable and bankable.

Described how PELUM's network supports smallholder farmers by providing training in Regenerative Agriculture and PURE, enabling them to maximize local resources and materials. Emphasized that these interventions increase productivity, improve access to finance, and facilitate market linkages, allowing farmers to capture greater value and sustain their livelihoods. PELUM also works closely with duty bearers and local institutions to align with national policies and support the transfer of appropriate technologies to farmers.

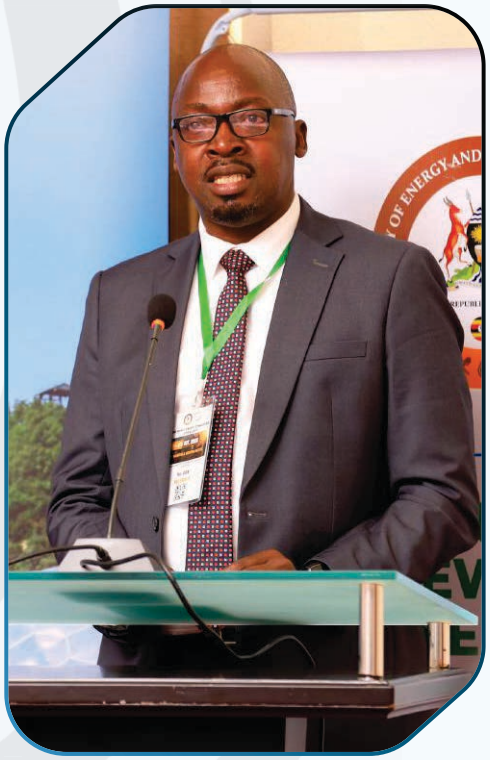
The session identified persistent barriers, including limited awareness and knowledge gaps among farmers and practitioners, high upfront technology costs and limited financing options, weak policy and regulatory support, and poor market linkages and infrastructure. Panelists highlighted best practices such as the use of demonstration sites and champions, market linkages and value chain support, and capacity building and training as effective strategies for scaling RA-PURE interventions.

Opportunities and next steps outlined by the session included advancing digital innovation and data-driven solutions for agriculture, strengthening knowledge and capacity across sectors, and enhancing climate-resilient agriculture. Panelists called for continued cross-sector collaboration, increased investment in demonstration and knowledge sharing, and expanded support for smallholder farmers to fully realize the transformative potential of the RA-PURE nexus in Uganda.

ENERGY ACCESS AND MANAGEMENT

AFFIRMING UK-UGANDAN COLLABORATIONS IN ENERGY ACCESS

Dr. Brian E. Isabirye, Commissioner, ERD, MEMD



Emphasized the critical role of integrating innovation, regulation, and market value to drive transformative energy solutions in line with the conference theme. Highlighted that emerging developments, including clean cooking and e-mobility, are not only enhancing livelihoods but also contributing significantly to environmental conservation and long-term sustainability.

Noted that Uganda's energy transition is designed to be inclusive, ensuring that no one is left behind, particularly in the shift toward clean cooking solutions. Further expressed appreciation to development partners, including MECS and other stakeholders, for their sustained commitment and support in advancing Uganda's clean energy agenda.

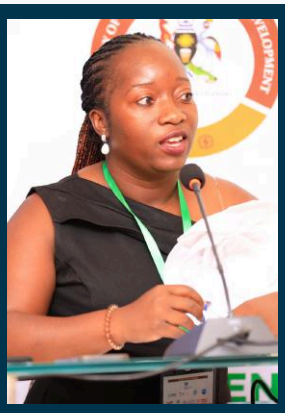
SESSION REMARKS:

AFFIRMING UK-UGANDAN COLLABORATIONS IN ENERGY ACCESS

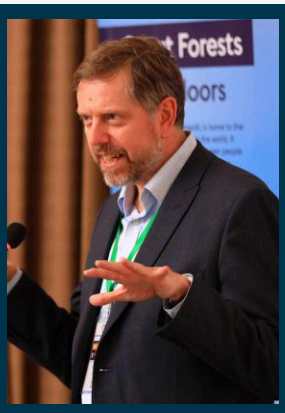
Speakers:

- **Ms. Tina Wamala,** Communications Officer, British High Commission
- **Mr. Steven Hunt**, Senior Energy Innovation Advisor, FCDO
- **Mr. Brendan Cronin**, CEO, Soleil Power
- **Eng. Ian John Kavuma**, Managing Director E-Bus Xpress, Kiira Motors Corporation
- **Mr. Raymond Lumansi**, Technical Lead, Mandulis Energy
- **Ms. Zoe Slattery**, Engineering Project Manager, Smart Villages
- **Mr. Louis Arinaitwe**, Country Director, Department of Business and Trade, British High Commission
- **Mr. Eric Olanya**, Country Director, Gridworks
- **Ms. Catherine Nakato**, Founder and Managing Director, KAB CONSULT LTD

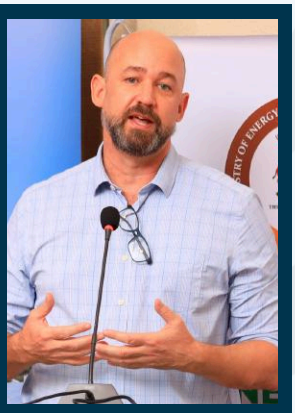
PANEL DISCUSSION:



Ms. Tina Wamala



Mr. Steven Hunt



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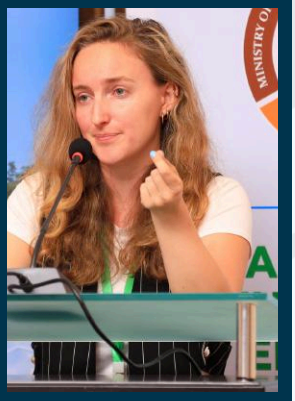
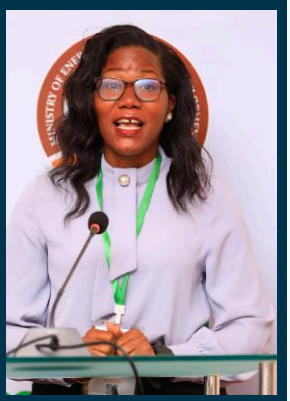


Ms. Zoe Slattery

Mr. Louis Arinaitwe

Mr. Eric Olanya



Ms. Catherine Nakato

Revealed substantial progress under the Transforming Energy Access (TEA) Programme, as private sector actors, government institutions, and the UK High Commission coordinated efforts, particularly in clean cooking and e-mobility. Underscored the importance of partnerships in enhancing livelihoods and promoting environmental conservation. Convened the event through NREP in collaboration with UK Aid.

Highlighted priority thematic areas, which included clean cooking, productive use of energy, energy efficiency, climate finance, and inclusivity. Provided long-term financing of up to 22 years for clean energy projects and facilitated collaborations between Uganda and the UK through guarantees and loans, as reported by UK Export Finance (UKEF). Strengthened energy access by directing strategic investments in transmission, distribution, and decentralized renewable energy systems, with British International Investment (BII) and Gridworks positioning Uganda as a key operational market.

Shared key statistics and case studies. Established over 687 solar irrigation scheme sites and increased farmers' incomes from USD 800 to USD 3,000 annually.

Demonstrated strong collaboration with Uganda across clean cooking, e-mobility, and productive energy use under TEA support. Integrated solar systems, productive-use equipment, and training for rural transformation through Community Smart Agri-Centres.

Addressed several major challenges. Identified market limitations as a barrier, with companies struggling to scale operations without improved market conditions and institutional support, which constrained the growth and broader impact of innovative energy solutions. Noted heavy reliance on traditional biomass, especially charcoal, for cooking. Reported that women represented approximately 75 percent of participants in the charcoal value chain. Explained that this reliance contributed to deforestation, affected livelihoods, and posed environmental and health challenges. Highlighted limited access to modern energy technologies in rural areas as a critical challenge, which hindered agricultural productivity, affected sanitation, and slowed socioeconomic development in underserved communities.

Received attention for gender-based risks, as imbalances in empowerment within communities increased the risk of gender-based violence and limited equitable participation in clean energy initiatives. Identified the difficulty in scaling innovations without robust impact data and sustained investment, with many promising solutions struggling to expand due to a lack of evidence and long-term financing. Noted that bottlenecks in electricity transmission and distribution limited the expansion of energy-dependent services and enterprises, despite Uganda having excess generation capacity.

Highlighted best practices and innovations. Recognized the TEA Learning Partnership for supporting over 60 universities to strengthen academic programs in energy access and the Energy Access Talent Initiative for training more than 3,000 young Africans, including gender-focused cohorts. Showcased solar-powered irrigation as a key innovation, enabling additional growing seasons, increasing agricultural yields, and reducing reliance on diesel pumps. Highlighted biochar production for its role in enhancing soil fertility and supporting regenerative agriculture. Showcased technological innovations such as IoT-enabled EPC monitoring for real-time data on energy savings and emission reductions, and Smart Agri-Centres combining solar energy, productive-use equipment, and training for rural transformation.

Outlined opportunities and next steps. Identified potential to scale innovations by expanding successful pilot projects and strengthening local collaboration, particularly with the Ugandan government and market players. Pointed to opportunities in leveraging UK Export Finance's Standard Buyer Loan Guarantee of up to £30 million and expanding infrastructure initiatives like Gridworks' AMARI project. Suggested piloting organic waste-to-energy projects, such as anaerobic digestion, and aligning efforts with multilateral initiatives like the Energy Sector Investment Plan (ESIP) for results-based financing and accelerated scaling of innovations.

10 YEARS OF IMPACT: LEVERAGING ENERGY EFFICIENCY FOR UGANDA'S SUSTAINABLE ENERGY DEVELOPMENT

Dr. Brian E. Isabirye, Commissioner, ERD, MEMD

Underscored that all countries grapple with the global energy trilemma, anchored on energy security, energy equitability, and energy sustainability. Emphasized that energy efficiency and conservation sit at the core of this trilemma and must be clearly understood and embraced by all sector stakeholders. Stressed the importance of behavioural and mindset change across all sectors as a prerequisite for achieving meaningful and lasting energy efficiency gains.

Clarified the strategic role of associations, noting that they should prioritize collective action, aggregation, and subsidiarity rather than positioning themselves as project implementers. Called for servant leadership, a long-term vision, and continued relevance to government, particularly in shaping policy, supporting market development, and strengthening sector coordination.

Concluded the address by officiating the launch of key EEAU milestones, including the Council on Women in Energy & Environmental Leadership (CWEEL), the EEAU Student Chapters, and the EEAU website.

Mr. Jacob Etunganan, Senior Advisor Energy and Agriculture, SNV

Highlighted the central role of energy efficiency in advancing the Productive Use of Renewable Energy (PURE), describing it as a critical driver of cost savings and sustainable production. Noted that investments in PURE become significantly more profitable when supported by strong energy efficiency practices.

Emphasized that achieving efficiency begins with a mindset shift, stating that energy efficiency starts with both the "mind and the hand," and therefore requires deliberate awareness creation at all levels. Called for comprehensive capacity building across the value chain and stressed that energy efficiency should be viewed as a continuous journey toward establishing a national culture of responsible energy use.

Encouraged strengthened collaboration among stakeholders as a means of accelerating the adoption and scaling of energy-efficient technologies and practices

Dr. Nicholas Mukisa, Deputy National Coordinator, NREP

Emphasized the importance of gender inclusivity in the energy sector and commended EEAU for its deliberate efforts to promote women's leadership in energy efficiency initiatives. Encouraged participants to make informed choices when purchasing appliances and to adopt responsible energy use behaviors in their daily lives.

Reinforced the message that energy is a valuable resource that should not be wasted, particularly in a developing economy where efficiency gains can yield significant socio-economic benefits.

Reaffirmed NREP's commitment to collaborating with EEAU on strategic initiatives, including carbon credit programs, Productive Use of Renewable Energy (PURE), e-mobility, and clean cooking solutions.

PANEL DISCUSSION:

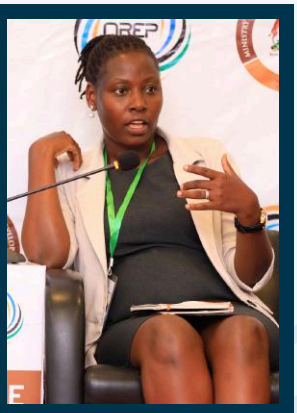
10 YEARS OF IMPACT: LEVERAGING ENERGY EFFICIENCY FOR UGANDA'S SUSTAINABLE ENERGY DEVELOPMENT

Speakers:

- **Eng. Isaac Ephraim Tumusiime**, President, EEAU
- **Ms. Susan Mbabazi**, Energy Officer, MEMD
- **Ms. Sumaya Mahomed**, Director of Utility Innovation, Power for All
- **Hon. (Prof.) Robinah K. Nanyunja**, President, Pilot International
- **Eng. David Birimumaso**, Principal Energy Officer, ERD, MEMD
- **Mr. Fred Tuhairwe**, Program Manager (PUE), UECCC

PANEL DISCUSSION:

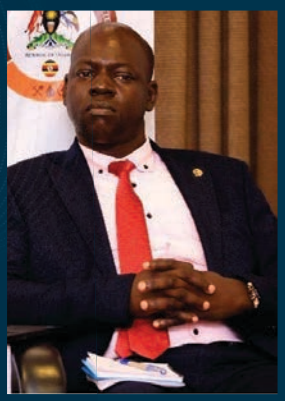
Eng. Isaac Ephraim Tumusiime



Ms. Susan Mbabazi

Ms. Sumaya Mahomed

Hon. (Prof.) Robinah K. Nanyunja



Eng. David Birimumaso

Mr. Fred Tuhairwe

The session celebrated the Uganda Association of Energy Efficiency (UEEA) reaching its 10-year milestone, highlighting the association's resilience and sustained momentum in Uganda's energy sector. Framed energy efficiency as central to the "energy triangle" of security, accessibility, affordability, and sustainability, emphasizing its role in promoting wise utilization, conservation, and equitable access, and supporting SDG 7 on energy access.

Emphasized the importance of diversifying the sector beyond engineering stereotypes by involving more women leaders and students, with student chapters fostering engagement and career guidance. Identified the East African region's untapped renewable resource potential, including hydro, solar, and wind, for green hydrogen production, which could advance energy access, value chains, and decarbonization.

Discussed the current policy landscape, noting that while most EAC countries have renewable energy policies, few have specific green hydrogen strategies, and all are aligning through NDCs for greenhouse gas reduction. Outlined value chain opportunities for green hydrogen in fertilizer, steel, transport, and industry, supporting reduced fossil fuel imports and food security.

Addressed key challenges including behavioral resistance to energy efficiency, prevalence of substandard products, lack of enforcement on minimum energy standards, sector stereotypes, policy gaps, high import costs, and funding constraints for associations. Highlighted UEEA's no-fee, networking-based model as a best practice for strengthening stakeholder collaboration and resource sharing.

Recommended strengthening aggregation and advocacy roles for associations, enforcing minimum energy performance standards, developing green hydrogen strategies, expanding collaboration on carbon credits and productive use, engaging student chapters in innovation, and promoting behavioral change campaigns.

Concluded that harnessing untapped renewables, localizing value chains, promoting regional policy harmonization, and empowering youth and women are essential next steps for Uganda's energy efficiency movement.

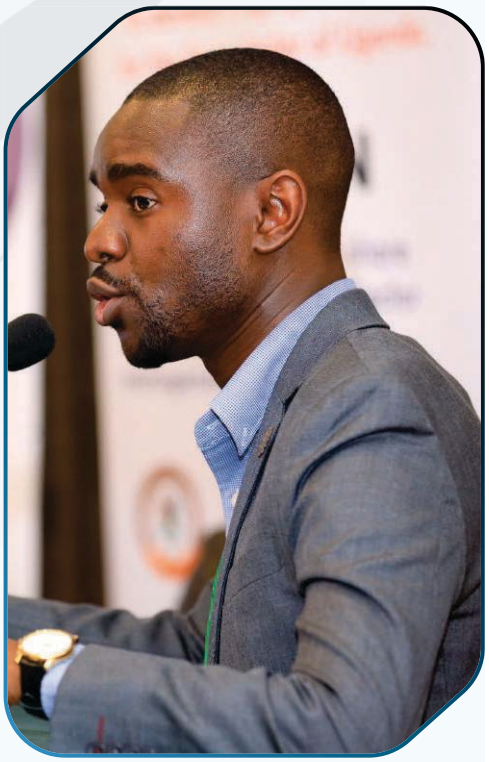
ENERGY FOR CLIMATE COMPATIBLE DEVELOPMENT: PUTTING PEOPLE AT THE CENTER

Mr. Nickson Kasolo, GIS Officer, Ministry of Energy and Mineral Development

Emphasized the Ministry's commitment to data-driven approaches for strengthening resilient renewable energy systems. Highlighted the importance of linking renewable energy deployment with job creation, economic opportunities, and local value chains, while stressing that infrastructure development must safeguard natural ecosystems.

Called on participants to actively contribute to building a sustainable, evidence-based energy future and underscored the critical role of strong partnerships in achieving both national and regional clean energy goals.

Mr. Anderson Ngowa, Finance Associate for Energy Access & Equitable Development, WRI Africa



Presented WRI's work across three interconnected pillars: people, nature, and climate. Emphasized that energy interventions must enable communities to thrive through livelihood-supporting systems while minimizing environmental impact. Highlighted global access gaps, noting that 745 million people lack electricity, 2.3 billion lack access to clean cooking, and 73% of global emissions come from energy consumption. Explained that USD 4.3 trillion is required globally to drive clean energy investments.

Outlined WRI's four core pillars for energy interventions: data through the Energy Access Explorer, policy support, finance via partnerships with governments and financial institutions, and Productive Use of Energy (PURE). Shared examples of successful WRI collaborations, including electrification initiatives in Ethiopia reaching 19 million people, PURE programs in Kenya, and the upcoming PURE Investment Prospectus for Uganda.

Mr. Frederic Famba, Energy Access Explorer Associate, WRI Africa

Highlighted the value of the Energy Access Explorer (EAE) in supporting planners, government bodies, operators, and researchers in identifying priority areas for energy interventions, including clean cooking. Shared platform insights, noting 35,000 users with 48% female participation, demonstrating strong gender inclusion.

