

Evidence for Informing Scaling and Impact in Youth and Women-Led Clean Energy Enterprises (EVI-SICEE) in Africa

Clean Energy Incubation Program Development Workshop Report

Designing and Operationalizing an Incubation Programme for Clean Energy Enterprises

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By Joyce Gathaci, Alexander Njuguna and Sarah Njeru

Design and layout by Peter Ongalo



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List of Acronyms and abbreviations

ACTS	African Centre for Technology Studies
B2B	Business - to- Business
B2C	Business - to - consumer
EVI-SICEE	Evidence for Informing Scaling and impact in Youth and Women -led Clean Energy Enterprises
ESG	Environmental, Social and Governance
IP	Intellectual Property
KCA	KCA University
KPI	Key Performance Indicator
MEL	Monitoring, Evaluation and Learning
MVP	Minimum Viable Product
SMEs	Small and Medium Enterprises
SDGs	Sustainable Development Goals
ToC	Theory of Change
TVET	Technical and Vocational and Training

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EXECUTIVE SUMMARY

The Clean Energy Incubation Programme Development Workshop was organized by the KCA University project team under the Evidence for Informing Scaling and Impact in Youth and Women-Led Clean Energy Enterprises (EVI-SICEE) project as part of ongoing efforts to translate research evidence into practical interventions that support enterprise development, innovation, and sustainable energy transitions. The workshop brought together stakeholders from academia, government institutions, development organizations, innovation hubs, financial institutions, private sector organizations, and clean energy enterprises to collaboratively develop an incubation framework tailored to the needs of youth- and women-led clean energy enterprises.

The workshop marked an important transition within the EVI-SICEE project from evidence generation to implementation planning. Through postgraduate research, stakeholder consultations, ecosystem assessments, and policy engagement activities, the project has generated substantial evidence regarding the opportunities and challenges affecting youth- and women-led clean energy enterprises. A recurring finding across these activities has been that many enterprises demonstrate considerable innovation potential but face persistent barriers that limit their ability to commercialize innovations, access markets, attract investment, and achieve sustainable growth.

Evidence generated through the project highlighted several interconnected constraints, including limited access to finance, inadequate commercialization support, weak market linkages, fragmented entrepreneurship support systems, insufficient mentorship opportunities, and regulatory challenges. While various entrepreneurship programmes exist, many focus primarily on business training and early-stage enterprise development, leaving significant gaps in areas such as market validation, investment readiness, technical support, and post-incubation engagement.

Recognizing these challenges, the workshop was convened to provide a platform through which key ecosystem actors could collectively examine existing evidence and develop practical solutions capable of strengthening enterprise development outcomes. Through presentations, group discussions, collaborative design exercises, and stakeholder reflections, participants explored the conditions necessary for supporting enterprise growth and developed a structured incubation framework informed by both research findings and practical experience.

The workshop discussions emphasized that effective incubation requires a holistic and ecosystem-based approach that extends beyond traditional entrepreneurship training. Participants highlighted the importance of integrating mentorship, technical assistance, financing opportunities, market access support, regulatory guidance, partnership development, and continuous learning into the incubation process. These considerations informed the development of a six-phase incubation framework comprising onboarding and entrepreneurial readiness, ideation and needs assessment, product development and technical validation, market validation, business model development, and commercialization and scaling.

In addition to the incubation framework, the workshop generated recommendations relating to programme operationalization, monitoring and evaluation, institutional sustainability, resource mobilization, governance structures, partnership development, and risk management. Collectively, these outputs provide a foundation for the establishment of a structured incubation programme capable of supporting enterprise growth while contributing to broader objectives relating to innovation, clean energy adoption, employment creation, and inclusive economic development.

The workshop concluded that strengthening the performance and scalability of youth- and women-led clean energy enterprises requires coordinated action across multiple ecosystem actors. The proposed incubation framework represents an important step towards addressing existing support gaps while providing a structured pathway for enterprise growth and sustainable impact.

1. BACKGROUND PROJECT CONTEXT

The incubation programme builds on a strong foundation of academic research and stakeholder engagement. Over the past two years, the project has supported postgraduate research, leading to the graduation of two master's students and the near completion of another. These efforts have generated valuable insights into the clean energy landscape, particularly within the Kenyan context.

However, previous engagements, most notably the 2025 multi-stakeholder workshop, revealed critical systemic gaps. These include fragmented incubation approaches, weak integration of regulatory frameworks, limited focus on commercialization and revenue generation, and persistent barriers faced by youth- and women-led enterprises.

A key concern emerging from this process was the disconnect between research and real-world applications. While innovative ideas are being developed, few successfully transition into market-ready enterprises. This realization has informed a strategic pivot toward incubation as a mechanism for bridging this gap.

2. WORKSHOP OBJECTIVES

The workshop was organized with the overarching objective of developing an evidence-informed incubation framework capable of supporting the growth, sustainability, and scaling of youth- and women-led clean energy enterprises.

Specific objectives of the workshop included:

- To share and reflect on evidence generated through the EVI-SICEE project regarding the opportunities and challenges affecting youth- and women-led clean energy enterprises.
- To facilitate dialogue among key ecosystem actors on the design and implementation of entrepreneurship support interventions within the clean energy sector.
- To identify critical support mechanisms required to strengthen enterprise development, innovation, commercialization, and scaling.
- To collaboratively develop an incubation framework responsive to the needs of youth- and women-led clean energy enterprises.

- To generate recommendations relating to programme implementation, sustainability, monitoring and evaluation, partnership development, and resource mobilization.



Figure 1: Alexander introducing the workshop objectives during the opening session

The workshop objectives were designed to ensure that the resulting incubation framework was grounded in both empirical evidence and stakeholder experience while reflecting the realities of the clean energy entrepreneurship ecosystem.