Explained that EAE is being expanded to eight additional African countries and emphasized its role in fostering stakeholder integration, providing market intelligence for energy businesses, and enhancing productive use of energy across sectors.

ENERGY FOR CLIMATE COMPATIBLE DEVELOPMENT: PUTTING PEOPLE AT THE CENTER

Speakers:

- **Mr. Anderson Ngowa,** Finance Associate, Energy Access & Equitable Development, WRI Africa
- **Dr. Nicholas Mukisa**, Deputy National Coordinator, NREP
- **Ms. Edwina Ahamize**, GIS Specialist, Energy Sector GIS Working Group, MEMD
- **Mr. Desmond Tutu**, Senior M&E Officer, UECCC
- **Ms. Joyce Latigo**, Senior Environmental Officer, Gulu City

PANEL DISCUSSION:

Mr. Anderson Ngowa

Dr. Nicholas Mukisa

Ms. Edwina Ahamize

Mr. Desmond Tutu

Ms. Joyce Latigo

The session explained that Productive Use of Energy (PURE) involves utilizing energy directly for business activities such as milling, cooling, and agro-processing, emphasizing its essential role in enhancing livelihoods. Raised concerns about the prevalence of fake products on the market, which discourage consumer adoption, and highlighted ongoing challenges related to affordability and limited access to reliable data for financiers and planners.

Highlighted clean cooking as a key component of the Energy Access Scale-Up Project (EASP), targeting both households and institutions. Emphasized that GIS data plays a crucial role in mapping energy needs, particularly for grid and off-grid connectivity, and stressed the importance of placing people at the center of the energy transition by capturing community perspectives. Explained that GIS tools are critical for resource assessment, impact evaluation, adoption monitoring, and prioritizing transition pathways, and noted that integrating GIS data can significantly improve livelihoods and strengthen local economies.

Underlined the importance of standards in ensuring the quality of renewable energy solutions and provided an overview of EASP components, including grid intensification, off-grid solutions, and clean cooking initiatives. Explained financing models such as credit lines to financial institutions, Results-Based Financing (RBF), and practical examples like supporting farmers with milk cooling systems. Emphasized that data-driven systems enable real-time verification and reporting.

Highlighted how the decentralization of energy has strengthened local government capacity, enabling integration of energy planning across all development sectors. Shared success stories of solarized street lighting and adoption of clean cooking technologies through city-led initiatives.

Advocated for the establishment of clean cooking hubs to enhance appliance accessibility and emphasized the need for energy strategies that align with industrialization and multi-sector development. Identified key challenges, including mindset barriers, data gaps, and financing constraints.

The session concluded by recommending strengthened data systems, expanded credit lines and RBF mechanisms, better integration of energy in city planning, greater focus on product quality and standards, and increased collaboration among government, financial institutions, development partners, the private sector, and local governments to accelerate the adoption and impact of clean energy solutions.

SESSION REMARKS:

UNLOCKING THE POTENTIAL OF GREEN-HYDROGEN DEVELOPMENT IN THE EAST AFRICAN COMMUNITY

Speakers:

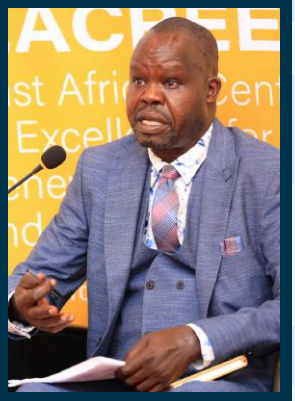
- **Mr. Collins Owuor**, Renewable Energy Expert, EACREEE
- **Ms. Sandra Banda**, Technical Advisor, GIZ
- **Eng. Noah Kyeyune**, Energy Officer, MEMD
- **Mr. John Ludungokol**, Assistant Commissioner Crop Production, MAAIF

PANEL DISCUSSION:

Mr. Collins Owuor

Ms. Sandra Banda

Eng. Noah Kyeyune



Mr. John Ludungokol

The session highlighted the significant potential of green hydrogen to drive decarbonization and reduce dependence on fossil fuels in the region. Noted that while most EAC countries have supportive energy policies, only Kenya has developed a dedicated hydrogen strategy. Emphasized hydrogen's role as a critical raw material for fertilizers and methanol, which could help reduce fertilizer import costs, and stressed the need for robust infrastructure and supportive policy frameworks to facilitate sector growth.

Reported that Kenya currently operates a functional green hydrogen plant producing approximately one ton per day and discussed hydrogen's applicability in sustainable aviation and maritime fuels. Pointed out that current demand remains low due to limited awareness and high production costs. Underscored that hydrogen production is capital-intensive and highlighted the importance of preparing Africa's industrial sector to manage future emissions sustainably. Advocated for regional production of green hydrogen-based fertilizers as a strategy to stabilize prices and mitigate global market volatility.

Emphasized the importance of water management, environmental compliance, occupational safety, and community protection in hydrogen production. Encouraged the expansion of markets for hydrogen-derived agricultural products to promote regional agricultural resilience.

Noted that Uganda plans to launch a national green hydrogen strategy next year. Highlighted the role of hydrogen in decarbonizing the transport and industrial sectors and noted Uganda's reliance on hydropower (89%) as a strong foundation for hydrogen-based fertilizer production at Karuma. Recommended harmonized regional standards and coordinated infrastructure development to support the growth of the green hydrogen sector across the EAC.

Identified challenges such as the lack of hydrogen-specific policy frameworks in most Partner States, high capital costs, limited current market demand, varying infrastructure capacity, and environmental and safety concerns.

Emphasized the need for dedicated hydrogen policies, regional cooperation, harmonized standards, investment in demonstration facilities, benchmarking against advanced hydrogen ecosystems, and prioritization of regional clusters based on resource availability.

Outlined key action points including Uganda's finalization and publication of its national green hydrogen strategy by 2026, development of harmonized regional standards by the EAC, establishment of capacity-building programs through universities and technical institutions, and the active engagement of the private sector and development partners for co-funding and accelerating hydrogen project implementation across the region.

ACCESS TO FINANCE

PANEL DISCUSSION:

ACCESS TO CAPITAL: OFF-GRID SECTOR BOOM UNDER ELECTRICITY ACCESS SCALE-UP PROJECT

Speakers:

- **Mr. Alfred Kizza,** Risk Manager, UECCC
- **Mr. Samuel Ocanya**, Project Manager, EASP, UECCC
- **Mr. James Kakeeto**, Manager Business Development and Renewable Energy, Stanbic Bank
- **Mr. Mustafa Mutebi**, Deputy General Manager, Kyadondo CBS PEWOSA SACCO
- **Ms. Anette Ssebuggwawo Nakigudde**, Head of Microfinance, Housing Finance Bank
- **Mr. Abdul Kyanika**, Manager Housing and Renewable Energy Business, Centenary Bank

PANEL DISCUSSION:

Mr. Alfred Kizza

Mr. Samuel Ocanya

Mr. James Kakeeto

Mr. Mustafa Mutebi

Ms. Anette Ssebuggwawo Nakigudde

Mr. Abdul Kyanika

This session highlighted the transformative role of the Pay-Go financing model, implemented through partnerships between UECCC and private financial institutions, in accelerating renewable energy uptake. Noted that targets under the Electricity Access Scale-Up Project (EASP), including 142,000 solar connections, 353,000 clean cooking appliances, and 9,000 productive use of energy (PUE) units were already being surpassed, largely due to strong engagement from financial institutions. Emphasized that by providing 50% capital support to these institutions, EASP has reduced costs for end-users and improved affordability. Stressed that off-grid solutions remain central to achieving Uganda's 2030 universal electricity access target, particularly in remote and grid-underserved areas.

Observed that renewable energy financing within commercial banks remains generalized, often failing to address technology-specific risks. Explained that banks are reviewing financing frameworks to develop more targeted renewable energy products that better meet sector needs.

Noted that rural electrification has been prioritized by some banks due to their extensive rural presence. Emphasized the importance of strong partnerships and capacity-building initiatives for effective renewable energy financing. Highlighted that advancements in technology, particularly lithium batteries and improved solar inverters, have enhanced product quality and reliability.

Reported that over UGX 5.4 billion in solar loans were disbursed between 2014 and 2024, supporting over 2,000 installations. Shared that banks are now focusing on PUE solutions and solar adoption across all branches, with product customization aligning with local economic activities such as agro-processing. Stressed the need for continuous community awareness campaigns to drive adoption.

Underscored the importance of community activation in driving renewable energy adoption. Noted that partnerships between financiers and energy service companies (ESCOs) have been critical in strengthening uptake, with solar and irrigation loan products seeing strong growth, particularly among upcountry farmers.
Explained that SACCOs are promoting financial inclusion and encouraging members to adopt renewable energy solutions. Shared that collaborations with UECCC in off-grid areas have enabled members to access subsidized renewable technologies, including solar-powered fridges, with subsidies playing a crucial role in supporting uptake among low-income households.

Identified key challenges including limited access to capital for small energy service companies and community-driven initiatives operating in remote areas, logistical difficulties in reaching hard-to-access locations, the need for stronger regulatory and policy support, financial sustainability risks for renewable businesses, and limited awareness of financing products in rural areas.

Recommended strengthening technical assistance for financial institutions, developing tailored renewable energy loan products, promoting last-mile financial inclusion through SACCOs, enhancing policy frameworks, and improving quality assurance and after-sales services. Emphasized that community-based models, integrated public and private capital, and innovative financing schemes are best practices for driving the off-grid boom.

Outlined opportunities to attract climate finance, green bonds, and carbon revenue streams, to expand PUE solutions for rural enterprise development, and to strengthen partnerships between government agencies, banks, and SACCOs. Set next steps including piloting blended finance schemes for mini-grids and PUE technologies, conducting nationwide awareness campaigns, and targeting 50,000 additional off-grid connections by mid-2026, with progress tracked through quarterly stakeholder forums.

PANEL DISCUSSION:

ENERGY SUBSIDIES AND RESULTS-BASED FINANCING: EXPERIENCES, CHALLENGES, AND SUCCESSES

Speakers:

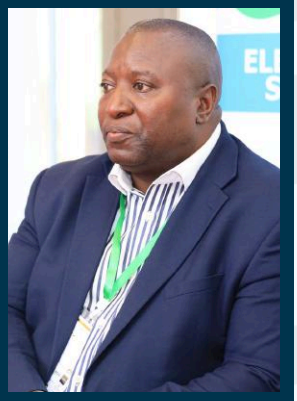
- **Mr. Mwaka Agoba,** Programme Manager RBF and Clean Cooking, UECCC
- **Ms. Victoria Butegwa**, Programme Component Manager, GIZ
- **Ms. Rose Twine**, Director, Eco Group Ltd
- **Dr. Emmy Wasirwa**, Managing Director, Wana Energy Solutions
- **Mr. Erick Obote**, Head of Sales, Startimes Ltd
- **Mr. Boniface Kiprop**, Head Commercial, Stabex International Ltd

PANEL DISCUSSION:

Mr. Mwaka Agoba

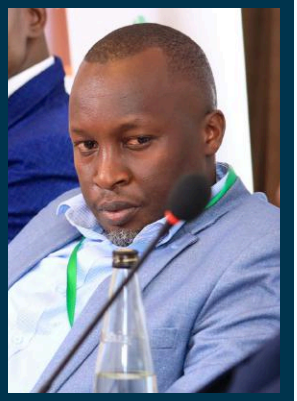
Ms. Victoria Butegwa

Ms. Rose Twine



Dr. Emmy Wasirwa

Mr. Erick Obote



Mr. Boniface Kiprop

This session highlighted that subsidies and Results-Based Financing (RBF) have played a pivotal role in accelerating access to clean energy, especially in the solar and clean cooking markets. Noted that these instruments have effectively lowered affordability barriers and de-risked market entry for private sector actors. Emphasized that the adoption of RBF has driven a shift toward performance-based, customer-centric business models, with companies now prioritizing customer acquisition, retention, and long-term satisfaction. Cited the EnDev programme, implemented by GIZ, as a key driver in scaling up solar and clean cooking solutions, providing targeted interventions for households, productive users, and public institutions in underserved areas.

Observed that RBF incentives have enabled companies to expand their distribution networks, strengthen sales and after-sales systems, and address operational challenges such as inventory management and marketing costs. Referenced international best practices, especially Brazil's achievement of 95% LPG adoption by 2023, as relevant for shaping Uganda's clean cooking agenda.

Shared innovations from the market, including Eco Group's use of embedded smart meters in electric pressure cookers for usage tracking, and StarTimes' deployment of AI tools to reduce errors and enhance RBF compliance. Noted that RBF has encouraged companies to develop a range of product sizes and strong after-sales service models.

Identified ongoing challenges, including high upfront costs and affordability barriers for low-income households, supply-side constraints from limited local manufacturing and import dependence, and delays in RBF payment verification that can affect business cash flow.

Highlighted concerns about potential market distortions after subsidy withdrawal and the need for strategies to ensure market stability beyond RBF support. Cited persistent cultural misconceptions and slow verification processes as additional barriers.

Recommended participatory design of RBF programmes, involving both government and private sector, to ensure alignment with national priorities and local dynamics. Stressed the importance of customer-centric approaches, capacity building for the private sector, and sustained awareness campaigns to address myths and increase adoption. Called for greater inclusivity, with targeted incentives for women-led households, refugees, and marginalized groups.

Proposed actions included supporting local manufacturing, streamlining verification and payment processes, strengthening financial linkages for working capital, monitoring post-sale usage, and tailoring awareness campaigns to local cultures and gender dynamics. Emphasized that future RBFs should integrate digital innovations, scale up targeting for institutions, and maintain strong after-sales engagement to ensure continued use of clean energy solutions.

Concluded that RBFs remain a powerful tool for scaling clean energy access, provided they are well-designed, inclusive, and supported by complementary interventions that address both supply and demand-side barriers.

PANEL DISCUSSION:

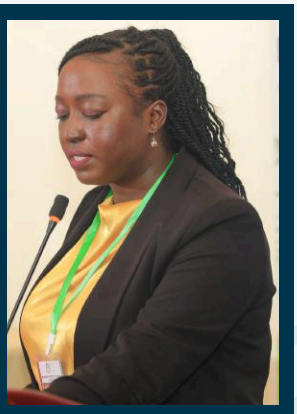
STOCKTAKING OF THE OFF-GRID SECTOR – THE TWO SIDES OF RBFS

Speakers:

- **Ms. Klaudine Wakasa,** Regional Institutional Lead, BGFA
- **Eng. Adella Kyohairwe**, Senior Energy Officer, ERD, MEMD
- **Mr. Mwaka Agoba**, Programme Manager, UECCC
- **Ms. Tina Möller**, Project Manager, BGFA
- **Ms. Bettina Baesch**, Head of Component, GIZ
- **Mr. Siliro Habiyaremye**, Head of Finance, Brighlight-Finca

PANEL DISCUSSION:

Ms. Klaudine Wakasa



Eng. Adella Kyohairwe

Mr. Mwaka Agoba

Ms. Tina Möller

Ms. Bettina Baesch

Mr. Siliro Habiyaremye

Presented a comprehensive overview of the off-grid sector, focusing on the role and implications of Results-Based Financing (RBF) mechanisms. Highlighted the dual impact of RBFs in catalyzing growth while also surfacing key risks and limitations within Uganda's off-grid energy market. Emphasized that, although RBFs accelerated market entry and product uptake, they did not always guarantee long-term sustainability or market transformation.

Showcased evidence that RBFs enabled new market entrants to expand distribution networks, reduce affordability barriers, and reach underserved communities. Noted that participating companies achieved higher sales volumes and expanded their consumer base more rapidly than those relying solely on traditional financing approaches. Reported that RBFs supported localized innovation and allowed for the piloting of new business models, including pay-as-you-go and micro-leasing options for solar home systems and productive-use technologies.

Addressed the challenges and unintended consequences associated with RBFs. Identified that heavy reliance on subsidy-driven sales sometimes created artificial demand and weakened incentives for after-sales service and quality assurance. Stated that some enterprises struggled to sustain operations or maintain service standards once RBF support ended, leading to market exits and stranded assets. Explained that the complexity of application and reporting requirements excluded smaller, local enterprises from participating fully, reinforcing market concentration among larger, more established players. Highlighted the need for a balanced approach to RBF design and implementation. Suggested that future RBFs should integrate robust monitoring frameworks, prioritize after-sales performance, and build capacity among local enterprises to ensure equitable participation.

Recommended aligning RBFs with broader sector policies, strengthening local supply chains, and promoting innovation that supports both commercial viability and long-term energy access objectives.

Concluded by calling for adaptive RBF models that address market realities, encourage sustainable business practices, and maximize benefits for underserved communities while minimizing dependency and market distortion.

SESSION REMARKS:

UNLOCKING INNOVATIVE FINANCE TO SCALE PURE SGB GROWTH IN EAST AFRICA

Speakers:

- **Mr. Kuria Wanjau,** Fragile Communities and States Programme Manager, Early- Stage Finance Team, FSD Africa
- **Ms. Cynthia Nabatanzi**, Project Leader, Open Capital

SESSION REMARKS

Mr. Kuria Wanjau

Ms. Cynthia Nabatanzi

Presented findings from a 10-month study by Open Capital and FSD Africa, supported by the IKEA Foundation, exploring how innovative financing could accelerate the growth of Small and Growing Businesses (SGBs) engaged in Productive Use of Renewable Energy (PURE) in Kenya, Uganda, and Ethiopia. Emphasized that Uganda's PURE market was valued at USD 4.6 billion, with most investment driven by government and donor programs, yet remaining underfinanced by commercial lenders.

Highlighted that SGBs in PURE sectors, particularly those led by youth and women, faced high upfront costs, limited financial literacy, and low access to affordable finance, with most relying on grants or donor funding. Mapped four key technology areas driving the PURE opportunity: solar water pumps, solar cooling solutions, e-mobility, and e-cooking. Identified significant financing gaps, including USD 54 million for inventory and working capital (last-mile distribution), USD 68 million for solid waste management, and USD 95 million for regenerative and circular agriculture.

Reported that agriculture employed 65 percent of Uganda's population, yet only 1 percent of farmland was irrigated, highlighting substantial potential for scaling solar pumps. Cited a case example in e-mobility, where local firms planning expansion from 1,000 to 4,000 motorcycles and from 7 to 1,500 buses required approximately USD 315 million in financing.

Explored blended and patient capital as essential tools for de-risking early-stage ventures and offsetting high capital expenditure requirements in the sector. Noted that blended finance models piloted by FSD Africa and partners catalyzed private capital and supported pipeline development for small and growing PURE enterprises through technical assistance and capacity building.

Identified challenges including scarcity of tailored financing products for early-stage SGBs in renewable energy, high upfront and working capital requirements, low consumer awareness of PURE technologies, weak enforcement of product quality standards, currency fluctuations, restrictive lending policies, and high collateral requirements. Stated that limited R&D funding, poor market linkages for local innovators, and cultural perceptions of risk regarding new technologies further constrained sector growth.

Recommended actions for stakeholders. Called on government and policymakers to establish standards and certification frameworks for PURE technologies and to offer tax incentives and forex stabilization measures for local manufacturers. Urged financial institutions to develop blended finance and patient capital instruments tailored to early-stage SGBs and to introduce risk-sharing mechanisms. Encouraged development partners to expand catalytic and de-risking funds and provide capacity building on financial management and business modeling. Advised the private sector and investors to increase marketing and consumer awareness campaigns, while academia and research institutions supported R&D and product validation. Suggested that civil society and media lead information campaigns to build consumer trust in clean and renewable technologies.

Highlighted best practices including blended finance and catalytic investment models, collaborative data gathering, early-stage incubation of local manufacturers to reduce forex exposure, and promotion of regenerative and circular agriculture as climate-positive investment frontiers.

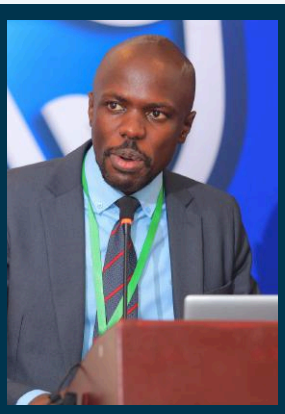
Outlined opportunities to scale up catalytic finance mechanisms, encourage domestic financial institutions to adopt blended models and risk-sharing frameworks, institutionalize quality standards and certification schemes, and enhance regional collaboration to build a robust pipeline of investible, climate-positive enterprises.

POWERING ENTERPRISE GROWTH BEYOND THE MEGAWATT: INNOVATIVE FINANCING FOR THE RENEWABLE ENERGY ECOSYSTEM AND PRODUCTIVE USE ACROSS THE VALUE CHAINS

Speakers:

- **Mr. James Kakeeto,** Manager, Business Development - Renewable Energy, Stanbic Bank
- **Ms. Martha Wakoli**, Senior Manager, Clean Energy Access, CLASP
- **Ms. Edna Nyamwaka**, Renewable Energy & Water Management. Heifer International
- **Mr. Paddy Bakengana**, Senior Programs Associate, USEA
- **Mr. Samuel Ocanya**, Project Manager Electricity Access Scale Up Project (EASP)

PANEL DISCUSSION:



Mr. James Kakeeto

Ms. Martha Wakoli

Ms. Edna Nyamwaka

Mr. Paddy Bakengana

Mr. Samuel Ocanya

The session opened with Stanbic Bank's renewable energy priorities and financing strategy, highlighting an ambition to integrate sustainability into mainstream banking. Outlined six renewable energy focus areas: power generation, including solar, hydro, biomass, cogeneration, and biofuels; grid extension; LPG as a transition fuel; clean cooking; battery storage; and e-mobility, all identified as key enablers for Uganda's low-carbon growth.

Reaffirmed Stanbic's climate policy commitment to supporting Africa's transition to net-zero carbon emissions and set a target to mobilize between USD 250 and 300 million in sustainable finance by 2025–2026. Stated an intention to underwrite USD 15 billion in renewable energy financing across its markets in the next three years. Projected that renewable financing would be two and a half to three times higher than non-renewable by 2024, with ten percent of the total lending portfolio dedicated to green investments.

Estimated Uganda's renewable energy market at between USD 4.8 billion and 5.5 billion over the next decade. Broke down sub-sector opportunities as follows: solar PV at USD 2 billion, e-mobility at USD 1.2 billion, clean cooking and biomass at USD 400 million, utility-scale renewables at USD 900 million, and energy storage and smart grids at USD 300 million. Outlined Stanbic's lending solutions, including working capital, trade finance, term loans, receivable-based financing, letters of credit, guarantees, and end-user credit for enterprises investing in renewable technologies, offering facilities with terms up to seven years to accommodate capital expenditure-heavy investments.

Described key partnerships with UECCC, SIDA, Heifer International, and the Uganda Green Enterprise Finance Accelerator (UGEFA) to blend concessional finance and credit guarantees, improving access to affordable capital for private sector actors.

Highlighted UECCC's role in de-risking investments through concessional credit lines, results-based financing, and guarantees, particularly under the Electricity Access Scale-Up Project (EASP), with a focus on productive use of energy and clean cooking. Stressed the importance of ecosystem strengthening through appliance quality assurance, end-user affordability models, and inclusive market development, as emphasized by CLASP.

Emphasized private sector coordination, with calls for stronger alignment among solar companies and banks to harmonize standards and ensure project bankability, as raised by USEA. Shared Heifer International's experience using blended finance to unlock investments in the dairy and water sectors, demonstrating the role of renewable energy in strengthening agricultural value chains. Shared key statistics and insights, noting Stanbic's sustainable finance target of between USD 250 and 300 million by 2025–2026 and the goal to underwrite USD 15 billion in renewable financing over three years. Cited renewable energy market potential in Uganda estimated at between USD 4.8 billion and 5.5 billion by 2035, lending tenors of up to seven years for renewable energy asset financing, and the targeting of ten percent of Stanbic's lending portfolio toward renewable investments.

Identified challenges, including limited access to affordable long-term finance for SMEs and project developers, high perceived risk and lack of historical performance data for renewable energy investments, a weak pipeline of bankable projects, a fragmented market and lack of harmonized standards for renewable energy systems and appliances, and limited end-user affordability for productive use and clean cooking solutions. Recommended that commercial banks expand renewable energy portfolios and leverage blended finance for longer-tenor, lower-cost loans. Urged DFIs and donors to increase guarantees, concessional funds, and technical assistance. Requested government and regulators to create supportive policy frameworks and enforce quality standards. Advised private sector developers to strengthen project preparation and financial structuring and encouraged industry associations to facilitate data sharing and standardization across the sector.

Highlighted best practices, including blended finance partnerships such as the Stanbic–Heifer model, the adoption of results-based financing to catalyze private sector participation, the leveraging of regional banking networks, and the integration of transition fuels and e-mobility financing as emerging green growth frontiers.

Outlined next steps to strengthen collaboration between banks, DFIs, and renewable developers, build project preparation facilities, develop a pipeline of creditworthy SMEs, expand public-private partnerships to scale productive use of energy, and continue Stanbic Bank's leadership in renewable energy financing through ecosystem building.

PANEL DISCUSSION:

POWERING ENTERPRISE GROWTH BEYOND THE MEGAWATT: INNOVATIVE FINANCING FOR THE RENEWABLE ENERGY ECOSYSTEM AND PRODUCTIVE USE ACROSS THE VALUE CHAINS

Speakers:

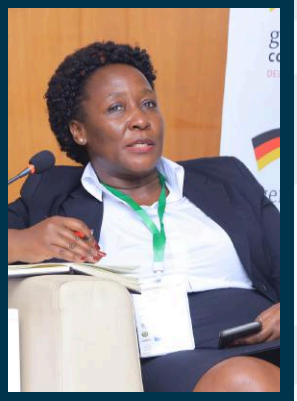
- **Mr. Denis Rukundo,** Programme Component Manager, GIZ PREEEP
- **Ms. Patriciah Roy Akullo**, Climate Finance Unit, MoFPED
- **Mr. Abdul Kyanika**, Head of Consumer Lending and Renewable Energy, Centenary Bank
- **Ms. Virginia Ssemakula**, Pillar Head Energy, Environment and Climate Change, Equity Bank
- **Ms. Agnes Nakkazi**, Program Manager Productive Use of Energy, UECCC
- **Ms. Gorreti Masadde**, CEO, UIBFS

PANEL DISCUSSION:

Mr. Denis Rukundo

Ms. Patriciah Roy Akullo

Mr. Abdul Kyanika



Ms. Virginia Ssemakula

Ms. Agnes Nakkazi

Ms. Gorreti Masadde

This session described the development of short-skilling programs and professional and academic training modules to enhance awareness and capacity in renewable energy and green finance. Emphasized the importance of partnerships with organizations such as GIZ and the Renewable Energy Institute in strengthening training delivery and expanding reach.

Highlighted the need for a broader, more inclusive approach to ecosystem capacity building, noting that training should extend beyond bankers to all actors. Shared that training on Environmental, Social, and Governance (ESG) principles is being delivered in alignment with Bank of Uganda's priorities, and announced the forthcoming launch of a comprehensive Green Finance Curriculum, set to be the first of its kind in Africa.

Explained that financing energy and productive-use technologies involves assessing technology risk, performance reliability, and the varying financing requirements of different projects. Identified challenges in evaluating creditworthiness, especially for clients with limited financial history or irregular income flows, and noted that collateral risk is a major concern when borrowers lack sufficient assets. Emphasized the difficulty for lenders in accurately evaluating new technologies and structuring appropriate financing solutions.

Described the UECCC's mandate to facilitate access to affordable financing for renewable energy and clean technologies. Explained that UECCC offers low-interest credit with a six-month grace period and deploys de-risking instruments such as partial credit guarantees and product credit guarantees to reduce lender risk.

Highlighted the use of subsidies through Results-Based Financing (RBF) mechanisms to improve access and affordability, enabling households to adopt solar home systems and transition to clean cooking. Shared that UECCC supports productive-use energy companies to enhance business development and productivity, and identified partnerships as essential for scaling impact.

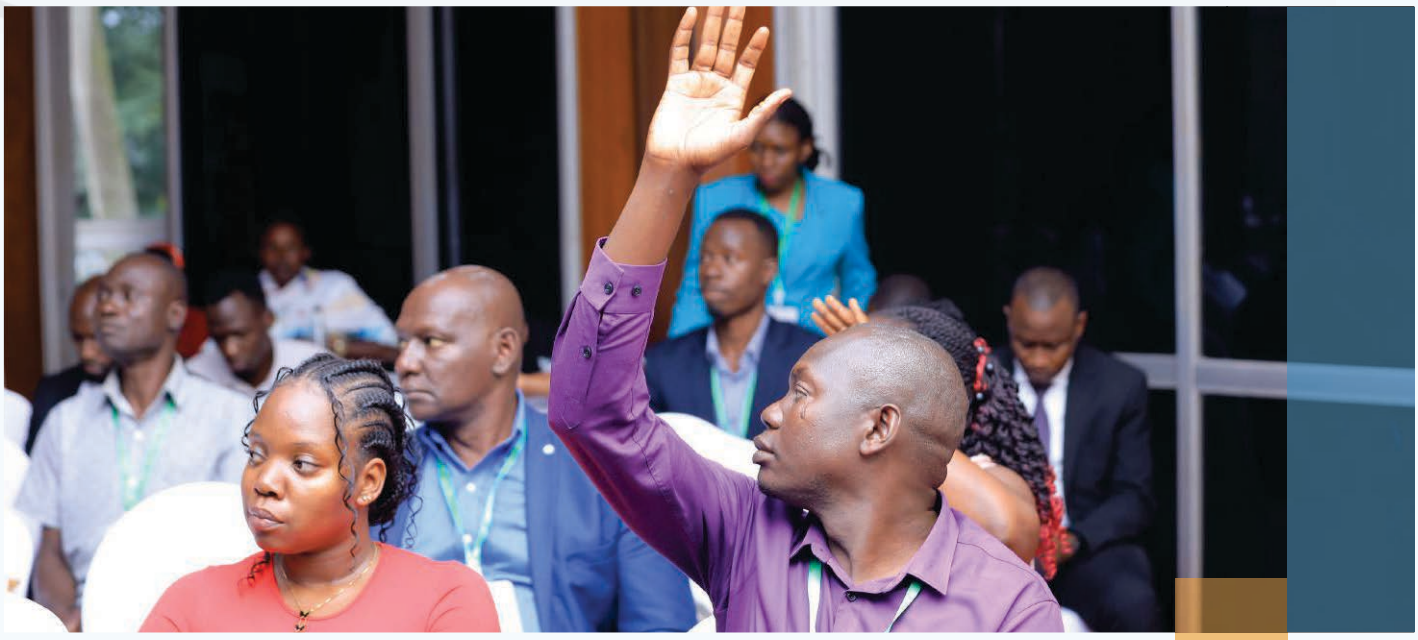
Outlined barriers to finance in the renewable energy sector. Emphasized that climate finance is more affordable when delivered through non-debt instruments and represents an opportunity to stimulate growth. Noted the high cost of renewable energy technologies, the limited pool of willing financiers due to scarcity of guarantees, and the government's efforts to introduce innovative financing instruments, including green bonds, to attract more capital. Highlighted the need to strengthen institutional capacity for project preparation, improve regulatory frameworks, and raise public awareness to boost investor confidence.

Shared the financial institution perspective from Abdul Kyanika, Head of Consumer Lending and Renewable Energy at Centenary Bank, who described challenges during the government's ERT 1 initiative to finance off-grid solar systems. Pointed to limited technical capacity, a lack of reliable solar companies, and absence of dedicated personnel and tailored financial products as key reasons for underperformance. Emphasized that collaboration with umbrella organizations like USEA is critical for improving quality assurance and building a more robust ecosystem for renewable energy financing.

Stressed the importance of technical assistance to strengthen the demand side of renewable energy financing. Highlighted the need to support clients and developers in preparing bankable proposals and noted the role of strong regulatory frameworks, like the upcoming Energy Efficiency Bill, in catalyzing market growth. Emphasized that targeted training programs are essential for addressing knowledge and capacity gaps among market actors, unlocking finance, and accelerating adoption of clean energy solutions.

Identified key challenges including limited technical capacity, high perceived technology and performance risk, limited creditworthiness and collateral constraints, institutional capacity limitations, and insufficient technical assistance for demand-side actors. Highlighted best practices such as strengthening the demand side through technical assistance, catalyzing markets at the policy level, bridging knowledge and technical gaps, and integrating skills development to drive adoption.

Outlined opportunities and next steps, recommending expansion of access to financing for clean energy projects, leveraging policy reforms to drive market growth, strengthening public-private partnerships, and stimulating demand through awareness and behavioral change.



FINANCING THE CLEAN COOKING TRANSITION: FROM PILOTS TO SCALE

Presentation One: National Integrated Clean Cooking Strategy for Uganda (NICCS), Mr. Rob Bialis, Senior Scientist, Stockholm Environment Institute

Presented the National Integrated Clean Cooking Strategy for Uganda, including the summary for Uganda, calling upon decision makers to maintain energy access targets, but extend the timelines to 2040, as well as incorporate targets for solid biomass fuels and appliances as well.

Disclosed that the total investment required stood between UGX 2.5 – 2.8 trillion (UGX 45-50 million per year through 2040), covering capital costs, research and development, awareness creation, monitoring, reporting, and verification, as well as standards development, with ethanol accounting for between UGX 587-890 billion, LPG consuming UGX 864 billion, e-cooking accounting for UGX 973 billion, and biogas accounting for UGX 62 billion.

Noted that the total private and public sector investment in the Sustainable Energy Development Programme was UGX 15.2 trillion, 99% of which is allocated to the power sector, leaving only UGX 30 million a year for clean cooking. Shared the NICCS recommendations to explore Results-based finance, Carbon Finance, Public-private partnerships, PAYGO and other innovative delivery models to meet the set targets.

Presentation Two: Blended Finance: Opportunities for Scale, Dr. Crispus Tashobya, Carbon Finance Expert, CCU

Identified the barriers of the prohibitive initial capital investment for higher-tier technologies, the high perceived risk of the sector by financial institutions, the absence of a standardized, robust system for measuring, reporting, and verifying emission reductions, and limited access to finance for SMEs due to high collateral and complex application requirements. Explained that these barriers limit market penetration and affordability for the majority of the population, keeps financial institutions risk-averse, restricting access to commercial loans for SMEs, prevents efficient monetization of climate benefits, and contrains the growth and scaling of local innovators and distributors.

Disclosed the need to institutionalize frameworks and aggressively unlock the necessary capital to bridge the 85% access gap through: Providing results-based carbon finance revenue to subsidize appliance costs and reward verifiable emission reductions, leveraging the Carbon Regulatory Framework.

Exploring public-private partnerships by integrating them with grants and concessional loans to accelerate adoption, particularly for institutional settings. Unlocking green bonds and impact investments by standardizing clean cooking investment vehicles and improving pipeline preparation. Finalizing and validating the clean cooking pre-feasibility study findings to enable the formulation of a comprehensive GCF proposal.

Presentation Three: Green Climate Fund Clean Cooking Proposal for Uganda, Mr. Tigran Sukiasyan, Senior Adviser, Climate Finance and Institutions

In his presentation, Mr. Sukiasyan disclosed the objective of the clean cooking project to accelerate the transition to clean cooking technologies, reduce Uganda's greenhouse gas emissions while improving the health and community resilience by:

- Facilitating the adoption of clean cooking solutions for 600,000 households by providing affordable financing through a dedicated revolving fund managed in partnership with local financing institutions.
- Strengthening maintenance and supply chains by supporting ten (10) companies selling clean cooking technologies and supplies to reduce market entry costs and expand their presence in regional markets.
- Enhancing local production capacities by supporting up to five (05) companies in establishing or re-engineering production facilities for clean cooking technologies.
- Creating an enabling policy environment by advocating for the development of policy and regulatory frameworks that incentivize the production, distribution and adoption of clean cooking technologies.
- Raising awareness and building capacity through collaboration with CSOs, business association, and UNACC to educate households on the benefits of clean cooking, while creating a repository of knowledge for products to inform future interventions and scale-up efforts.