3. WORKSHOP METHODOLOGY AND STAKEHOLDER ENGAGEMENT

The workshop adopted a participatory and evidence-based co-design methodology intended to facilitate meaningful stakeholder engagement while ensuring that programme development remained grounded in research findings and practical experience. This approach reflected recognition that effective entrepreneurship support programmes must respond to both empirical evidence and the realities experienced by ecosystem actors.

The workshop was organized and facilitated by the KCA University project team and brought together stakeholders representing key components of the clean energy innovation ecosystem. Participants included representatives from universities, research institutions, innovation hubs, clean energy enterprises, government agencies, financial institutions, development organizations, entrepreneurship support programmes, and private sector organizations.

The selection of participants was guided by the objective of ensuring diverse representation and facilitating cross-sectoral dialogue. Particular emphasis was placed on engaging stakeholders possessing expertise and experience in enterprise development, innovation management, financing, policy development, incubation, and clean energy technologies. This diversity was considered important for ensuring that discussions reflected multiple perspectives and generated practical recommendations.

Methodologically, the workshop combined expert presentations, plenary discussions, facilitated group work, reflection sessions, and collaborative framework development exercises. Presentations provided participants with an overview of project findings and broader trends affecting clean energy entrepreneurship. These sessions established a common evidence base and informed subsequent discussions.

Participants subsequently engaged in group discussions aimed at identifying enterprise support needs, examining ecosystem challenges, and developing incubation pathways capable of addressing barriers to enterprise growth. Structured facilitation tools were used to guide discussions and ensure consistency across groups. The outputs generated through these discussions were then consolidated and refined through plenary deliberations, enabling participants to collectively shape the final incubation framework.

The co-design methodology adopted during the workshop encouraged active participation, knowledge exchange, and collective problem-solving. More importantly, it strengthened stakeholder ownership of the resulting framework and ensured that the recommendations reflected both research evidence and practical experience. As a result, the workshop generated outputs that are not only analytically grounded but also responsive to the realities of the clean energy entrepreneurship ecosystem.

The workshop brought together twenty-five participants drawn from academia, research institutions, government agencies, entrepreneurship support organizations, development partners, innovation hubs, and the private sector. In line with the project's commitment to promoting gender inclusion, participation reflected a relatively balanced representation of men and women, comprising fourteen female participants (56%) and eleven male participants (44%). This diversity enriched the discussions by bringing together a broad range of experiences, expertise, and perspectives relevant to clean energy entrepreneurship and enterprise development.

Category	Number	Percentage
Female Participants	14	56%
Male Participants	11	44%
Total Participants	25	100%

4. STRATEGIC PRESENTATIONS AND KNOWLEDGE SHARING SESSIONS

The workshop commenced with a series of presentations and knowledge-sharing sessions aimed at establishing a common understanding of the project context, research findings, and broader trends influencing clean energy entrepreneurship. These sessions provided the evidence base upon which subsequent discussions and framework development activities were anchored.

4.1 Project overview -Carolyn Ntaara

The opening presentation provided an overview of the KCA – EVI-SICEE project and highlighted the progress achieved through postgraduate research activities, ecosystem assessments, and policy dialogues. The presentation emphasized the project's commitment to generating evidence capable of informing interventions that strengthen the growth and impact of youth- and women-led clean energy enterprises.

Findings presented during the session demonstrated that while many enterprises possess significant innovation potential, they continue to encounter barriers that limit their ability to scale and sustain growth.

Access to finance, technical support, market opportunities, mentorship, and commercialization pathways emerged as recurring challenges across multiple studies and stakeholder consultations. The presentation further highlighted the importance of developing interventions that address these challenges in an integrated manner rather than through isolated support mechanisms.

4.2 Reflection from previous workshop-Mourine Cheruiyot

Subsequent presentations reflected lessons emerging from stakeholder engagement processes conducted throughout the project. These engagements revealed that entrepreneurship support systems often remain fragmented, with different actors providing services independently and with limited coordination. As a result, entrepreneurs frequently experience discontinuities in support as they progress through different stages of enterprise development.



Figure 2: Mourine providing reflections from the previous workshop

Participants observed that while many programmes provide valuable support during the early stages of entrepreneurship, fewer interventions focus on market validation, commercialization, investment readiness, and scaling. This gap was identified as a significant constraint affecting enterprise growth and one of the key areas requiring attention within the proposed incubation programme.

4.3 Digital transformation and clean energy innovation -Erick Odipo

Erick presentation explored the evolving role of digital technologies in supporting entrepreneurship and innovation. Presentations highlighted opportunities associated with digital platforms, artificial intelligence, data analytics, and digital business models within the clean energy sector. Participants noted that digital technologies have the potential to strengthen market intelligence, improve operational efficiency, facilitate customer engagement, and expand access to business support services.



Figure 3: Erick presenting on digital transformation

At the same time, discussions acknowledged the importance of ensuring that digital transformation efforts remain inclusive and responsive to the realities faced by entrepreneurs operating within resource-constrained environments. Participants emphasized that technological innovation should complement rather than replace the human support systems that entrepreneurs require throughout their development journey.

Collectively, the presentations established a strong analytical foundation for the workshop and reinforced the importance of developing a comprehensive incubation programme capable of addressing the interconnected technical, financial, institutional, and market-related challenges affecting clean energy enterprises.



Figure 4: Participant Interactive Session

The presentations triggered critical discussions that revealed deeper insights as outlined below.

1) Is Going Green Expensive? Although going green incurs high initial costs in the short term, clean energy solutions yield significant long-term cost savings and sustainability benefits, often reducing operational costs substantially in the ICT sector.