Disclosed the technologies under consideration as higher-tier biomass cookstoves, liquefied petroleum gas stoves, and ethanol stoves.

POLICY, PLANNING, QUALITY, STANDARDS, INSTITUTIONS & MARKETS

BLENDED FINANCE FOR CLEAN COOKING: A PANEL DISCUSSION ON UGANDA'S CLEAN COOKING LANDSCAPE

Speakers:

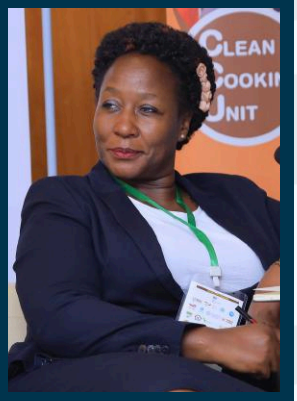
- **Dr. Crispus Tashobya,** Carbon Finance Expert, CCU
- **Dr. Louise Medland**, Programme Manager, MECS
- **Mr. Darious Mugabe**, Policy Researcher, MoFPED
- **Ms. Virginia Ssemakula**, Pillar Head Energy, Environment and Climate Change, Equity Bank

PANEL DISCUSSION:

Dr. Crispus Tashobya

Dr. Louise Medland

Mr. Darious Mugabe



Ms. Virginia Ssemakula

This session delved into the numerous opportunities in Uganda's clean cooking financing landscape and proposed steps to leverage them.
Discussed how results-based revenue offers an opportunity to subsidize appliance costs and reward verifiable emission reductions, presenting an opportunity to leverage the National Carbon Regulatory Framework to ensure high-integrity credit generation.

Explored how public-private partnerships utilize government capacity in the form of bulk procurement and market creation avenues to reduce private sector risk and cost. Shared that green bonds and impact investments tap into domestic and international capital to deliver measurable environmental and social impact. Shared how concessional finance provides patient capital and first-loss layers to absorb risk and catalyze private investment.

Underscored the importance of monitoring and verification to scale in sustaining investment, sharing that access scenarios, if comprehensive, guide investment across different fuel/technology pathways, to provide a clear roadmap for investors and align public spending.

Discussed the need to develop robust national monitoring, reporting, and verification frameworks for clean cooking to ensure the credibility of emission reduction claims, an essential prerequisite to unlocking carbon and results-based finance opportunities.

Informed delegates of the importance of pre-feasibility studies and validations to de-risk fundable proposals and transform project concepts into bankable opportunities.

PANEL DISCUSSION:

BIOMASS ENERGY TRANSITION IN AFRICA: POLICY SHIFTS, REGULATORY FRAMEWORKS, AND PATHWAYS FOR SUSTAINABLE LIVELIHOODS

Speakers:

- **Mr. Lazarus Oketch,** Clean Cooking Officer, CCU, MEMD
- **Mr. James Ochaka**, Energy Focal Person, Gulu District
- **Mr. Hatimu Muyanja**, Energy Officer, ERD, MEMD
- **Mr. Issa Katwesige**, Assistant Commissioner, Forest Sector Support Department, MoWE
- **Mr. Kenneth Atim**, Assistant Commissioner, Social Economic Research, Office of the President
- **Mr. Emmanuel E. Kakoro**, Environment and Energy Officer, FAO

PANEL DISCUSSION:

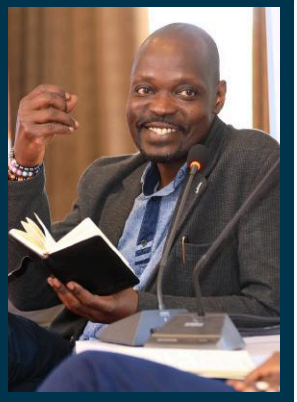
Mr. Lazarus Oketch

Mr. James Ochaka

Mr. Hatimu Muyanja

Mr. Issa Katwesige

Mr. Kenneth Atim



Mr. Emmanuel E. Kakoro

The session emphasized that biomass will remain a significant part of Uganda's energy mix for years due to the slow pace of energy transitions. Highlighted the need to minimize biomass use through interventions such as fast-growing energy crops, efficient combustion technologies, and reforms across the biomass supply chain, including sustainable charcoal production. Stressed that integrated planning among ministries, departments, and agencies is essential to prevent conflicting mandates.

Noted that the Forestry Policy of 2001 is under revision to address emerging issues and carbon reduction strategies. Identified key gaps in institutional governance, coordination, and financing, and advocated for the development of bioenergy forests, zoning for sustainable forest utilization, subsidy schemes to support natural forest conservation, and the adoption of approved charcoal production standards.

Shared that the National Clean Cooking Strategy had been launched, noting that over 80% of Ugandans still rely on biomass for cooking. Explained that the policies under the Energy Policy 2023 aim to accelerate the transition to clean and efficient cooking technologies, eliminate unsustainable biomass production, and establish an integrated reporting and monitoring framework.

Emphasized the importance of policy coherence, good governance, and stakeholder coordination. Noted collaboration with RDCs to enforce environmental protection laws and raise awareness on biodiversity conservation, aligning with commitments outlined in the national manifesto.

Shared a practical example from the Acholi chiefdom, where bylaws impose fines for prohibited tree cutting, such as one goat per violation.

Highlighted that parts of Northern Uganda had misunderstood the presidential ban on charcoal burning, indicating a need for better communication and awareness campaigns.

Identified key challenges, including heavy dependence on traditional biomass, limited financing for clean cooking technologies, weak regulatory frameworks, poor coordination among government agencies, and limited private sector engagement. The expiry of the Sustainable Energy Response Plan, weak enforcement of policies and standards, poor tracking of clean cooking technology uptake, and inefficient biomass production methods were also noted as barriers.

Recommended establishing an inter-ministerial committee to coordinate biomass energy policy implementation, finalizing and operationalizing the integrated reporting and monitoring framework for clean cooking, strengthening forestry policy revisions, adopting and scaling local bylaws for forest protection, supporting financing and technology transfer for sustainable biomass, and innovating efficient biomass and alternative clean cooking solutions through the private sector.

Concluded that Uganda must leverage policy coherence, improved governance, and multi-stakeholder collaboration to accelerate the transition from biomass, protect forests, and achieve universal access to clean and efficient cooking technologies.

TRAINING, RESEARCH & COMMUNITIES OF PRACTICE

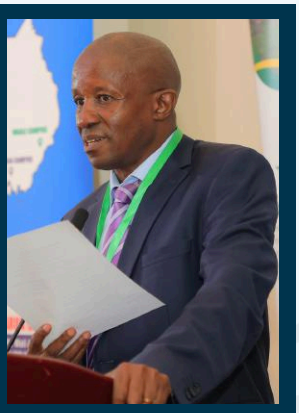
SCALING YOUTH AND WOMEN-LED CLEAN ENERGY ENTERPRISES FOR TRANSFORMATIVE IMPACT

Speakers:

- **Dr. Brian E. Isabirye,** Commissioner, ERD, MEMD
- **Prof. Moses Muhwezi**, Principal, MUBS
- **Dr. Geofrey Nkuutu**, Lecturer, MUBS
- **Dr. Joseph Elasu**, Lecturer, MUBS
- **Dr. Ann Kingiri**, Director of Research and Innovation, ACTS
- **Dr. Sylvia Aarakit**, Lecturer, MUBS

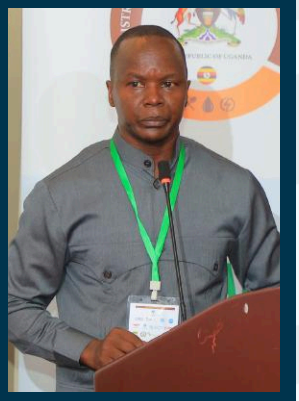
PRESENTATIONS:

Dr. Brian E. Isabirye



Prof. Moses Muhwezi

Dr. Geofrey Nkuutu



Dr. Joseph Elasu

Dr. Ann Kingiri

Dr. Sylvia Aarakit

This session presented new evidence from the Evidence for Informing Optimization and Scaling of Youth and Women-led Clean Energy Enterprises (EVI-SICEE) initiative, an applied research project conducted in Uganda, Kenya, Malawi, and South Africa. Highlighted Uganda's findings, which showed that youth-led and women-led clean energy enterprises (CEEs) faced limited access to finance, weak technical capacity, fragmented policy support, and persistent gender norms that constrained decision making, leadership, and entrepreneurial mobility. Identified promising models, including pay-as-you-go (PAYG) systems, microfinance mechanisms, blended finance, cooperative-led distribution, and community agent networks as having strong potential to drive inclusion and expand rural energy access.

Emphasized the need for gender-responsive systems of innovation, where finance, policy, market linkages, and capacity building worked cohesively to support women and youth innovators. Provided a framework for scaling successful models, strengthening the ecosystem, and informing policy and investment decisions. Facilitated a discussion among practitioners and CEOs from across the clean energy value chain to translate this evidence into actionable insights for scaling impact.

Presented study findings from the ACTS & MUBS Research Team. Reported that Uganda's CEEs were constrained by high capital requirements, inadequate early-stage finance, and limited pathways for enterprise formalization. Described how gender norms affected mobility, labor allocation, asset ownership, and participation in technical roles. Stated that youth enterprises faced high attrition, limited mentorship, and weak market linkages. Indicated that most women-led CEEs operated in clean cooking, solar distribution, and micro-retailing segments, but struggled to scale due to fragmented support ecosystems.

Revealed through key informant interviews persistent gaps in technical standards, limited access to testing facilities, and challenges with sourcing quality appliances.

Identified systemic gaps in the entrepreneurial ecosystem, including a lack of tailored financing instruments for women and youth innovators, insufficient integration of clean energy entrepreneurship into national MSME and industrialization frameworks, barriers in accessing market intelligence, R&D support, and quality assurance services, and weak collaboration across ministries, regulators, academia, and private sector developers.

Highlighted promising practices emerging from the study. Noted that PAYG financing models enabled affordability for rural households. Cited blended finance mechanisms that combined grants, concessional loans, and private capital to lower enterprise risk.

Recognized community-based distribution networks that empowered women agents and last-mile entrepreneurs. Identified cooperative-based market penetration for productive-use technologies such as solar irrigation, cooling, and milling. Described micro franchising and bundled services, including maintenance, credit, and appliances.

#1: FROM INNOVATION TO IMPACT: INSIGHTS ON BEST PRACTICES FROM ACTORS IN THE CLEAN ENERGY ECO-SYSTEM

Speakers:

- **Mr. Joseph Murabula,** Project Business Incubation lead, Kenya Climate Development, WRI Africa
- **Ms. Ruth Komuntale**, CEO, ECOCA East Africa
- **Ms. Mariah Kizza**, Head Project Finance & Corporate Affairs, NREP
- **Mr. Alfred Kusiima**, CEO SunCool Uganda
- **Eng. Loy Kyozaire**, CEO Sendea Institute of Energy and Management

PANEL DISCUSSION:

Mr. Joseph Murabula

Ms. Ruth Komuntale

Ms. Mariah Kizza

Mr. Alfred Kusiima

Eng. Loy Kyozaire

This session focused on translating clean energy innovation into scalable impact for youth- and women-led enterprises in Uganda. Opened with a conversation on the critical importance of bankability for scaling enterprises, emphasizing that proving steady demand, securing reliable off-takers, and demonstrating productive-use revenues are essential to qualify for financing. Stressed the need for enterprises to strengthen technical capability, governance, and compliance, while developers were encouraged to build robust business models, establish clear revenue projections, and form strong EPC partnerships.

Highlighted that gender-responsive interventions must go beyond technology to address capacity building, improve access to assets, enhance market mobility, and ensure supply-chain inclusion for women and youth. Discussed the crucial role of de-risking and investment readiness, with development finance institutions and government programs such as UECCC underscoring the value of partial credit guarantees, first-loss capital, and technology risk guarantees to enable banks to lend to clean energy enterprises. Noted that many local enterprises continue to fail due to low capitalization, reluctance to share equity, and lack of audited financials. Called for co-designed finance mechanisms that align banks, cooperatives, and community enterprises to support sustainable growth.

Shared key statistics and case studies, including the finding that only 2 percent of required productive-use appliances have been sold globally, signaling a 98 percent opportunity for investors and enterprises. Referenced the International Energy Agency's estimate of USD 50 billion required to close the global energy access gap. Reported that women continue to face limited asset ownership, mobility constraints, and uneven access to technical roles, while many clean energy enterprises lack audited financials and formal registration.

Cited the UECCC technology risk guarantee, which allows banks to claim losses in case of technology failure, and highlighted the emergence of PAYG, microfinance, and blended-finance programs as scalable pathways for affordability and last-mile inclusivity. Pointed to cooperative pilots by Heifer International that successfully used blended finance to deliver productive-use solar technologies without defaults. Identified persistent challenges, including high upfront capital needs for clean energy enterprises and productive-use technologies, fragmented policy frameworks, limited coherence across ministries and regulators, gender norms restricting women's participation and asset ownership, limited technical and managerial capacity among youth and women entrepreneurs, weak supply chains, inadequate quality assurance infrastructure, traditional collateral-based lending by commercial banks, lack of enterprise readiness, high distribution costs, low affordability in remote communities, and incomplete integration of clean energy enterprises into national MSME and industrial policy.

Outlined recommendations and proposed actions for stakeholders. Advised the government and MEMD to strengthen policy coherence, integrate clean energy enterprises into national MSME and industrialization frameworks, and expand incentives for women- and youth-led enterprises. Urged regulators to enhance quality assurance, testing facilities, and certification processes. Recommended that financial institutions develop gender-responsive, flexible financial instruments, adopt blended finance, and expand risk-sharing mechanisms. Called on DFIs to scale partial credit guarantees, technology risk guarantees, and first-loss mechanisms. Encouraged private sector developers to strengthen technical capacity, document financials, and adopt robust business models. Suggested that academia and research institutions expand innovation hubs and gender-focused entrepreneurship training, while community cooperatives should scale productive-use pilots and expand aggregation models with youth and women agents.

Highlighted best practices and innovations such as PAYG and microfinance models for appliance affordability, blended finance structures, community-based distribution networks advancing gender inclusion, cooperative-led procurement, technology risk guarantees, enterprise capacity building, and micro-franchising for rural distribution and after-sales services.

Outlined opportunities and next steps, including expanding gender-responsive finance and enterprise support programs, integrating research findings into government policy and donor strategy, strengthening cross-ministry coordination, scaling successful cooperative and PAYG pilots, building an integrated ecosystem linking banks, DFIs, developers, and innovators, investing in quality assurance and local manufacturing, and implementing national programs to support youth and women clean energy enterprises at incubation and growth stages.

#2: UGANDA'S CLEAN ENERGY ECOSYSTEM AND THE ENTREPRENEURIAL CONTEXT FOR YOUTH AND WOMEN-LED BUSINESSES

Speakers:

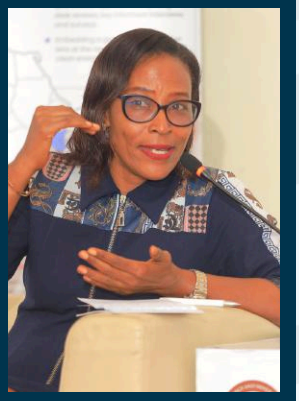
- **Prof. Rasmus Lema,** Advisory Board Member, University of Johannesburg
- **Mr. Desmond Tutu,** Uganda Energy Credit Capitalization Company (UECCC)
- **Dr. Nicholas Mukisa**, Deputy National Coordinator, NREP
- **Hon. Prof. Robinah Nanyunja**, President Women Entrepreneurship Forum for Africa (WEFA)
- **Mr. Richard Ebong**, Senior Standards Officer, UNBS
- **Ms. Justine Akumu**, Senior Clean Cooking Officer, CCU, MEMD

PANEL DISCUSSION:

Prof. Rasmus Lema

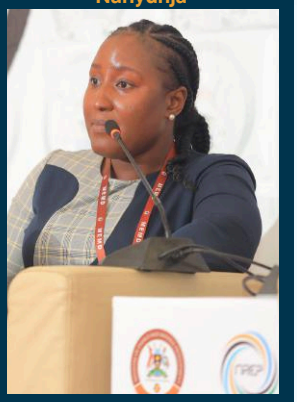
Mr. Desmond Tutu

Dr. Nicholas Mukisa



Hon. Prof. Robinah Nanyunja

Mr. Richard Ebong



Ms. Justine Akumu

The session underscored the need to integrate women and youth across all energy programs and the use of gender-disaggregated data to inform policy design. Proposed the establishment of a "Women's Leadership Center for Excellence in Energy" to aid mainstreaming efforts, as well as designing career interventions with institutions of higher education.

Called for collaboration with the World Bank to provide gender-responsive financing, derisk clean energy lending, and set gender targets, e.g., ensuring that at least 30% of the beneficiaries are women.

Highlighted the importance of conducting needs mapping to understand the evolving requirements of enterprises at different stages, while underscoring the need for tailored interventions such as business development services, technical training, and innovation support facilitated by access to testing and certification facilities.

Emphasized the need to establish clear progression pathways from micro to small and medium enterprises. This approach ensures that enterprises can grow in a structured manner, with support mechanisms tailored to their stage of development, thereby strengthening the overall entrepreneurial ecosystem.

Recommended the creation of a dedicated SME division within Uganda's National Bureau of Standards (UNBS) to lower certification costs and provide training on quality management systems prior to certification. Such a division would not only ease the financial burden on small businesses but also build their capacity to meet quality requirements, enhancing competitiveness in both local and international markets.

Encouraged private sector engagement through sector associations to promote collective action initiatives such as group certification and cost-sharing, with particular focus on women- and youth-led enterprises. By leveraging associations, enterprises can pool resources, reduce individual costs, and amplify their voice in policy and market negotiations, fostering inclusivity and resilience.

Highlighted the importance of developing simplified standards for micro enterprises while safeguarding essential safety requirements. Simplified standards would make compliance more attainable for smaller businesses without compromising consumer protection, thereby enabling broader participation in formal markets.

PANEL DISCUSSION:

UNIVERSITIES' ROLE IN ACHIEVING UGANDA'S VISION 2040

Speakers:

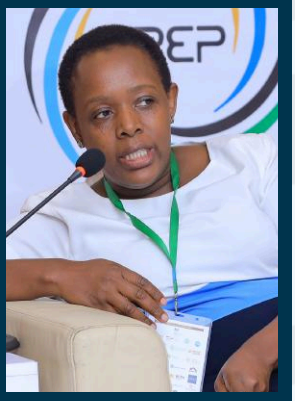
- **Dr. Nicholas Mukisa,** Lecturer, MUBS
- **Dr. Shamim K. Matovu**, Director of Cooperative Education, Career and Workplace Partnerships Victoria University
- **Dr. Sylvia Aarakit**, Senior Lecturer, MUBS
- **Dr. Marriette Katarahweire**, Lecturer, Makerere University
- **Dr. Miria Agunyo**, Dean, Department of Engineering and Environment, UCU

PANEL DISCUSSION:

Dr. Nicholas Mukisa

Dr. Shamim K. Matovu

Dr. Sylvia Aarakit



Dr. Marriette Katarahweire

Dr. Miria Agunyo

This session explored the central role of universities in driving Uganda's Vision 2040, transforming the nation into a modern, middle-income country through education, research, innovation, and partnerships. Convened university leaders, researchers, policymakers, and students to deliberate on how higher education can align research and community engagement with national development priorities.

Panelists emphasized universities as engines of innovation, renewable energy, climate change mitigation, and human capital development, highlighting the need to strengthen linkages between academia, industry, government, and communities. Stressed that exposure of university students to real-world environments, markets, industries, and the informal sector significantly enhances their academic growth, employability, and social impact. Noted that practical exposure gives students confidence, teamwork skills, and contextual understanding, bridging the gap between theoretical learning and real-life application.

Described Uganda Christian University (UCU) initiatives such as peer-to-peer mentorship, cross-departmental collaboration, business students spending time working in local markets, and engineering students engaging with local artisans on construction or fabrication sites. Emphasized that universities should build bridges with informal innovators, supporting and learning from them to drive research innovation and local industrial growth.

Highlighted the push to nurture young innovators from early stages, noting UCU's Technology Department runs robotics and coding short courses for children as young as seven, helping identify and mentor talent early and feeding into a culture of creativity and problem-solving.

Reflected that universities must go beyond classrooms, engage directly with markets, artisans, and communities, and integrate informal innovation into academic and research ecosystems. Stated that this approach builds competent graduates and strengthens society's capacity for sustainable development through innovation and inclusion. Called for a mindset revolution from universities, parents, and policymakers to nurture inventors, creators, and innovators of tomorrow, not just scholars who pass exams. Painted a vision of universities open to community, collaborative across disciplines, supportive of creativity and risk-taking, and responsive to generational shifts in skills and aspirations.

Stressed that employability challenges stem more from attitude than skill gaps, calling for character development, work ethics, and mindset change to be integrated into curricula. Urged universities to co-create research agendas with policymakers and communities, with the Triple Pillars Model (policy, academia, and community) highlighted as best practice.

Emphasized the need for experiential learning, interdisciplinary collaboration, and engagement with technical and vocational sectors to make higher education more practical and inclusive. Noted that collaboration among universities and with the informal sector expands access to resources, knowledge, and innovation.

Identified barriers such as weak university–industry linkages, negative attitudes and poor work ethic among graduates, funding gaps and reliance on external funding, rigid curricula with theoretical overemphasis, information silos, and limited awareness among students of global industrial transitions and Uganda's position within them.

Shared recommendations including building working relationships between universities and the informal sector, opening campuses to the public and informal workers, valuing experiential knowledge, partnering with technical and vocational institutions, and ensuring universities are open and relatable spaces for the community. Urged universities to anchor programs and research in national development frameworks like Vision 2040 and the National Development Plan IV, and to expose students and staff to real-world problems through conferences and fieldwork. Stressed the value of engaging directly with communities as living laboratories, co-creating solutions, and using industry feedback as research topics.

Highlighted best practices such as generational change and recognizing Gen Z's creativity and digital fluency, establishing incubation hubs for cross-disciplinary innovation, balancing technological proficiency with human values and responsibility, and reintroducing life and professional skills as part of employability training. Called for universities to align curricula with national goals such as agriculture, energy, environmental sustainability, and industrial innovation. Urged establishment of a national internship and training platform, with incentives for companies that mentor students, and advocated for meaningful, accountable internships through strong partnerships and supervisor accountability.

Outlined opportunities and next steps, including building university–industry consortia focused on renewable energy, scaling informal sector skilling programs, leveraging Vision 2040 to attract funding for community research, integrating digital and industrial evolution awareness into curricula, and facilitating faculty internships in ministries to strengthen university–government linkages.

Notable quotes from the session included Dr. Brian's assertion, "Attitude is more important than intelligence. I hire based on attitude, not grades." highlighting the value employers place on character and mindset over academic performance alone. Dr. Shamim emphasized the gradual nature of institutional and societal change, reflecting, "You cannot take a goat to the well and force it to drink water; change is a transition, not an event." Dr. Miria observed, "The exclusivity of education is gone. What keeps you relevant is how you stay in the game," pointing to the necessity of adaptability and continuous learning in a rapidly evolving world.

PANEL DISCUSSION:

SKILLS DEVELOPMENT: THE ROLE OF SKILLING AND TVET IN DRIVING ENERGY ACCESS AND SUSTAINABILITY

Speakers:

- **Mr. Rolex Muceka,** Energy Advisor, GIZ
- **Ms. Lisa Hofheinz**, Head of Project, GIZ PREEEP
- **Mr. Benard Akol**, Principal, Amelo Technical Institute
- **Ms. Jalia Nasaza**, Deputy Executive Secretary, Curriculum Development, Ministry of Education and Sports
- **Eng. Loy Kyozaire**, CEO, SENDEA Institute for Energy and Management
- **Ms. Juliet Murekatete**, Employment Promotion Officer, ENABEL

PANEL DISCUSSION:

Mr. Rolex Muceka

Ms. Lisa Hofheinz

Mr. Benard Akol

Ms. Jalia Nasaza

Eng. Loy Kyozaire

Ms. Juliet Murekatete

This session examined the pivotal role of skills development, Technical and Vocational Education and Training (TVET), and local capacity building in advancing energy access and sustainability in Uganda. Highlighted the need for a robust local workforce equipped to design, install, operate, and maintain renewable energy systems, emphasizing that investment in skilling and TVET underpins the long-term success of clean energy initiatives.

Reported that Uganda's current energy sector workforce faced significant gaps in technical proficiency, business development, and cross-cutting skills such as project management and customer service. Noted that rapid expansion of off-grid and decentralized renewable energy solutions created urgent demand for technicians, engineers, and business professionals with specialized training in solar PV, mini-grids, clean cooking technologies, energy efficiency, and productive use of energy.

Outlined the collaborative efforts between government, development partners, private sector actors, and academic institutions to address these challenges. Cited the establishment of dedicated Renewable Energy Training Centres and the integration of energy curricula into TVET institutions as key milestones. Stated that the Ministry of Education and Sports, in partnership with the Ministry of Energy and Mineral Development (MEMD), spearheaded reforms to align TVET programs with industry requirements, focusing on competency-based education, hands-on learning, and industry placement.

Highlighted donor-funded initiatives such as the TEA Learning Partnership, which supported over 60 universities in strengthening energy access curricula, and the Energy Access Talent Initiative, which trained more than 3,000 young Africans, including gender-focused cohorts.

Noted the involvement of private sector partners in offering internships, apprenticeships, and on-the-job training programs that bridge the gap between classroom learning and practical fieldwork.

Addressed barriers to effective skilling, including limited funding for TVET institutions, outdated training equipment, insufficient qualified trainers, and a lack of national certification and accreditation standards for renewable energy professions. Stated that regional disparities in access to training facilities and gender imbalances in enrollment further restricted the pool of skilled professionals.

Recommended actions for stakeholders. Urged government agencies to increase investment in TVET infrastructure, update curricula in consultation with industry, and establish a national certification framework for renewable energy technicians and professionals. Encouraged development partners to expand support for teacher training, provide modern equipment, and fund scholarships targeting women and marginalized groups. Advised private sector actors to scale up internship and apprenticeship opportunities and to participate in curriculum development and assessment. Called on academic and research institutions to expand research programs in renewable energy, foster innovation, and promote entrepreneurship among students.

Concluded that a coordinated skilling and TVET ecosystem is essential for driving Uganda's energy transition, ensuring sustainability, and delivering widespread socio-economic benefits. Emphasized that building a skilled, inclusive workforce will accelerate progress toward universal energy access and support the growth of a competitive, resilient renewable energy sector.

TECHNOLOGY INNOVATION, DEVELOPMENT, & DEPLOYMENT

PANEL DISCUSSION:

DRIVING UGANDA'S ENERGY TRANSITION: UNLOCKING BIOFUELS FOR TRANSPORT AND CLIMATE GOALS

Speakers:

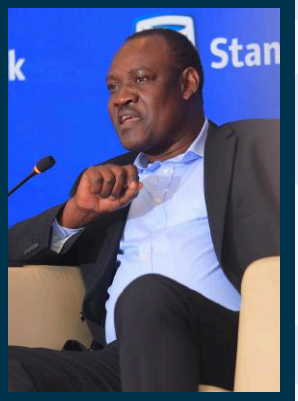
- **Dr. Litho Patricia,** Asst. Commissioner Communications & Information Management, MEMD
- **Mr. Praviin Kekal**, MD, Bukona Agro Processors Ltd
- **Mr. Hatimu Muyanja**, Energy Officer, MEMD
- **Mr. Anthony Ogalo**, General Secretary, Sustainable Energy and Petroleum Association
- **Mr. Khalid Muwembe**, Environmental Focal Point, Civil Aviation Authority
- **Eng. Oscar Olaro**, Senior Planner, National Planning Authority

PANEL DISCUSSION:

Dr. Litho Patricia

Mr. Praviin Kekal

Mr. Hatimu Muyanja



Mr. Anthony Ogalo

Mr. Khalid Muwembe

Eng. Oscar Olaro

In this session, delegates reviewed progress on blending terminals and infrastructure, noting that the Busia blender was licensed and complete, while the Malaba and Mutukula terminals were approximately 99 percent complete. Highlighted the government's establishment of an incubation period up to January 2026 to pilot and operationalize initial blending, beginning at E1, with standards already developed for pure ethanol and blended petrol grades including E1 (1 percent ethanol), E5 (5 percent), and E10 (10 percent).

Emphasized the session's key themes, including the need to attract private capital through predictable policy, public-private partnerships, guarantees, and technical support for investors. Stressed that biofuel production requires significant upfront capital, and investor confidence depends on stable and progressive regulation as well as government handholding and due diligence assistance for private firms. Proposed the creation of a multi-stakeholder steering board that would bring together private sector representatives, UN agencies, ministries, and oil marketing companies to co-design regulations, troubleshoot operational issues, and ensure policy predictability.

Discussed the importance of sustainable feedstock supply, with farmers seeking guarantees for off-take and predictable pricing for feedstocks such as cassava, millet, and maize. Noted the ongoing development of zoning frameworks and procurement planning to provide visibility and security to feedstock producers. Outlined that biofuels and sustainable energy are being mainstreamed into Uganda's National Development Plan IV (NDP4), with stakeholders encouraged to align projects and funding to this plan. Highlighted the formation of the National Bio-produce Committee, which brings together government agencies, private sector producers, and blenders to guide the programme.

Outlined that the incubation window will allow for staged blending progression based on feedstock viability, with regulatory provisions enabling increases in blending percentages as supply stabilizes. Stressed the importance of integrating blending infrastructure with the wider fuel market programme to safeguard fuel quality.

Addressed several challenges and barriers, including investment risk and policy uncertainty, the absence of clear feedstock off-take and price guarantees for farmers, the need for practical handholding and market intelligence for private firms, and the lack of robust zoning and predictive feedstock planning. Raised concerns about standards enforcement, quality assurance at blending terminals, and the risk of feedstock competing with food crops, emphasizing the need for sustainability safeguards and coordinated land-use planning. Noted that accessing public-private partnership funding or public support requires rigorous due diligence and ministry recommendations, which may exclude smaller firms. Highlighted the need to ensure blended fuels do not harm engines and are perceived as reliable to maintain consumer and oil marketing company confidence.

Recommended that the government and key agencies institutionalize a multi-stakeholder Biofuels Steering Board, provide explicit, time-bound policy commitments and fiscal levers to reassure investors, and publish clear feedstock zoning and procurement frameworks. Urged the National Planning Authority and NDP4 implementers to map biofuels interventions into NDP4 programmes and issue guidance for alignment. Called on the Ministry of Finance and the PPP unit to simplify access routes to PPP financing and create tailored financing windows or guarantee instruments for small and medium producers.

Encouraged private sector blenders and producers to prepare bankable project pipelines, demonstrate compliance with standards, and partner with aggregators to offer farmer off-take guarantees. Suggested that development partners and DFIs provide concessional finance, partial risk guarantees, technical assistance, and support for research and development of sustainable feedstocks and SAF feasibility. Stated that agricultural extension agencies should lead feedstock zoning, provide agronomic support, and design bundled packages for farmers. Recommended that standards and testing agencies fast-track enforcement mechanisms and public reporting on fuel quality. Showcased best practices such as the early development of standards for ethanol and blended grades, the formation of the National Bio-produce Committee as a coordinating body, and the integration of terminal readiness with fuel market safeguards. Highlighted the use of a defined incubation window to pilot blending, monitor impacts, and scale progressively. Described the licensing process and PPP pathways designed to ensure that only compliant, tested blenders and producers enter the market.

Outlined next steps and opportunities, including operationalizing feedstock zoning and farmer guarantees, mobilizing de-risking finance through partial risk guarantees and blended finance, beginning with E1 blending and advancing to higher grades based on monitored feedstock and market performance, and putting in place robust quality assurance and enforcement systems. Recommended developing SAF and biodiesel roadmaps with sustainability criteria, engaging farmers and aggregators through bundled interventions, and publishing a clear investor roadmap to support long-term sector development and bank financing.

PANEL DISCUSSION:

#1: FOSTERING INNOVATION AND COLLABORATION IN THE RENEWABLE ENERGY SECTOR; Access to Finance Case Studies: Experiences from Women Entrepreneurs. Women Entrepreneurs sharing Experiences on access to finance (Grant, Equity, Debt)

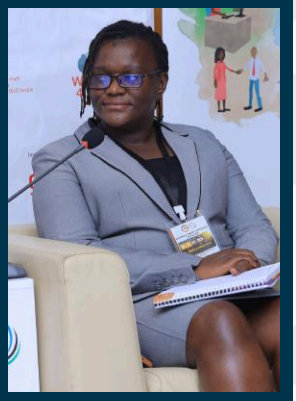
Speakers:

- **Mr. Eddie Sembatya,** Founder and Group CEO, FINDING XY
- **Ms. Harriet Nongoola**, Founder and Chief Executive Officer, Fena Solar Limited
- **Mr. Fred Opio**, Incubation and Acceleration Intervention Officer, WeWork – Green and Decent Jobs for Youth, Enabel
- **Ms. Mariah Kizza**, Program Lead, SWEDO Innovation

Mr. Eddie Sembatya

Ms. Harriet Nongoola

Mr. Fred Opio



Ms. Mariah Kizza

Disussants described Fena Solar Limited's journey, noting the company's five years of operation with a mission to empower women and youth through clean energy solutions. Stated that the company began with solar pico lanterns and expanded into standalone solar PV systems and productive use of renewable energy activities, responding to sector demands for technical skills and significant capital investment. Emphasized that customer awareness and affordability continued to present challenges, which motivated programs and development partners to address market gaps and improve last-mile financing.

Highlighted Fena Solar's active membership in the Uganda Solar Energy Association (USEA) and partnerships with GIZ and UECCC, which resulted in grant support for field logistics and technical assistance to strengthen institutional capacity and market penetration.

Outlined SWEDO Innovation's approach, noting persistent barriers to women's participation in renewable energy, including limited access to capacity building, fear of technical fields, and inadequate exposure to research and innovation.

Emphasized the need for intentional investment in training, mentorship, and confidence building. Identified SWEDO as a social enterprise and UNACC member that benefited from GIZ-supported capacity building to enhance technical and institutional capabilities.

Described SWEDO's collaboration with GIZ and CREEC in developing a solar-aided stove and participating in the BCCeC campaign to boost community awareness and adoption of clean cooking. Stated that capacity building for women remained insufficient and argued that entrepreneurship in clean energy required self-assessment, confidence, and personal transformation to positively influence others.

Noted multiple barriers for women entrepreneurs in renewable energy. Attributed slow business formation to fear, uncertainty, perceived risks, and limited sector exposure. Stated that women entrepreneurs struggled to secure affordable credit and meet collateral requirements, while gaps in technical skills, mentorship, and business development support further limited their progress.

Pointed out that broader ecosystem weaknesses, such as inadequate infrastructure and market linkages, continued to restrict opportunities for women-led enterprises. Emphasized the necessity of blended finance models and guarantee schemes to enable women to overcome constraints, access capital, and participate more meaningfully in the renewable energy sector.

Collectively, the session illustrated that while grants and donor support are vital for early-stage growth and capacity building, women entrepreneurs continue to face challenges with equity and debt due to collateral requirements, limited technical capacity, and systemic barriers within the finance ecosystem. The panelists recommended expanding capacity-building, mentorship, and tailored financial instruments such as blended finance and credit guarantees to create a more enabling environment for women-led enterprises in the clean energy sector.

ENERGY FINANCING SOLUTIONS, AND BEST INDUSTRY PRACTICE AND STRATEGY FOR RE WOMEN ENTREPRENEURS

Presentation: Mr. Lawrence Ssentongo, Managing Director, Finding XY

Presented insights on the current landscape of renewable energy financing, emphasizing that government, particularly through UECCC, is well positioned to tap into financial resources due to the availability of appropriate instruments and mechanisms. Noted that many women entrepreneurs and several financial institutions are not fully aware of these instruments or how to leverage them, and stressed the need to help women-led enterprises understand and access available financing opportunities.