2) How do we bridge the SME Knowledge Gap from the discussions it was clear that the challenge is not technology in itself but rather how it is communicated. therefore, entrepreneurs must present solutions in terms SMEs understand and appreciate, specifically focusing on cost saving, increased profitability and simplicity that the solution delivers.

3) Role of Compliance in Driving Innovation Businesses are increasingly adopting green solutions due to regulatory pressure. Compliance is becoming a stronger driver than sustainability alone

4) Integration of Technology in Clean Energy There is a need to balance hardware solutions Digital innovations and hybrid approaches have proven to be more effective.

5. Group Deliberations and Development of the Incubation Framework

A central component of the workshop was the highly interactive co-design session facilitated by Dr. Abraham Rotich. This session represented a critical transition from evidence sharing and conceptual discussions to the practical design of the proposed clean energy incubation programme. Building on the findings presented during earlier sessions, participants were challenged to collaboratively develop an incubation journey capable of supporting entrepreneurs from idea generation through to commercialization and enterprise growth.



Figure 5: Rotich facilitating the co-design process session

In introducing the session, Dr. Rotich emphasized that many entrepreneurship and capacity development programmes often succeed in transferring knowledge but fail to adequately support entrepreneurs in applying that knowledge to create viable businesses and sustainable innovations. Consequently, the proposed incubation programme was envisioned as an implementation-oriented intervention designed to bridge the gap between learning, innovation, commercialization, and enterprise development.

Participants were guided by a central design question: What should the journey of a clean energy entrepreneur look like from programme entry to market and investment readiness? To address this question, stakeholders adopted a backward design approach that began by defining the desired end state, successful, commercially viable, and scalable enterprises—and then identifying the stages, milestones, support mechanisms, and learning interventions required to achieve those outcomes.

The discussions emphasized that an effective incubation programme should be structured, milestone-driven, experiential, and strongly oriented towards commercialization. Participants further agreed that the programme should remain flexible enough to accommodate the diverse needs, capabilities, and growth trajectories of youth- and women-led enterprises operating within different clean energy sub-sectors.

To facilitate deeper engagement, participants were divided into three multidisciplinary working groups comprising representatives from academia, industry, entrepreneurship support organizations, development partners, and practitioners. Each group was tasked with designing an incubation pathway, identifying critical milestones, and proposing mechanisms for supporting enterprise development throughout the incubation cycle.

Although each group approached the task from a different perspective, several areas of convergence emerged. Across all groups, participants recognized the importance of structured onboarding processes, product development support, market validation, business model strengthening, mentorship, financing readiness, and commercialization support.

These common elements ultimately informed the development of the consolidated incubation framework presented in subsequent sections.

Group One: Structured Lifecycle Approach

Group One proposed a highly structured and sequential incubation model characterized by clearly defined phases, timelines, milestones, and expected outputs. The group emphasized the importance of beginning with a comprehensive assessment phase focused on evaluating the viability of business ideas from financial, technical, market, and legal perspectives. Participants argued that rigorous early-stage assessment would improve entrepreneur preparedness while reducing the likelihood of investing resources in non-viable ventures.



Figure 6: Group 1 members

Group Two: Ecosystem and Systems-Oriented Approach

Group Two approached the incubation framework from a broader ecosystem perspective, emphasizing the importance of stakeholder engagement, regulatory compliance, partnership development, and continuous learning. Participants proposed a model that distinguished onboarding as a standalone phase and incorporated extensive attention to market research, customer discovery, legal compliance, certification processes, and quality assurance mechanisms.



Figure 7: Group 2 members

One of the distinguishing features of this model was its recognition of the role played by regulatory institutions and standards agencies in supporting innovation commercialization. Participants emphasized that many entrepreneurs encounter difficulties when attempting to navigate certification processes, intellectual property protection, environmental compliance requirements, and other regulatory obligations.

The group also proposed a dedicated business model and traction phase designed to strengthen financial planning, operational management, scaling strategies, and enterprise sustainability. This contribution significantly enriched the overall framework by ensuring that commercialization considerations extended beyond product development to include broader business growth and scaling processes.

Group Three: Entrepreneur-Centered and Market-Oriented Approach

Group Three proposed a streamlined incubation pathway that placed the entrepreneur at the center of the development process. Discussions focused on understanding entrepreneur needs, identifying market opportunities, strengthening business capabilities, and preparing enterprises for market engagement.



Figure 8: Group 3 members

The group emphasized the importance of conducting detailed needs assessments to understand customer requirements, market gaps, and competitive dynamics before significant investments are made in product development. Participants argued that a strong understanding of market realities should guide innovation processes from the outset.

In addition to product development and market validation, the group proposed a dedicated business support phase focusing on branding, customer segmentation, financing strategies, and market positioning. Participants noted that many entrepreneurs possess technically viable products but lack the business capabilities required to effectively compete within dynamic market environments.

The entrepreneur-centered nature of this model reinforced the importance of tailoring incubation support to the evolving needs of participating enterprises while ensuring that entrepreneurial capacity development remains central throughout the incubation process.

Consolidation of Group Outputs into the Final Framework

Following the group presentations, participants engaged in plenary discussions aimed at comparing, refining, and consolidating the proposed models. Rather than selecting a single approach, the workshop adopted a synthesis process through which the strongest elements from each model were integrated into a unified incubation framework.

The final framework reflects the structured lifecycle approach proposed by Group One, the ecosystem and regulatory considerations emphasized by Group Two, and the entrepreneur-centered perspective advanced by Group Three. This process resulted in the development of a comprehensive six-phase incubation framework comprising onboarding and entrepreneurial readiness, ideation and needs assessment, product development and technical validation, market validation, business model development, and commercialization and scaling.

Participants concluded that the resulting framework provides a balanced and contextually relevant pathway capable of supporting youth- and women-led clean energy enterprises from idea generation through to sustainable commercialization and growth.

6. DETAILED INCUBATION PROGRAMME FRAMEWORK

One of the most significant outcomes of the workshop was the development of a structured incubation framework designed to support youth- and women-led clean energy enterprises throughout their growth journey. The framework reflects the collective insights generated through research findings, stakeholder consultations, and workshop deliberations.

Participants agreed that effective incubation should be viewed as a developmental pathway rather than a collection of isolated activities. The framework was therefore structured around six interconnected phases that collectively address the technical, entrepreneurial, financial, and market-related needs of participating enterprises.

Phase 1: Onboarding and Entrepreneurial Readiness

The onboarding and entrepreneurial readiness phase was identified as the foundation of the incubation process. Discussions highlighted that entrepreneurs enter incubation programmes with varying levels of experience, technical competence, business knowledge, and organizational readiness. Consequently, participants emphasized the importance of conducting comprehensive assessments at the outset of the programme.

The proposed onboarding process includes participant selection, orientation activities, baseline assessments, entrepreneurial diagnostics, and needs identification exercises. These activities are intended to establish a clear understanding of participant profiles, strengths, challenges, and development priorities. Participants noted that such assessments are critical for ensuring that support interventions are responsive to the specific needs of individual enterprises.

The workshop further highlighted the importance of setting clear expectations and development objectives during the onboarding stage. Establishing a shared understanding of programme requirements, milestones, and expected outcomes was considered essential for promoting participant commitment and maximizing programme effectiveness.

Phase 2: Ideation and Needs Assessment

The second phase focuses on strengthening entrepreneurs' understanding of the problems they seek to address and ensuring that innovations respond to genuine market needs. Discussions revealed that many enterprises begin with promising ideas but often lack sufficient evidence regarding customer demand, market opportunities, and user preferences.

Participants emphasized the importance of supporting entrepreneurs to engage directly with potential customers and stakeholders during the ideation process. Activities such as customer discovery, stakeholder consultations, market research, and problem validation were identified as critical mechanisms for improving the relevance and viability of proposed solutions.

The workshop noted that a strong understanding of customer needs and market dynamics contributes significantly to innovation success. By grounding enterprise development within evidence-based needs assessments, entrepreneurs are better positioned to develop solutions that generate value for users while addressing real-world challenges.

Phase 3: Product Development and Technical Validation

The third phase focuses on transforming ideas into viable products, services, and business solutions. Participants observed that technical validation is particularly important within the clean energy sector due to the need to ensure product reliability, safety, efficiency, and compliance with regulatory requirements.

Discussions highlighted the importance of providing entrepreneurs with access to technical expertise, testing facilities, prototype development resources, and specialized support services. These resources were viewed as critical for enabling entrepreneurs to refine innovations and address technical challenges before entering the market.

The workshop further recognized that technical validation contributes to reducing risk for entrepreneurs, investors, and customers. Products that have undergone rigorous testing and validation are more likely to gain market acceptance, attract investment, and achieve long-term sustainability.

Participants therefore proposed that the incubation programme incorporate structured support mechanisms relating to prototype development, product testing, quality assurance, regulatory compliance, intellectual property management, and environmental sustainability considerations.

Phase 4: Market Validation

Market validation emerged as one of the most critical stages within the proposed incubation framework. Discussions revealed that many entrepreneurs invest substantial resources in developing products and technologies without adequately testing market demand, customer preferences, purchasing behavior, and distribution channels. Consequently, numerous innovations that demonstrate technical viability often experience difficulties during commercialization due to weak market alignment.

Participants emphasized that market validation should be integrated as a structured and deliberate phase within the incubation process rather than being treated as a supplementary activity. The workshop highlighted the importance of creating opportunities for entrepreneurs to engage directly with potential customers, distributors, industry actors, and other stakeholders capable of providing valuable market feedback.

Several approaches were proposed to facilitate market validation, including pilot projects, product demonstrations, customer testing exercises, field trials, exhibitions, and stakeholder engagement forums. These activities were viewed as important mechanisms for generating evidence regarding product-market fit while simultaneously enabling entrepreneurs to gain practical insights into customer needs and market expectations.

Discussions further highlighted that market validation contributes significantly to risk reduction. By testing products and services within real-world environments, entrepreneurs are better positioned to identify technical limitations, pricing challenges, operational constraints, and customer concerns before making substantial investments in commercialization. This iterative process allows enterprises to refine products, strengthen value propositions, and improve competitiveness.

Participants also observed that evidence generated through market validation can strengthen investor confidence and support resource mobilization efforts. Demonstrated market demand and customer acceptance provide important indicators of commercial potential and can significantly improve enterprise attractiveness to investors, development partners, and strategic collaborators. As such, market validation was recognized as an essential bridge between product development and commercialization.

Phase 5: Business Model Development

The business model development phase was designed to address a challenge frequently identified during stakeholder consultations and project research. While many entrepreneurs demonstrate strong technical capabilities and innovative potential, they often encounter difficulties translating innovations into sustainable and financially viable enterprises.

Workshop discussions emphasized that successful enterprises require not only innovative products but also robust business models capable of generating value, sustaining operations, and supporting long-term growth. Participants therefore highlighted the need for structured support aimed at strengthening entrepreneurial understanding of value creation, customer segmentation, revenue generation, operational efficiency, and financial sustainability.

The deliberations underscored the importance of supporting entrepreneurs to develop clear value propositions that align with identified customer needs and market opportunities. Participants noted that enterprises often struggle when products are developed without sufficient consideration of market realities or mechanisms through which value will be captured and sustained.