Highlighted the importance of collaboration between financial institutions and platforms such as Finding XY to effectively reach women entrepreneurs across different regions. Cited the role of organizations such as GIZ and initiatives like EnDev and Results-Based Financing in expanding access to energy solutions, but pointed out that some enterprises still fail to adequately sensitize women entrepreneurs about these instruments, limiting their potential impact.

Drew on research to state that grants serve as incentives by lowering interest rates and reducing collateral burdens, which are common challenges for women seeking financing. Argued that alternative approaches are needed to make finance more accessible to women entrepreneurs, especially in rural areas where financial institutions offering renewable energy products have limited presence.

Emphasized that asset-based financing models and lease-to-own schemes can significantly improve affordability for SMEs by reducing upfront costs and interest rates. Highlighted the potential of green bonds and impact funds for mobilizing capital for women-led renewable energy enterprises. Pointed to the value of gender-smart budgeting and gender-responsive financing frameworks in enhancing women's participation as investors, suppliers, and business leaders in the sector.

From the perspective of Finding XY, identified emerging opportunities such as the WE4D program, green technology hubs, and digital innovation hubs across various regions as critical in supporting early-stage and growth-stage women-led businesses.

Concluded by outlining key takeaways: the renewable energy financing landscape is evolving from being primarily grant-based to incorporating results-based financing models and data-driven approaches; women-led enterprises are playing an increasingly central role in sector growth; financing challenges remain persistent; and innovative pathways such as PAYGO and lease-to-own continue to shape the future of inclusive energy access.

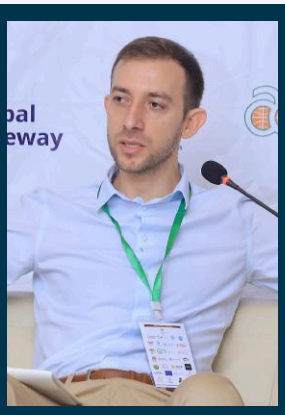
PANEL DISCUSSION:

#2: STRENGTHENING THE ENABLING ENVIRONMENT

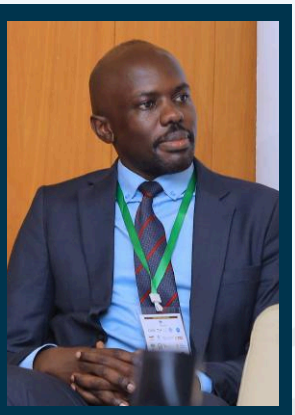
Speakers:

- **Mr. Giuseppe Gregu**, Head of Programme, REEEP
- **Mr. James Kakeeto**, Manager Business Development and Renewable Energy, Stanbic Bank
- **Ms. Merab Twinomugisha**, Head of Operations, Finding XY
- **Mr. Douglas Baguma**, Chairperson, USEA
- **Dr. Paul Nduhuura**, Head of Research and Capacity Building, NREP

PANEL DISCUSSION:

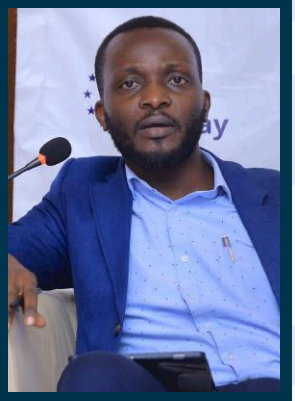


Mr. Giuseppe Gregu

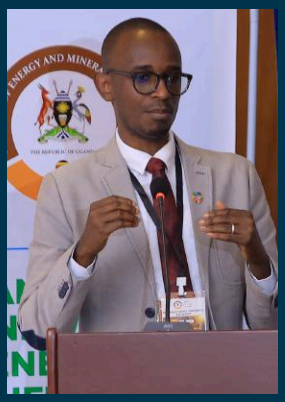


Mr. James Kakeeto

Ms. Merab Twinomugisha



Mr. Douglas Baguma



Dr. Paul Nduhuura

This session highlighted that guarantees have proven most effective in supporting renewable energy businesses by significantly reducing interest rates from commercial banks and making loans more accessible and affordable. Stressed the importance of capacity building for local financial institutions, noting that banks require a clear understanding of renewable energy business models to effectively assess and structure financing.

Noted that, despite progress, challenges remain in fully comprehending the diverse models and cash flow dynamics within the sector. Added that Results-Based Financing (RBF) provides additional security for donors and allows financing without requiring upfront capital disbursement. Emphasized that the sustainability of the market depends on active participation from all stakeholders, including donors, financial institutions, and entrepreneurs, and that commercial viability is essential for sector growth.

Outlined the financial and operational challenges faced by women entrepreneurs, particularly those who import inputs from countries such as China or India. Explained that many entrepreneurs finance imports through loans without a grace period, which creates significant cash flow pressures. Stated that entrepreneurs are often required to begin servicing debt before receiving goods, and taxes and duties can require repayment of up to 45 percent of the investment in taxes alone. Pointed out that operational and logistical expenses after goods arrive further strain cash flow.

Emphasized that supportive financing models, including structured grace periods, concessional interest rates, and tailored working capital solutions, are critical to helping women entrepreneurs manage these challenges, scale their businesses, and sustain operations in Uganda.

Discussed how financial institutions can better support renewable energy companies. Noted that many companies require working capital, but from a lender's perspective, the borrower's ability to repay is key. Stated that the sector is becoming more attractive as technology costs decline, economies of scale improve, and strong, demonstrable demand develops.

Explained that Stanbic Bank offers tailored financing, such as unsecured loans for up to six months for working capital, with longer-term financing requiring security. Described renewable energy asset financing, which funds the acquisition of solar systems for productive use, and highlighted successful financing of cooperatives in the dairy sector. Stressed that renewable energy should be seen not only as an environmental solution but also as a viable economic opportunity capable of generating revenue, creating jobs, and improving livelihoods.

In his closing remarks, Dr. Paul Nduhuura expressed appreciation to GIZ and the WE4D and Finding XY teams for convening the session and emphasized that the renewable energy sector is increasingly people-centered, especially in supporting women entrepreneurs. Highlighted success stories such as Mariah Kizza's work in clean cooking and other women-led initiatives that go beyond electrifying homes to transforming livelihoods. Concluded by noting that access to finance remains a critical challenge limiting the growth and scalability of women-led renewable energy businesses.

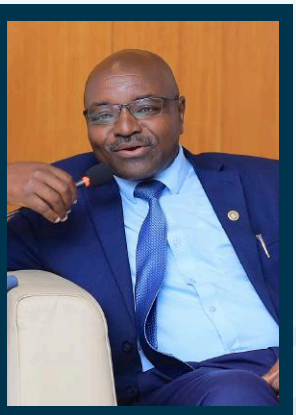
PANEL DISCUSSION:

E-MOBILITY LANDSCAPE: THE PRESENT AND FUTURE PROSPECTS

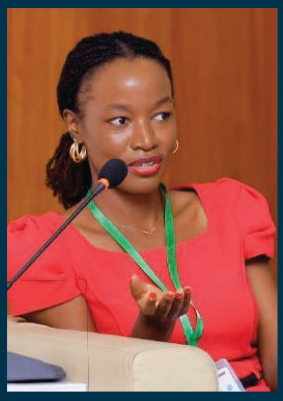
Speakers:

- **Dr. Paul Nduhuura,** Head Research and Capacity Building, NREP
- **Eng. Protaze Tibyakinura**, UEDCL
- **Ms. Jackie Bazimudde**, Zembo & Uganda E-Mobility Association
- **Mr. Geoffrey Mutabazi**, CEO, Karaa
- **Mr. Sydney Ngobi Nyiiro**, GOGO Electric
- **Mr. Bruce Mucuuguzi**, Country Head, Spiro Uganda

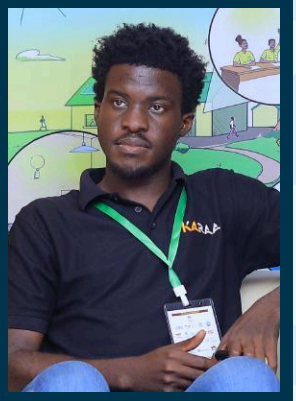
Dr. Paul Nduhuura



Eng. Protaze Tibyakinura

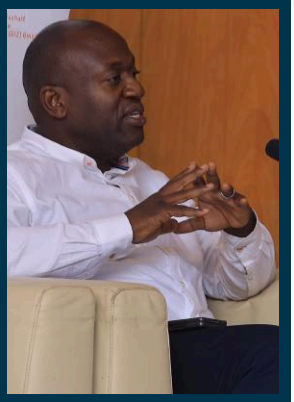


Ms. Jackie Bazimudde



Mr. Geoffrey Mutabazi

Mr. Sydney Ngobi Nyiiro



Mr. Bruce Mucuuguzi

This session described the Karaa business model designed to accelerate the adoption of electric bicycles, emphasizing that bicycles support productive livelihoods in sectors such as food delivery and retail distribution, offering affordable and adaptable mobility solutions. Noted that rural areas are especially receptive to bicycle adoption because of minimal traffic congestion and established riding paths, which also support the movement of agricultural produce.

Highlighted the strategic shift toward establishing widespread charging infrastructure. Explained that the company is deploying charging stations in locations where rider demand is already high and working closely with UEDCL to align infrastructure rollout with electricity distribution improvements, including transformer placement and network upgrades.

Indicated that business performance in the e-bike sector is promising, with adoption growing across the country. Noted the availability of data on e-bike fleets and charging activities but observed that this information is not yet centralized into a unified national system that could underpin planning, innovation, and investment.

Described a comprehensive five-year investment plan to ensure that Uganda's electricity distribution network remains reliable, safe, and sustainable for both current and emerging users.

Emphasized that electricity is a critical enabler for industrial and technological innovation, including e-mobility. Pointed out that Uganda's current surplus in electricity generation will diminish as more advanced technologies and high-demand innovations, such as e-mobility, are rolled out.

Shared that Spiro has operated in Uganda for 18 months, initially focusing on adapting their products to Uganda's terrain. He reported that Spiro has established assembly and manufacturing lines with a capacity of up to 350 units per day and has deployed over 15,000 e-bikes within the last 18 months. Highlighted investments in skills development and local technical capacity, citing partnerships with Kyambogo University's Faculty of Engineering to train Ugandan professionals in e-mobility manufacturing and maintenance.

Identified several challenges, including the absence of centralized data on e-bikes and charging stations, insufficient voltage in some regions, and limited local component suppliers that constrain large-scale assembly and increase operational costs. Also noted reliance on imports and the need for improved supply chain reliability. Showcased best practices and innovations, such as market-driven adoption models positioning e-bikes as income-generating assets, strategic deployment of charging stations coordinated with grid expansion, sector coordination for data sharing and standards harmonization, and local manufacturing and skills development partnerships with universities.

Opportunities identified included strengthening electricity as an enabler of innovation, expanding charging infrastructure, increasing localized manufacturing and assembly, investing in capacity building, promoting market growth in rural areas, and developing data consolidation and digital platforms. Next steps proposed by the panel included establishing a centralized e-mobility data framework, coordinating infrastructure rollout with electricity distribution planning, enhancing local manufacturing capacity, supporting technical training and certification programs, piloting rural productive use mobility programs, and developing supportive policy and financing models to drive sector growth.

LEAVING NO ONE BEHIND

PANEL DISCUSSION:

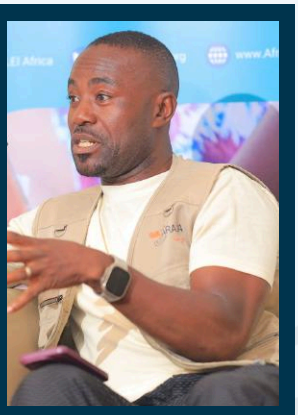
URBAN AUTHORITY SYMPOSIUM ON CLEAN COOKING AND ENERGY ACCESS; Data-Driven Insights – Understanding Household Access to Cooking Energy in Informal Kampala

Speakers:

- **Mr. David Sheridan,** Senior Specialist, Sustainable Energy, ICLEI Africa
- **Mr. Idris Lubega**, National Slum Dwellers Federation of Uganda
- **Ms. Juliet Nalukenge**, Data Collector, National Slum Dwellers Federation of Uganda
- **Mr. Francisco Mawejje**, Program Manager, Community-Led Data, ACTogether Uganda

PANEL DISCUSSION:

Mr. David Sheridan



Mr. Idris Lubega

Ms. Juliet Nalukenge

Mr. Francisco Mawejje

Presented evidence from community-driven data on household access to cooking energy in informal settlements of Greater Kampala. Survey settlements such as Nansana East, Nakulabye, Banda, and Kirinya to uncover how informality, insecure tenure, gender roles, and limited infrastructure drive household choices in cooking fuels.

Demonstrated the importance of settlement-level data for capturing lived realities that national statistics often overlook, and frame clean cooking access as an intersecting challenge of public health, gender, livelihoods, and governance that requires context-sensitive action. Positioned community-led data collection as essential for influencing policy, guiding private investment, and ensuring inclusive urban energy transitions.

Highlighted that approximately 1.6 million people lived informally in the surveyed settlements, with most households being tenants facing complex arrangements of land and structure ownership. Revealed that only 6% of households used modern cooking solutions such as LPG or electricity, while over 90% relied on biomass, mirroring national patterns and reinforcing the need for focused interventions.

Identified tenure insecurity and landlord control over utilities as key barriers that prevented tenants from adopting electric cooking or upgrading infrastructure. Showed that women, as primary managers of cooking fuel, faced economic constraints and had limited agency, and that lower female education correlated with continued use of traditional fuels.

Reported that only 41% of households had individual electricity meters, forcing many to depend on shared or informal wiring, which restricted appliance choice and reliability. Documented how perceptions of clean cooking as expensive, risky, or unsuited to traditional foods discouraged adoption, while fuel stacking persisted as households balanced cost, convenience, and reliability. Emphasized the value of community-driven data for informing targeted subsidy design, infrastructure planning, and more effective private-sector engagement, and urged policies that addressed informality directly rather than treating it as a temporary condition. Concluded that addressing the interlinked factors of informality, gender, tenure, and infrastructure was vital for advancing clean cooking access and improving health, livelihoods, and equity in informal Kampala.

PANEL DISCUSSION:

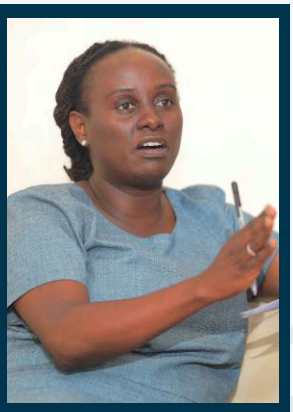
INTER-MINISTERIAL DIALOGUE ON EMBEDDING CLEAN COOKING IN HOUSING AND URBAN DEVELOPMENT POLICIES

Speakers:

- **Mr. David Sheridan,** Senior Specialist, Sustainable Energy, ICLEI Africa
- **Ms. Martha Mugarura**, Assistant Commissioner, Urban Planning, MLHUD
- **Dr. Ivan Kimuli**, Head, Air Pollution Department, Makerere University Lung Institute
- **Mr. Patrick Byakagaba**, Department of Environmental Management, Makerere University
- **Mr. Lazarus Oketch**, Clean Cooking Officer, MEMD

PANEL DISCUSSION:

Mr. David Sheridan



Ms. Martha Mugarura

Dr. Ivan Kimuli

Mr. Patrick Byakagaba

Mr. Lazarus Oketch

Examined how urban planning, housing, health, and energy policies could better integrate clean cooking, especially in informal settlements where compliance-based approaches had failed. Emphasized the need to decouple access to clean energy from formal land tenure and housing standards, recognizing clean cooking as a basic urban service rather than a privilege of formality.

Highlighted new policy shifts, including the review of the National Urban Policy, the creation of the Clean Cooking Unit at MEMD, and initiatives to strengthen inter-ministerial coordination. Underscored health evidence linking traditional fuels to respiratory illness and economic losses, reinforcing the urgency of mainstreaming clean cooking.

Reframed clean cooking as a service by advocating for energy access driven by household need instead of compliance with formal housing standards. Stressed the separation of energy access from land tenure, and proposed designating informal settlements as special planning or intervention zones to allow flexible infrastructure and tailored regulations for clean energy.

Identified major policy gaps, noting that current urban, housing, and planning policies struggled to address informality. Demonstrated opportunities through ongoing policy review to mainstream clean cooking. Emphasized community participation as essential for mapping energy needs, cooking patterns, and demand, and recognized informal settlement residents as active partners in the process.

Reported that MEMD established an inter-ministerial clean cooking committee involving health, lands, trade, and local government. Called for stronger coordination to align energy access, urban planning, and health outcomes. Addressed technology suitability by noting that housing density and limited space restricted some clean cooking solutions, while modular and community-based approaches showed promise.

Documented public health research linking indoor air pollution to respiratory disease, and advocated for modelling the economic costs of inaction. Stressed that transition strategies must avoid disadvantaging low-income households, and highlighted affordability and cultural suitability as critical to success.

Concluded with recommendations to decouple clean energy access from land tenure, designate informal settlements as priority intervention zones, strengthen inter-ministerial and local government coordination, integrate public health data in policy decisions, and promote low-cost, culturally appropriate technologies and phased transition pathways.