Financial management emerged as a particularly important area of focus. Discussions revealed that limited financial planning and inadequate business management systems frequently undermine enterprise growth and sustainability. To address these challenges, participants proposed incorporating activities related to financial forecasting, budgeting, cash flow management, pricing strategies, investment planning, and financial reporting within the incubation framework.

The workshop also highlighted the importance of strengthening organizational and managerial capacities. Enterprise growth often requires entrepreneurs to transition from informal management approaches to more structured systems capable of supporting increased operational complexity. Consequently, leadership development, governance structures, strategic planning, and organizational management were identified as important components of business model development.

Overall, the phase was viewed as critical for ensuring that participating enterprises are equipped not only with innovative products but also with sustainable business structures capable of supporting long-term commercial success.

Phase 6: Commercialization and Scaling

The commercialization and scaling phase represents the culmination of the incubation journey and focuses on supporting enterprises as they transition from development to sustained market growth. Discussions revealed that commercialization remains one of the weakest components of many entrepreneurship support programmes despite being one of the most important determinants of enterprise success.

Participants observed that numerous enterprises successfully navigate product development stages but encounter significant challenges when attempting to enter markets, attract customers, generate revenue, and secure investment. These challenges often stem from limited commercialization experience, inadequate market networks, insufficient investment readiness, and weak strategic partnerships.

The workshop therefore proposed that commercialization support should form a central pillar of the incubation programme. Activities identified during discussions included market entry planning, customer acquisition strategies, branding and marketing support, investment readiness preparation, partnership development, and growth planning.

Investment readiness was identified as a particularly important area requiring attention. Participants noted that entrepreneurs frequently possess innovative products but lack the skills and documentation necessary to engage effectively with investors. Strengthening investment readiness was therefore viewed as essential for improving access to financing and supporting enterprise expansion.

The discussions further emphasized the importance of facilitating connections between entrepreneurs and strategic ecosystem actors. Partnerships with distributors, technology providers, financial institutions, government agencies, development organizations, and private sector actors were viewed as critical enablers of growth and scaling. Such partnerships can provide enterprises with access to resources, expertise, markets, and networks that may otherwise be difficult to obtain independently.

Beyond financial and commercial performance, participants highlighted the importance of considering broader developmental outcomes when assessing enterprise growth. Enterprise success was viewed not only in terms of revenue generation but also through contributions to employment creation, clean energy adoption, environmental sustainability, social inclusion, and community development. This broader perspective reflects the developmental objectives underpinning the EVI-SICEE project and the proposed incubation programme.

Collectively, the six phases of the incubation framework were designed to provide entrepreneurs with a structured pathway that addresses the technical, entrepreneurial, financial, institutional, and market-related dimensions of enterprise development. Participants agreed that the integrated nature of the framework constitutes one of its primary strengths and enhances its potential to support sustainable enterprise growth.

7. OPERATIONALIZING THE PROGRAMME

Having developed the incubation framework, discussions shifted towards the practical mechanisms required to support programme implementation. Participants emphasized that even the most comprehensive framework would have limited impact without effective operational systems capable of translating programme design into meaningful support for entrepreneurs.

The workshop identified four interrelated pillars as central to programme operationalization: bootcamp design and delivery, mentorship and technical advisory support, market access and partnership development, and monitoring, evaluation, and learning. These pillars were viewed as complementary mechanisms through which the incubation framework could be effectively implemented.

Bootcamp Design and Delivery

Participants proposed that the programme should incorporate a series of structured bootcamps aligned with different stages of the incubation journey. Unlike conventional training programmes that rely heavily on theoretical instruction, the proposed bootcamps were envisioned as experiential learning platforms emphasizing practical problem-solving, peer learning, and real-world application.



Figure 9: Alexander addressing the participants

Discussions highlighted the value of involving experienced entrepreneurs, industry practitioners, technical experts, and ecosystem actors as facilitators. Such an approach was viewed as important for ensuring that learning remains grounded in practical realities while exposing participants to diverse perspectives and experiences.

The bootcamps were proposed as platforms for strengthening entrepreneurial competencies across areas such as business development, innovation management, product design, market validation, financial planning, leadership, and commercialization. Participants emphasized that the content and structure of bootcamps should remain adaptable to the evolving needs of participating enterprises.

Mentorship and Technical Advisory Support

Mentorship emerged as one of the most consistently emphasized themes throughout the workshop. Participants observed that many entrepreneurship programmes treat mentorship as a supplementary activity rather than as a core component of enterprise development. However, evidence presented during the workshop suggested that continuous mentorship can significantly influence entrepreneurial learning, decision-making, resilience, and enterprise performance.

The proposed mentorship framework was therefore conceptualized as a continuous support mechanism operating throughout the incubation cycle. Discussions highlighted the importance of engaging mentors from diverse backgrounds, including experienced entrepreneurs, academics, technical specialists, investors, regulators, and industry practitioners.

Participants noted that mentorship contributes not only to technical and business development but also to confidence building, accountability, professional networking, and exposure to growth opportunities. As such, mentorship was viewed as a critical component of the overall incubation experience.

Market Access and Partnership Development

The workshop discussions consistently highlighted market access as one of the most significant constraints affecting the growth and sustainability of youth- and women-led clean energy enterprises. Participants observed that many entrepreneurs successfully develop innovative products and services but encounter considerable difficulties in accessing customers, distribution channels, strategic partners, and commercial opportunities necessary for business expansion.

Stakeholders noted that innovation alone is insufficient to generate meaningful developmental impact if enterprises remain disconnected from markets. Consequently, market access support was identified as a critical operational pillar of the proposed incubation programme. Discussions emphasized the need for structured mechanisms capable of facilitating interactions between entrepreneurs and key market actors, including distributors, suppliers, technology providers, investors, corporate organizations, government institutions, and development partners.

Participants proposed that the incubation programme should actively support market linkage activities through networking events, business-to-business engagements, trade exhibitions, innovation showcases, investor forums, and partnership development initiatives. Such platforms were viewed as important opportunities for entrepreneurs to increase visibility, establish strategic relationships, and explore new market opportunities.

The workshop further highlighted the importance of ecosystem partnerships in strengthening programme effectiveness. Participants observed that no single institution possesses all the resources and expertise required to support entrepreneurs throughout the enterprise development journey. As a result, collaboration among universities, innovation hubs, government agencies, financial institutions, development organizations, and private sector actors was viewed as essential for creating a comprehensive support ecosystem.

Emphasis was placed on the role of KCA University as the host institution responsible for coordinating partnerships and facilitating stakeholder engagement. Through strategic collaboration, the programme is expected to leverage existing expertise, infrastructure, networks, and resources while minimizing duplication of efforts across the ecosystem.

Discussions also underscored the importance of establishing partnerships that extend beyond programme implementation and contribute to long-term sustainability. Strong ecosystem partnerships were viewed not only as mechanisms for supporting entrepreneurs but also as important foundations for institutional learning, resource mobilization, policy influence, and programme expansion.

Collectively, these discussions reinforced the view that strengthening market access and partnerships is fundamental to improving enterprise competitiveness, accelerating commercialization, and enhancing the broader developmental impact of clean energy entrepreneurship.

8. MONITORING, EVALUATION AND LEARNING FRAMEWORK

The workshop recognized Monitoring, Evaluation and Learning (MEL) as a critical component of programme implementation and long-term effectiveness. Participants emphasized that a robust MEL framework is essential not only for tracking progress and measuring results but also for supporting evidence-based decision-making, adaptive programme management, accountability, and continuous improvement.

Discussions highlighted the need for the incubation programme to move beyond activity monitoring and incorporate mechanisms capable of capturing both enterprise-level outcomes and broader ecosystem-level changes. Participants noted that traditional performance measurement approaches often focus primarily on outputs, such as the number of participants trained, while providing limited insight into longer-term outcomes relating to enterprise growth, innovation, commercialization, and impact.

To address this limitation, stakeholders proposed a results-oriented MEL framework aligned with the programme's overall theory of change. The proposed framework recognizes that incubation activities contribute to a progression of outputs, outcomes, and long-term impacts that collectively support enterprise development and sustainable economic transformation.

8.1 Theory of Change

Participants proposed that the programme's theory of change should be based on the assumption that providing integrated support services, including mentorship, technical assistance, market access support, financing linkages, and entrepreneurial capacity development, will strengthen enterprise performance and increase the likelihood of successful commercialization and scaling. Improved enterprise performance is expected to contribute to broader outcomes including increased employment creation, enhanced clean energy adoption, improved livelihoods, environmental sustainability, and strengthened innovation ecosystems. The theory of change therefore establishes a clear pathway linking programme interventions to both enterprise-level and societal-level impacts.

Output Indicators

Participants identified several output indicators that could be used to monitor programme implementation and immediate results. These include:

- Number of entrepreneurs enrolled in the programme.
- Number of bootcamps conducted.
- Number of mentorship sessions completed.
- Number of prototypes developed and tested.
- Number of market validation exercises undertaken.
- Number of partnerships established.
- Number of investor engagement activities conducted.
- Number of enterprises completing the incubation programme.

These indicators were viewed as useful for assessing programme delivery and participation levels while providing early evidence of implementation progress.

Outcome Indicators

Recognizing that outputs alone do not adequately capture programme effectiveness, participants proposed a series of outcome indicators designed to measure changes in enterprise performance and entrepreneurial capacity. These include:

- Improvement in entrepreneurial competencies.
- Increased business management capacity.
- Enhanced investment readiness.
- Increased market access opportunities.
- Growth in enterprise revenues.
- Increased customer acquisition and retention.
- Strengthened strategic partnerships.
- Increased access to finance and investment.

Participants emphasized that these indicators provide a more meaningful assessment of programme effectiveness by capturing changes occurring within participating enterprises.

Impact Indicators

The workshop further identified broader impact indicators that reflect the programme's contribution to sustainable development objectives. These include:

- Employment creation among youth and women.
- Increased adoption of clean energy technologies.
- Expansion of clean energy markets.
- Improved environmental sustainability outcomes.
- Enhanced economic inclusion.
- Strengthened innovation ecosystems.
- Increased contribution of enterprises to local economic development.
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These indicators were viewed as important for demonstrating the long-term value and developmental significance of the programme.

Learning and Adaptive Management

A key theme emerging from the discussions was the importance of embedding learning within programme implementation. Participants emphasized that incubation programmes operate within dynamic environments characterized by changing technologies, market conditions, policy contexts, and entrepreneurial needs. As a result, programme success depends on the ability to continuously learn and adapt.

The proposed MEL framework therefore incorporates structured learning mechanisms including periodic reflection sessions, participant feedback processes, stakeholder reviews, learning workshops, and knowledge-sharing platforms. These mechanisms are intended to facilitate the identification of emerging challenges, capture lessons learned, and inform programme improvements over time.

Participants noted that learning should be viewed as a continuous and collaborative process involving entrepreneurs, mentors, programme staff, and ecosystem partners. Such an approach is expected to strengthen programme responsiveness while supporting innovation and continuous improvement.