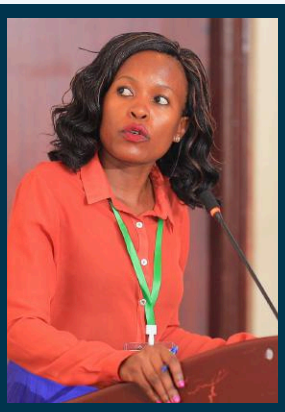
PANEL DISCUSSION:

DATA-DRIVEN INSIGHTS – UNDERSTANDING HOUSEHOLD ACCESS TO COOKING ENERGY IN INFORMAL KAMPALA

Speakers:

- **Ms. Susan Naddamba,** ENACTUS Coordinator, ICLEI Africa
- **Eng. Herbert Abigaba**, Senior Energy Officer, MEMD
- **Ms. Rhoda Gwayinga**, Supervisor Risk Management, KCCA
- **Ms. Edidah Busingye**, Principal Urban Officer, Local Government
- **Mr. John Michael Oloit**, Supervisor Community Development, KCCA
- **Mr. Brian Matovu**, Environmental Officer, Nansana Municipal Council

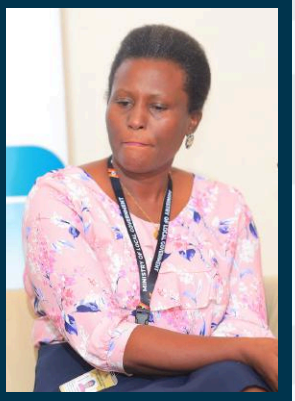
PANEL DISCUSSION:



Ms. Susan Naddamba

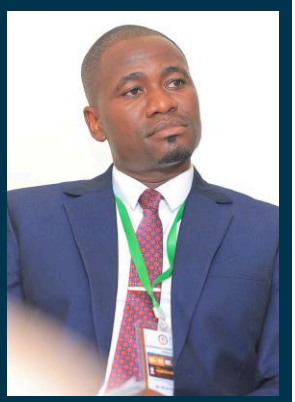
Eng. Herbert Abigaba

Ms. Rhoda Gwayinga



Ms. Edidah Busingye

Mr. John Michael Oloit



Mr. Brian Matovu

This session highlighted the strong correlation between women's education levels, household energy preferences, and the likelihood of adopting clean cooking technologies. Reported that women remain the primary decision-makers for cooking but often lack autonomy to select modern energy options due to economic and social constraints. Noted that limited access to higher education for women directly influences awareness and adoption of alternative cooking solutions. Emphasized that gender-responsive interventions must address socio-cultural barriers as well as affordability.

Outlined a market segmentation framework based on observable household assets, including refrigerators, flooring type, and household size. Explained that this approach enables clean cooking companies to estimate purchasing power without intrusive surveys and supports the development of tiered product offerings for low-income communities. Identified consumer groups suitable for pay-as-you-go LPG, improved biomass stoves, or electric pressure cookers (EPCs).

Described behavioral patterns such as the persistence of fuel stacking, driven by reliability concerns with electricity, high upfront costs of LPG and electric appliances, and cultural preferences for charcoal cooking. Stated that these factors lead households to maintain multiple cooking systems even after adopting cleaner alternatives.

Addressed the influence of landlords and structural barriers, noting that landlords often determine access to electricity and restrict high-load appliances, affecting tenants' ability to use modern cooking technologies. Cited limited metering options and a lack of incentives for landlords to upgrade electrical infrastructure as additional barriers.

Discussed the continued dominance of informal fuel markets, with construction waste and timber offcuts contributing to the availability of cheap charcoal and firewood. Stressed that this dynamic sustains informal markets that compete with cleaner alternatives and called for integrated approaches involving city planning, waste management, and environmental conservation.

Featured a GIZ case study on mainstreaming energy functions into local government, reporting that energy focal persons have been designated across 33 districts. Indicated that local capacity for data collection and clean cooking planning has improved, and coordination across technical departments has been strengthened.
Highlighted local leadership and community engagement initiatives in Kampala, including the integration of clean cooking within climate action plans, support for women-led briquette businesses, and leveraging youth networks under the Bloomberg Youth Climate Action Fund. Demonstrated the value of decentralized leadership in scaling clean energy transitions.

Presented key statistics and case studies, noting that women with lower education levels are twice as likely to rely exclusively on charcoal. Stated that charcoal costing UGX 2,500–3,000 continues to dominate informal settlements. Traced a typical fuel stacking trajectory from three-stone fires to metallic and ceramic charcoal stoves, then LPG, and finally to electric pressure cookers. Observed that EPC users are predominantly households that have already adopted LPG, indicating a stepwise transition in fuel use. Reported that the 33-district GIZ pilot revealed improved planning outcomes when energy is embedded within local government structures.

Identified challenges such as deep-rooted behavioral patterns sustaining charcoal reliance, limited financial capacity among informal settlement households, weak coordination across government levels, insufficient data for neighborhood-specific interventions, and unreliable electricity infrastructure.

Recommended scaling up community energy literacy programs targeting women and youth, developing landlord-targeted incentives for building electrical upgrades, encouraging private-sector adoption of asset-based market segmentation, strengthening partnerships with community-based organizations for last-mile distribution, and integrating clean cooking into local government budgeting and planning.

SESSION REMARKS:

MAINSTREAMING CLEAN COOKING IN URBAN GOVERNANCE – LEADERSHIP, PARTNERSHIPS, AND PATHWAYS FOR SCALE

Speakers:

- **Dr. Brian E. Isabirye,** Commissioner ERD, MEMD
- **His Worship Erias Lukwago**, Lord Mayor of Kampala
- **Ms. Regina Bakitte**, Mayor, Nansana Municipality
- **Mr. Steven Hunt**, Senior Energy Innovation Adviser, Foreign, Commonwealth & Development Office
- **Mr. Ben Odong**, Head, ICLEI Uganda Clean Cooking Centre

PANEL DISCUSSION:

Dr. Brian E. Isabirye

His Worship Erias Lukwago

Ms. Regina Bakitte

Mr. Steven Hunt

Mr. Ben Odong

Discussed the integration of energy access goals into urban development strategies and emphasized the importance of collaboration among ministries responsible for energy, urban planning, and metropolitan affairs. Recognized that cities are central actors in achieving national energy targets and that structural integration is necessary for effective delivery.

Highlighted systemic gaps including the lack of energy focal points in urban authorities, limited technical capacity to integrate energy issues in urban planning, and fragmented decision-making processes across departments. Demonstrated, through the examples of Kampala Capital City Authority (KCCA) and Nansana Municipality, practical innovations such as gender-mainstreaming in clean cooking promotion, community outreach systems for awareness campaigns, and the integration of clean cooking targets into climate action planning.

Announced national innovations with the establishment of the Fumba Hub, a digital one-stop platform for clean cooking products, service providers, and data, as well as the creation of a national clean cooking data centre to centralize information for planning and research. Emphasized the need for clear municipal guidance for door-to-door marketing of clean cooking products, opportunities in carbon markets and innovative financing, and the strengthening of quality assurance and user training standards.

Identified challenges such as weak enforcement of urban energy regulations, limited funding for municipal clean cooking initiatives, outdated grid systems that constrain e-cooking expansion, fragmented coordination among ministries, and the lack of dedicated energy governance structures at the local level.

Recommended that the national government embed energy units in all 176 local governments, accelerate the rollout of the clean cooking data hub, and standardize reporting frameworks for municipal clean cooking initiatives. Urged local governments to pass and enforce bylaws promoting clean cooking adoption, integrate clean cooking into physical development plans, and strengthen partnerships with women's groups and youth innovators.

Suggested that the private sector use Fumba Hub data to design targeted products, scale models such as pay-as-you-go LPG and electric pressure cooker financing, and partner with municipalities for market expansion. Called on development partners to support leadership training for local government officers, invest in demonstration projects and technology pilots, and facilitate multistakeholder platforms for knowledge exchange.

Highlighted best practices and innovations including the deployment of local energy focal persons (GIZ pilot), digital access tools such as Fumba Hub, women-led briquette enterprises, youth-led clean energy innovations, and door-to-door clean cooking distribution partnerships. Outlined opportunities for expanding energy mainstreaming from 33 to all 176 districts, strengthening inter-ministerial coordination, investing in innovation financing for women-owned clean cooking enterprises, leveraging carbon finance to scale up modern cooking adoption, and expanding digital tools for awareness and monitoring.

PANEL DISCUSSION:

OVERCOMING BARRIERS: LOCAL GOVERNMENTS' ROLE IN PRODUCTIVE USE OF ENERGY AND CLEAN COOKING ADVANCEMENT

Speakers:

- **Ms. Jackie Nandawula,** Policy Advisor and Energy Investment, EnDev GIZ
- **Mr. Mwaka Agoba**, Programme Manager, UECCC
- **Ms. Sarah Babirye**, Projects Coordinator, UNACC
- **Mr. Patrick Drama**, District Energy Focal Person, Moyo District Local Government

PANEL DISCUSSION:

Ms. Jackie Nandawula

Mr. Mwaka Agoba

Ms. Sarah Babirye

Mr. Patrick Drama

Stressed that stakeholders identified awareness creation, behavioral change campaigns, and live clean cooking demonstrations as essential for addressing cultural misconceptions about new technologies. Detailed the establishment of five regional clean cooking hubs in Jinja, Mbale, Lira, Mbarara, and the Central Region to decentralize distribution and access to clean cooking technologies. Noted over 50 districts have been reached by demonstrations, talk shows, and exhibitions, with more than 50 local engagements held in partnership with GIZ, FAO, and NREP.

Identified persistent challenges, including high technology costs, poor infrastructure, lack of regulatory standards enforcement, and fragmented coordination among ministries, local governments, and private sector actors.

Pointed to limited technical capacity at district and sub-county levels, lack of job structures for energy officers, weak policy enforcement, inadequate standards for clean cooking appliances, poor transport infrastructure, limited local repair technicians, fragmented data, and persistent cultural misconceptions.

Recommended that the Ministry of Energy and Mineral Development fully decentralize the energy function and create formal staffing structures for energy focal persons in all districts. Urged the Ministry of Finance and URA to introduce tax exemptions or holidays on clean cooking and renewable energy technologies. Advised local governments to integrate energy planning into District Development Plans and strengthen district energy committees.

Encouraged the private sector to establish regional clean cooking hubs and invest in after-sales service networks for rural users, while development partners were called upon to continue financing RBF programs, expand capacity building for artisans, and scale awareness campaigns. Suggested that civil society and media support continuous public education and myth-busting campaigns around clean cooking safety and benefits.

Highlighted best practices such as the establishment of district energy committees, the UECCC's combined supply-side and demand-side subsidies, the creation of regional clean cooking hubs, live behavior change demonstrations, and multi-stakeholder partnerships for district-level awareness and market activation.

Outlined opportunities and next steps, including scaling up the energy decentralization framework nationwide, strengthening coordination through the National Clean Cooking Unit, expanding financing for SMEs and local manufacturers, institutionalizing clean cooking and productive energy use in national and district budgets, and developing robust enforcement mechanisms for product standards and local manufacturing certification.

PANEL DISCUSSION:

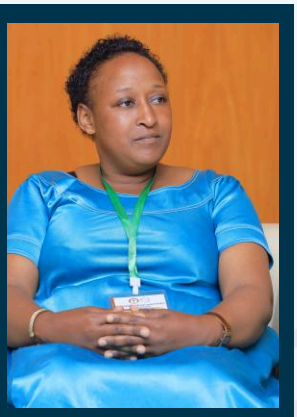
END-USER VOICES: LEAVING NO ONE BEHIND IN THE CLEAN COOKING CAMPAIGN

Speakers:

- **Ms. Mariah Kizza,** Head of Finance and Corporate Affairs, NREP
- **Ms. Annet Kwarija**, Treasurer, KCCL
- **Ms. Deborah Aturinda**, Chairperson, KCCL
- **Ms. Barbra Jane Nantongo**, Business Coach, SINA
- **Mr. Fred Kagoda**, Sales Associate, Kendeza
- **Ms. Kiconco Shallon**, Member, KCCL

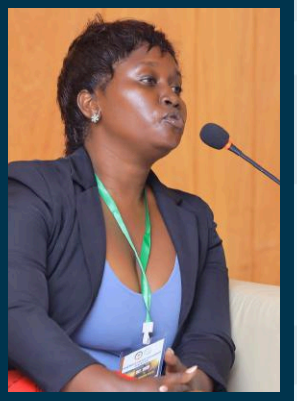
PANEL DISCUSSION:

Ms. Mariah Kizza



Ms. Annet Kwarija

Ms. Deborah Aturinda



Ms. Barbra Jane Nantongo

Mr. Fred Kagoda

Ms. Kiconco Shallon

This session centered on the need to ensure that Uganda's clean cooking transition is inclusive and accessible to all, especially low-income and marginalized communities. Emphasized the need to make clean cooking technologies as accessible as traditional fuels like charcoal and firewood. Highlighted that collaboration among government, private sector, and community structures is critical to expanding reach and sustaining adoption.

Stressed the importance of affordability, advocating for financing schemes, subsidies, and flexible payment options to help low-income households transition to modern cooking appliances. Underscored that changing mindsets and building trust among end-users remains an ongoing priority, with community outreach, social media, and radio identified as effective channels for awareness creation and user engagement.

Noted that formal registration of community-based associations, such as the Kabale Clean Cooking Ladies, provides a pathway to engage district and government officials and strengthens local ownership of clean cooking initiatives. Emphasized the value of listening to end-user voices and leveraging digital tools and social media platforms to collect feedback and improve program design.

Panelists highlighted the power of digital outreach, referencing a TikTok awareness campaign that reached over 900,000 viewers, and shared field experiences showing that early adopters and brand ambassadors can influence their peers and accelerate adoption through trust-based networks. Addressed user skepticism about new technologies, such as concerns over the safety of electric pressure cookers, and reinforced that mindset change requires clear information and practical demonstrations.

Discussed the need for reliable electricity access to support electric cooking adoption, calling for closer collaboration between clean cooking advocates and government energy agencies to expand rural electrification. Stressed that infrastructure development must go hand in hand with awareness and behavior change campaigns to achieve sustainable results.

Identified key challenges such as persistent skepticism toward new technologies, limited electricity access in rural areas, high upfront costs, insufficient last-mile distribution outlets, and weak coordination between government and local implementers. Recommended strengthening rural electrification programs, integrating clean cooking initiatives into district development plans, and supporting flexible financing mechanisms like installment and pay-as-you-go models.

Encouraged private sector actors to partner with local retailers and leverage existing distribution networks to improve accessibility. Called on civil society and community groups to drive mindset-change campaigns through schools, churches, and radio, and on media and technology actors to use digital storytelling to reach broader audiences and gather user feedback.

Concluded that development partners play a vital role in funding capacity-building, supporting regional innovation hubs, and scaling community outreach. Collectively, these coordinated, multi-sectoral actions are essential to ensure that no one is left behind in Uganda's clean cooking movement and to achieve truly inclusive energy access.

PANEL DISCUSSION:

TEENS' VOICES: ENGAGING GEN-ZS IN ENERGY TRANSITION DIALOGUE

Speakers:

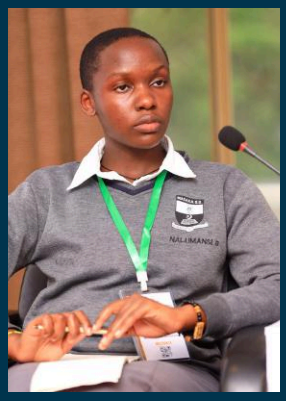
- **Mr. Mark Tusiime,** Head Knowledge Management, NREP
- **Ms. Best Kaitesi**, Student, Gayaza High School
- **Mr. Isaac Musinguzi**, Student, Namilyango College
- **Ms. Bernadette Nalumansi**, Student, Masaka SS
- **Mr. Edwin Ariho**, Student, Makerere College School
- **Mr. Andrew Ahabyoona**, Student, St. Henry's College Kitovu

PANEL DISCUSSION:

Mr. Mark Tusiime

Ms. Best Kaitesi

Mr. Isaac Musinguzi



Ms. Bernadette Nalumansi

Mr. Edwin Ariho

Mr. Andrew Ahabyona

Emphasized the importance of meaningful youth involvement in Uganda's energy transition, noting that engaging young people in renewable energy dialogues is essential for generating actionable insights and driving sustainable change. Clarified the concept of energy transition as the gradual shift from carbon-intensive sources to cleaner alternatives like solar and wind, aimed at reducing environmental impacts and safeguarding resources for future generations.

Highlighted the role of personal responsibility in environmental stewardship. Youth-led actions such as community sensitization, clean-up campaigns, recycling initiatives, tree planting, and advocacy for appropriate clean technologies were identified as practical ways that individuals can contribute to planetary protection. Underscored the power of collective action, with participants noting that everyday choices, like using public transport or joining environmental clubs, have a significant cumulative impact on achieving energy transition goals.

Identified a critical gap in communication, observing that most climate change and energy transition information is often insufficiently engaging or relatable to young people, limiting their awareness, interest, and active participation. Noted that Gen Z prefers short, visual digital content such as TikTok and YouTube Shorts, and that school-based environmental clubs provide practical entry points for youth-led climate action. Showcased youth innovations including ethanol-based and hydroponic technologies as scalable solutions.

Discussed significant challenges in adopting new energy technologies, with resistance stemming from high costs, limited accessibility, and low levels of awareness.

Recognized that some youth in Uganda perceive climate change as irrelevant or even a “hoax,” influenced by global political narratives, which reduces meaningful youth engagement. Highlighted that climate information is often presented in inaccessible, technical formats, making it difficult for young people to relate or take action.

Explored economic trade-offs, noting that in developing countries like Uganda, the urgent need for economic growth and industrialization can take precedence over climate action, creating tension between development and sustainability. Pointed out that limited youth inclusion in policy-making processes results in policies that fail to reflect youth perspectives or address community realities. Socioeconomic constraints further limit outreach and participation, particularly in rural and low-income areas lacking access to digital platforms or affordable clean energy technologies.

Raised concerns about the motivations of some youth in climate initiatives, with engagement sometimes driven more by personal benefits than commitment to genuine impact. Identified the high cost of emerging clean energy technologies, such as hydrogen-based cooking, as a barrier to adoption and a source of skepticism.
Recommended integrating youth voices into policy development, supporting affordable clean energy solutions, and expanding school curricula to include practical clean energy skills.

Called for the establishment of climate and clean energy clubs, hands-on demonstrations, and social media challenges to drive engagement. Urged civil society and NGOs to support youth-led innovations with funding and mentorship and advocated for the media and influencers to produce youth-friendly content. Suggested that the private sector develop affordable clean energy products and that local governments integrate energy in city planning and establish clean cooking hubs.

Concluded that expanding social media engagement, funding youth-led innovations, collaborating with grassroots communities, and advocating for inclusive policy reform are essential next steps to empower Gen Z as leaders in Uganda’s clean energy transition.

OFFICIAL CLOSING CEREMONY

H.E. Matthias Schauer, Ambassador of Germany to Uganda

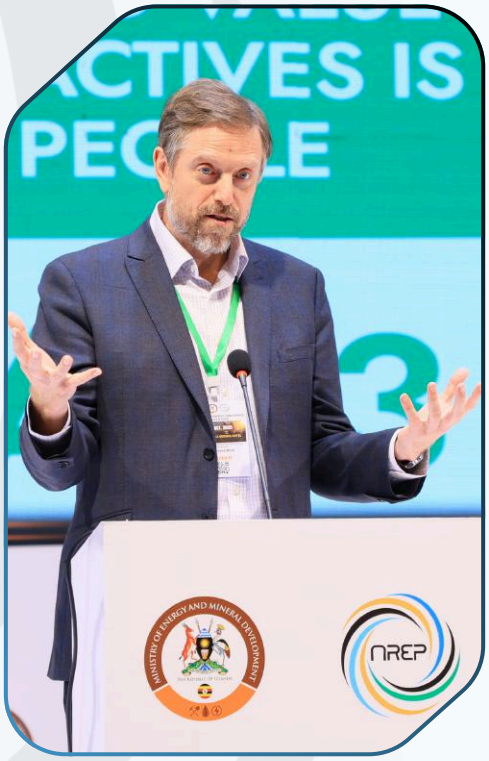
Expressed what a great honor it was to deliver closing remarks at the Renewable Energy Conference 2025.
Shared an appreciation for the conference theme, explaining that without energy, it is very hard to establish livelihoods, and without conservation, the livelihoods will be destroyed again sooner or later, underscoring the need to strike a balance between the two.
Highlighted Germany's more than 60 years of support to the government of Uganda through GIZ, which has enabled the development of renewable energy and energy efficiency programs and infrastructure, strengthened local capacity, and promoted innovative financing mechanisms to expand access to clean energy. Demonstrated a shared vision to unlock Uganda's potential and ensure the benefits of energy transformation reach all communities, including remote and refugee-hosting areas.

Expressed gratitude to the Ministry of Energy and Mineral Development, led by Hon. Can. Dr. Ruth Nankabirwa Ssentamu, for shaping policies, driving reforms, and advocating for a sustainable and inclusive energy sector in Uganda. Noted that most of Uganda's energy sources are clean, unlike many countries, and emphasized that building on this success requires integrating clean energy into national policies across all sectors, promoting private sector engagement to scale up access, making people understand that energy means business, and fostering local ownership of energy.

Reaffirmed Germany's commitment to supporting Uganda in several focus areas: investing in vocational training and skills development for renewable energy, scaling up innovative financing such as Results-Based Financing to unlock private sector investment, and promoting productive use of energy (PUE), including supporting applications like agro-processing. Emphasized the goal of ensuring no community is left behind on Uganda's energy transition journey.

Concluded by congratulating all participants and organizers for the successful Renewable Energy Conference 2025 and Expo.

Mr. Steven Hunt, Senior Energy Innovation Advisor, Foreign Commonwealth and Development Office (FCDO



Mr. Hunt opened his remarks by expressing gratitude for the warm welcome he received in Uganda, sharing that although it was his first visit, the many friendly faces made it feel familiar. Noted his enjoyment of the numerous panel discussions over the past three days and thanked everyone for making him feel at home.

Highlighted the momentum and progress in Uganda's energy sector, from generation and transmission to the dynamic enterprises and businesses in the marketplace. Recognized the extraordinary leadership coming from the Ministry, local governments, mayors, and the private sector, emphasizing how this makes a significant difference. Commended the Government of Uganda for its ambitious targets and commitment to collaboration, efficiency, and system improvement.

Emphasized the sense of genuine partnership, referencing the GET FiT programme and its positive impact on generation capacity, and expressed optimism for even closer cooperation in the future.

Spoke about the comprehensive approach adopted by Uganda, both within the EAC and more broadly, noting that while alignment could be improved, the tools and frameworks are in place. Referenced a favorite Ugandan expression, "Tugenda n'abagenda" (we go with those who are moving), underscoring the value of working together and building on existing momentum to reach shared objectives. Expressed excitement about Uganda's potential for exponential growth in energy access, suggesting that the country could become a leader regionally and even globally in the clean energy transition.

Focused particularly on clean cooking, discussing the momentum around electric cooking and the Modern Energy Cooking Services (MECS) program. Recounted an inspirational visit to Kisenyi, hearing directly from women who have adopted electric pressure cookers, and shared pride in the clean cooking partnerships and broader energy sector collaborations. As the UK lead for the Transforming Energy Access programme, highlighted the contribution to empowering Ugandan partners in areas like e-mobility, productive use of energy, and electric cooking, and noted the growing connections with the finance sector.

Closed by thanking the Ministry and NREP for organizing the conference, expressing hope to return, and reaffirmed the continued partnership and support of the UK and its partners for Uganda's energy transformation.

H.E. Jan Sadek, Ambassador of the EU to Uganda

Opened his remarks by spotlighting Uganda's vast potential, with its rich hydro, solar, and geothermal resources and its capacity to become a green energy powerhouse in the region. Emphasized that Uganda is a strategic EU partner in the global energy transition, with the EU resolute in supporting Uganda to unlock this potential through joint efforts.

Highlighted that the European Union is delivering high-quality results through the Global Gateway, Europe's offer for sustainable and connected development. Shared that at the recent Global Gateway Forum in Brussels, attended by Hon. Minister Ruth Nankabirwa, the EU surpassed its investment target, reaching 306 billion euros (about 1,200 trillion Ugandan shillings), underscoring the EU's commitment as a credible and predictable partner for a just global future based on shared values of peace and inclusive, climate-neutral development.

Outlined EU-backed Global Gateway investments in Uganda, from large-scale infrastructure projects like rehabilitation of the Nalubaale and Kiira hydropower plants and regional interconnection projects, to small-scale decentralized solutions such as mini-grids, subsidized connections for vulnerable groups, and the Uganda–South Sudan interconnector. Shared EU support for e-mobility, with examples like Gogo Electric at the Expo, and envisioned an energy system that is both clean and inclusive, leaving no one behind.

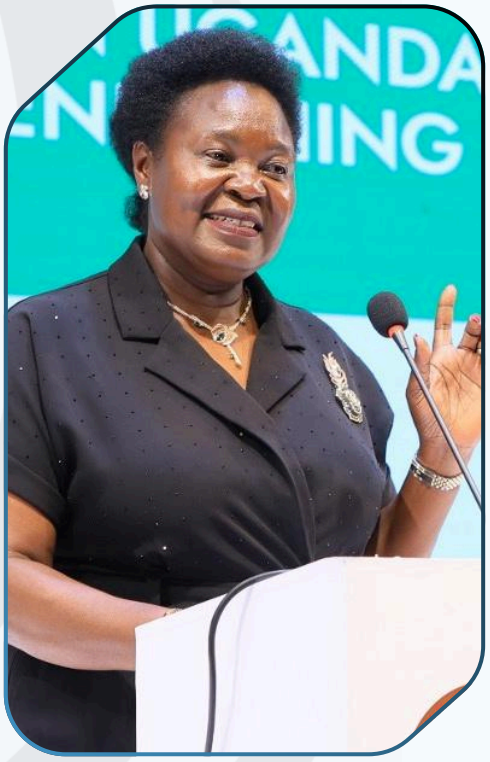
Recognized the roles played by the Electricity Regulatory Authority, the National Renewable Energy Platform, and the Uganda National Bureau of Standards in setting global benchmarks. Emphasized that bankability, transparency, and a reliable regulatory framework are essential for attracting long-term investment and delivering affordable power. Underscored the EU's commitment to decentralized renewable energy solutions such as mini-grids and solar home systems to achieve universal energy access, empower SMEs, create jobs, and address poverty and climate vulnerability.

Reported that conference discussions clarified concrete steps to accelerate mini-grid development, and announced that Team Europe will celebrate cooperation with Uganda during Green Diplomacy Week, showcasing innovation and impact.

Highlighted the existential and transformative challenge of clean cooking in Uganda, stressing the need for coordinated, accelerated investment to phase out unsustainable use of firewood and charcoal. Affirmed the EU's commitment to contributing support to this effort.

Concluded by calling for a move from dialogue to action, expressing confidence that Uganda will continue to lead and that Team Europe stands ready to help turn conference insights into tangible results. Extended gratitude to Hon. Minister Nankabirwa and participants, stating that the Renewable Energy Conference 2025 is a stepping stone toward deeper partnerships and mobilization of resources to achieve shared goals.

Hon. Can. Dr. Ruth Nankabirwa Ssentamu, Minister of Energy and Mineral Development



Hon. Dr. Can. Ruth Nankabirwa Ssentamu delivered the closing remarks, expressing deep appreciation to all participants, exhibitors, and development partners for making REC25 & Expo a success. Observed that the conference fostered a collaborative atmosphere, allowing for the exchange of ideas and suggestions that benefit Uganda's energy sector.

Emphasized that discussions during the conference advanced shared understanding of energy's role in transforming livelihoods, promoting conservation, and ensuring equity. Noted that renewable energy is not only about powering homes and industry, but also about improving lives and protecting the environment. Reflected on the collective assessment of the SEDP and SEIDP under NDPIII, highlighting that the lessons learned will accelerate implementation of NDPIV.

Stated a commitment to exceeding targets in the next programme review and acknowledged the importance of patience and resilience in the energy and extractives sector. Celebrated major achievements, including the commissioning of the Karuma 600MW hydropower plant, the largest of its kind on the continent, and progress on the Ayago Hydropower Plant, which are vital for national grid stability and solar integration. Thanked the World Bank for supporting the EASP, which enables one million free electricity connections by 2027, and stressed the urgent need to make electricity connections affordable for all Ugandans.

Recognized reforms in the mineral sector, such as the commissioning of Uganda's largest gold mine, operationalization of the tin smelter, revival of Kilembe copper mines, and ongoing resource surveys. Announced Uganda's first oil is expected in 2026, with infrastructure projects like EACOP and refinery developments progressing well.

Applauded innovations showcased at the expo and the involvement of cultural and religious leaders in promoting clean energy, noting that these collaborations advance both social and technological transformation. Urged that as Uganda enters NDPIV, energy security, affordability, and sustainability must be prioritized, and called on all Ugandans to engage in discussions about the urgency of these issues. Reiterated the need to fast-track financing, encourage private sector investment, promote policy coherence, and strengthen local content and inclusive energy access, especially for rural and vulnerable communities.

Expressed gratitude to the Permanent Secretary, development partners, diplomatic missions, exhibitors, sector agencies, and the organizing committee for their contributions to the event's success. Recognized the media's role in tracking and disseminating conference discussions.

Concluded by encouraging all participants to leave the conference inspired to contribute to Uganda's energy transformation, stating that actual socioeconomic progress is reflected in higher literacy, life expectancy, and job creation. Officially declared REC25 & Expo closed, expressing hope for even greater milestones in Uganda's clean energy journey at the next edition of the Annual Renewable Energy Conference and Expo.


RENEWABLE CONFERENCE
&EXPO 2025
THEME: Transforming Energy Systems For Livelihoods
& Conservation

EXPO

Exhibitor Overview and Categorization

The expo featured participation from 94 companies and institutions, representing a broad spectrum of the renewable energy sector. Exhibitors included organizations specializing in clean cooking solutions, solar energy technologies, ethanol fuel production, and innovative energy storage systems, among others. This diversity underscored the event's role as a comprehensive platform for showcasing advancements and fostering collaboration across the industry.

Category	Exhibitors	Products Exhibited
Clean Cooking Technologies	• Arem Clean Energy Ltd • Green Flame Solutions • Order Plus Uganda • Good Briquettes Initiative • Best of Waste • EcoSafi • Kendeza • Wana Energy Solutions • UP Energy • AES • Smart Kitchen Solution • Eco Stove • Bold Energy and Clean Cooking Solutions Moroto. • SWEDO Innovations Ltd • EcoWave Appliances • Bio Flame Africa • Bukona Agro • EBENEZER Energy Saving Stoves • Re-Newable Hub • Rockaways Creatives • BUKs Africa Ltd • Marscorp Ltd • ECOCA East Africa • Enersave • Energy Empire Uganda Ltd • CEFA Uganda • Asona Energy Solutions • Josa Green Enterprises • Suliya Smart Stoves • All Green Technologies • Kiboko Enterprises • Green Enterprises Uganda • Jamies Assorted Charcoal • Ecoverse Innovations Ltd • Masupa Enterprises	Improved cookstoves (ICS), Electric Pressure Cookers (EPCs), Solar Cookstoves, Briquettes, Ethanol fuel and stoves, Solar Aided Volcanic Rock Stoves, Grills and Efficient household cooking solutions.

Solar Energy & Electrification	• Fena Solar Ltd • Jikaland Solar Company • Tulima Solar Ltd • Solar Nation SMC Ltd • Star Hub Power • Stabex • Power Hub • Gen-Pack • Ajay Solar • TigerPro Solar Solutions Ltd • Marvel Energy Solutions Ltd • Village Energy • Soleil Power • Sun king • Sun Culture Uganda • Mobile Solar Uganda Ltd	Solar panels, green hydrogen, lighting kits, solar water pumps, solar home systems, inverters and power backup solutions.
E-Mobility & Green Transport	• Gogo Electric • eBee Mobility • Green Wheel Africa Ltd and Dirt Trails Safari • KARAA • Spiro Uganda	Electric motorcycles, bicycles, charging stations and awareness on sustainable transport.
Biogas & Biomass Solutions	• Bold Biogas Ltd • Detra Energy and Environment Contractors	Biogas digesters, biomass briquettes, and organic waste-to-energy technologies.
Policy Institutions, Research, Academia &	• National Renewable Energy Platform (NREP) • Ministry of Energy and Mineral Development • Makerere University, (MUK) • Uganda Christian University (UCU) • Uganda National Alliance on Clean Cooking (UNACC) • Energy Uganda Foundation • Step Standard Ltd • Centre for Research in Energy and Energy Conservation (CREEC) • Enactus • Ayuda en Acción	Research publications, institutional frameworks, innovations and policy engagement tools supporting renewable energy adoption.

Community-Based Organizations & NGOs	• Kamu Kamu Development Organization • JEEP, Papillion Living Barefoot • MUYETIS Company Ltd • Breathe Hope Uganda • Empower Women Uganda • GRIDWORKS/UKAID • Nezikolima Environmental Group • Nature for Development Consult • Youth for Life • Green Gate Youth Organization • Live in Green • Climate Hub International	Community awareness, environmental advocacy, gender-focused energy access projects and local empowerment initiatives.
Private Enterprises & Start-ups	• Renewable Hub • Time Gen Pack • TK Energy Solution • Mandulis Energy	Innovative energy start-ups showcasing renewable products, prototypes and digital energy solutions.
Financial & Supporting Institutions	• Stanbic Bank • ABSA Bank Uganda Ltd, • Uganda Institute of Bankers & Financial Services • OLD Mutual • FINCA • Jubilee Insurance	Financial inclusion models, green financing opportunities, and renewable energy investment products.
Other Renewable Energy & Support Services	• TotalEnergies • Downsnion House Ltd • SEB Engineering Services	Engineering services, solar accessories, environmental technologies and complementary renewable energy support systems.

Exhibition Highlights

E-Mobility Transport Options

Institutional Electric Cooking

UEDCL's Electricity Metering Technology

Liquefied Petroleum Gas for Clean Cooking Applications

Critical Minerals for the Energy Transition

Productive Use of Solar Energy Applications

E-Cooking Repair and Maintenance

Geothermal Energy Technology

Decentralized Hydrogen Energy Technology

Solar-Powered Electric Cooking Solutions

Improved Biomass Cookstove Solutions

Financial Institutions

Energy Data and Mapping Solutions

Productive Use of Energy for Agricultural Applications

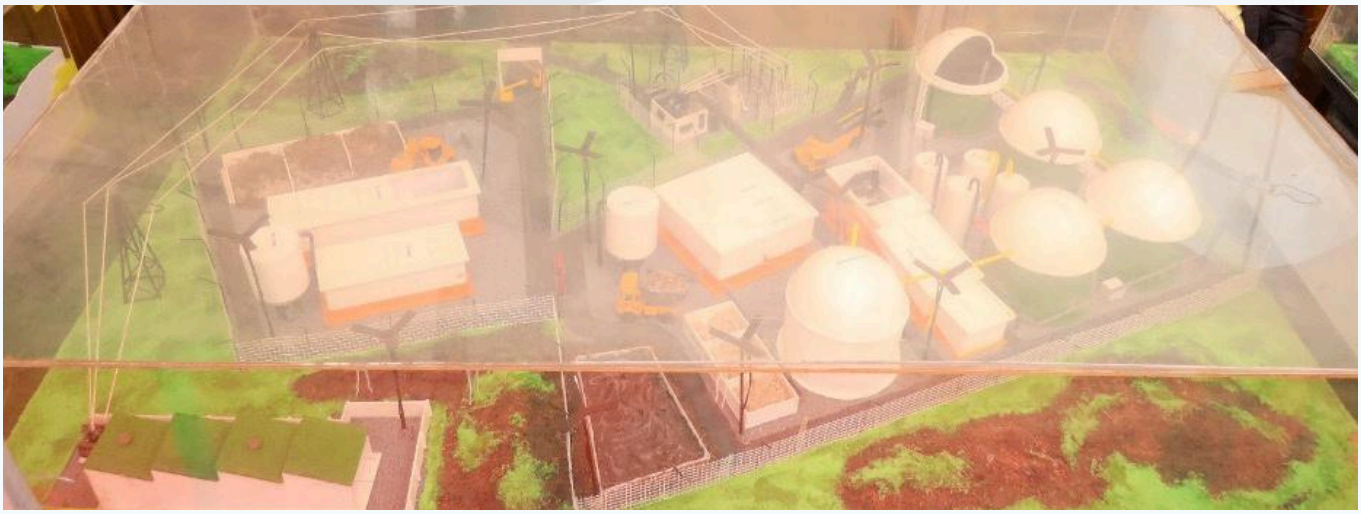
Solar Lighting Solutions

Domestic Clean Cooking Technologies

Improved Biomass Fuel Solutions

Solar Water Pumping Solutions

Geothermal Energy Technology



Biogas to Electricity Technology

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REC25 & EXPO REPORT

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