8.2 Governance and Institutional Arrangements

The long-term success of the incubation programme was recognized as being dependent upon the establishment of clear governance structures capable of providing strategic leadership, accountability, coordination, and oversight. Participants emphasized that effective governance is essential for ensuring programme quality, institutional ownership, stakeholder participation, and sustainability.

Discussions identified KCA University as the primary host institution responsible for overall programme coordination and strategic leadership. Given its role within the EVI-SICEE project and its existing expertise in entrepreneurship, innovation, and knowledge management, KCA University was viewed as well positioned to provide institutional anchorage for the programme. Participants proposed a multi-stakeholder governance structure comprising three interconnected levels. At the strategic level, an Advisory Committee would provide overall guidance, strategic direction, and oversight. Membership would include representatives from KCA University, ACTS, government agencies, development organizations, financial institutions, private sector organizations, and other relevant ecosystem actors.

At the operational level, a Programme Management Team would be responsible for day-to-day implementation, coordination of incubation activities, stakeholder engagement, resource mobilization, and monitoring and evaluation. The workshop emphasized the importance of ensuring that this team possesses the technical and managerial capacity necessary for effective programme delivery.

At the implementation level, mentors, technical experts, trainers, and ecosystem partners would support entrepreneurs through the delivery of specialized services and capacity-building interventions. This layered governance structure was viewed as important for promoting accountability while ensuring effective coordination among multiple stakeholders.

Participants further emphasized that governance arrangements should remain adaptive and responsive to changing programme needs. Regular stakeholder consultations, performance reviews, and learning processes were therefore recommended as mechanisms for strengthening programme effectiveness and continuous improvement.

8.3 Stakeholder Roles and Responsibilities

The workshop recognized that successful implementation of the incubation programme will require active participation from a broad range of ecosystem actors. Participants emphasized that no single institution possesses all the resources, expertise, and networks required to support entrepreneurs throughout the enterprise development journey.

KCA University was identified as the lead institution responsible for programme coordination, stakeholder engagement, knowledge management, monitoring and evaluation, and overall programme oversight. The institution is also expected to facilitate learning processes and provide strategic leadership during implementation.

ACTS was identified as an important strategic partner capable of contributing expertise relating to policy engagement, research dissemination, ecosystem strengthening, and knowledge sharing. Participants emphasized the value of leveraging ACTS' regional networks and experience in supporting evidence-informed development interventions.

Government agencies were viewed as important actors in creating enabling environments, facilitating regulatory compliance, and supporting broader ecosystem development. Their involvement was considered critical for ensuring alignment between programme activities and national development priorities.

Innovation hubs, accelerators, and entrepreneurship support organizations were identified as valuable partners capable of providing technical assistance, mentorship, market access support, and entrepreneurial capacity-building services. Their practical experience in enterprise development was viewed as a significant asset to programme implementation.

Financial institutions and investors were recognized as essential partners in addressing financing constraints affecting participating enterprises. Participants noted that strengthening engagement with these actors would improve investment readiness and expand access to growth capital.

Private sector organizations were identified as potential collaborators in areas such as market access, technology transfer, product development, supply chain integration, and commercialization support. Their participation was viewed as important for strengthening market linkages and enhancing enterprise competitiveness.

The workshop concluded that clearly defined stakeholder roles and effective coordination mechanisms will be critical for ensuring programme effectiveness and avoiding duplication of efforts.

9. Resource Requirements, Risk Management and Institutional Sustainability

9.1 Risk Assessment and Mitigation Framework

The workshop discussions highlighted the importance of proactively identifying and managing risks that may affect programme implementation and impact. Participants recognized that entrepreneurship support programmes operate within dynamic and often unpredictable environments characterized by financial, institutional, market, and regulatory uncertainties.

Several key risks were identified during the discussions.

Risk	Potential Effect	Proposed Mitigation Strategy
Participant attrition	Reduced programme effectiveness and lower completion rates	Strengthened participant selection, continuous mentorship, regular engagement and monitoring
Limited access to finance	Constrained enterprise growth and commercialization	Investor engagement, financing partnerships, investment readiness support
Weak market uptake	Reduced revenue generation and sustainability	Market validation, customer engagement, partnership development
Regulatory barriers	Delayed implementation and commercialization	Early regulatory engagement and compliance support
Resource constraints	Reduced programme quality and coverage	Diversified funding strategies and partnership development
Weak stakeholder coordination	Duplication of efforts and inefficiencies	Clear governance structures and communication mechanisms

Participants emphasized that effective risk management should be integrated throughout programme implementation rather than treated as a standalone activity. Continuous monitoring, stakeholder engagement, and adaptive management were identified as important mechanisms for mitigating emerging risks and strengthening programme resilience.

9.2 Sustainability Strategy

Sustainability emerged as a central theme across all workshop discussions. Participants emphasized that the long-term success of the incubation programme will depend on institutional ownership, strategic partnerships, diversified resource mobilization, and continuous stakeholder engagement.

The workshop highlighted the importance of embedding the programme within existing innovation and entrepreneurship structures at KCA University. Institutional integration was viewed as critical for ensuring continuity beyond the current project cycle while strengthening organizational commitment to programme implementation.

Participants further emphasized the need for diversified funding approaches capable of reducing dependence on a single funding source. Potential strategies discussed included donor partnerships, private sector engagement, grant funding, consultancy services, innovation challenges, and collaborative resource mobilization initiatives.

Partnership sustainability was also identified as a critical success factor. Long-term collaboration with ACTS, government institutions, development partners, innovation hubs, financial organizations, and private sector actors was viewed as essential for maintaining programme relevance, expanding reach, and strengthening impact.

The workshop concluded that sustainability should be viewed as an ongoing process rather than a final outcome. Continuous learning, stakeholder engagement, institutional commitment, and adaptive management will therefore be critical for ensuring that the incubation programme remains responsive, effective, and impactful over time.

10. PROPOSED IMPLEMENTATION TIMELINE

Discussions on implementation emphasized the importance of adopting a structured yet flexible approach capable of accommodating the diverse needs and development trajectories of participating enterprises. While participants acknowledged that enterprise growth rarely follows a linear path, there was broad agreement that a phased implementation process would provide entrepreneurs with a clear progression pathway while ensuring that support interventions are delivered at appropriate stages of enterprise development.

The workshop proposed an implementation cycle spanning approximately seven to eight months, beginning with participant recruitment, onboarding, and entrepreneurial readiness activities. This initial phase would focus on enterprise diagnostics, needs assessments, orientation activities, and the establishment of individual development pathways. Participants emphasized that investing time in understanding entrepreneurs' profiles and support needs at the outset would strengthen programme responsiveness and improve overall effectiveness.

The second phase would focus on ideation, refinement, and needs assessment. During this stage, entrepreneurs would be supported to deepen their understanding of customer needs, market opportunities, and sector challenges. Activities would include customer discovery exercises, stakeholder consultations, market analysis, and opportunity identification processes designed to strengthen the relevance and viability of proposed innovations.

Product development and technical validation would follow, providing entrepreneurs with opportunities to refine prototypes, undertake product testing, address technical challenges, and strengthen compliance with relevant standards and regulations. Participants highlighted the importance of ensuring that innovations are both technically viable and responsive to market requirements before progressing to subsequent stages.

The market validation phase would then provide entrepreneurs with opportunities to test products and services within real-world environments. Activities such as pilot projects, demonstrations, customer engagement sessions, and market exposure events would enable enterprises to gather feedback, refine products, and generate evidence of market demand.

Following successful validation, the programme would focus on business model development, including value proposition refinement, financial planning, operational strategy development, leadership strengthening, and investment readiness preparation. Participants emphasized that this phase is critical for ensuring that enterprises possess sustainable business foundations capable of supporting long-term growth.

The final stage would focus on commercialization and scaling. Activities would include market entry planning, investor engagement, partnership development, business expansion strategies, and continued mentorship support. Participants noted that while commercialization represents the culmination of the incubation cycle, enterprise support should not necessarily end at this stage. Instead, mechanisms for continued engagement and post-incubation support should be explored to sustain momentum and facilitate long-term growth.

Overall, the proposed timeline was viewed as sufficiently structured to provide direction while remaining flexible enough to accommodate the varying capacities, sectors, and growth trajectories of participating enterprises.

11. STRATEGIC REFLECTIONS AND KEY LESSONS

The workshop generated several important insights regarding entrepreneurship support, innovation ecosystems, and enterprise development within the clean energy sector. These reflections provide valuable lessons that extend beyond the immediate development of the incubation framework and offer broader implications for future entrepreneurship support initiatives.

One of the most significant lessons emerging from the discussions was that effective incubation programmes cannot operate in isolation from the broader innovation ecosystem. Participants consistently emphasized that enterprise growth is influenced by a complex interaction of factors including financing, mentorship, market access, policy environments, technical support, and institutional networks. Consequently, interventions that focus exclusively on entrepreneurial training are unlikely to achieve sustained impact unless they are embedded within supportive ecosystems capable of addressing these broader challenges.

A second lesson concerned the critical importance of commercialization support. Evidence presented during the workshop demonstrated that many enterprises successfully develop innovative products and technologies but struggle to transition from innovation to market success. Participants observed that commercialization remains one of the weakest components of many entrepreneurship support programmes despite being central to enterprise sustainability and growth. This finding reinforced the need for incubation models that place greater emphasis on market validation, customer engagement, investment readiness, and scaling strategies.

The discussions also highlighted the importance of mentorship as a continuous process rather than a standalone intervention. Participants noted that entrepreneurs face evolving challenges throughout their development journey and therefore require ongoing access to guidance, expertise, and professional networks.

Effective mentorship was viewed not only as a mechanism for strengthening technical and business capacities but also as a means of building confidence, accountability, resilience, and leadership capabilities.

Another important lesson related to the value of evidence-informed programme design. Participants recognized that the incubation framework benefited significantly from the research findings generated through the EVI-SICEE project. By grounding programme development in empirical evidence and stakeholder experiences, the workshop was able to identify support gaps, prioritize interventions, and develop solutions that respond to actual challenges faced by entrepreneurs. This approach enhanced both the credibility and relevance of the resulting framework.

The workshop further underscored the importance of inclusivity within entrepreneurship support programmes. Participants emphasized that youth and women entrepreneurs often encounter unique barriers relating to access to finance, professional networks, technical resources, and market opportunities. Addressing these barriers requires deliberate programme design choices that promote equitable participation and ensure that support mechanisms remain accessible and responsive to diverse entrepreneurial needs.

Discussions also highlighted the significance of partnerships in supporting innovation and enterprise growth. Collaboration among universities, innovation hubs, government institutions, financial organizations, development partners, and private sector actors was consistently identified as a critical success factor. Participants observed that partnerships facilitate resource sharing, knowledge exchange, market access, and institutional sustainability while strengthening the overall effectiveness of entrepreneurship support systems.

Collectively, these lessons reinforce the importance of adopting integrated, evidence-based, and ecosystem-oriented approaches to enterprise development. They also provide important considerations for future programme implementation and scaling efforts.

12. CONCLUSION AND WAY FORWARD



Figure 10: Ntaara giving her closing remarks

The Clean Energy Incubation Programme Development Workshop represented a significant milestone within the broader EVI-SICEE project and an important step towards translating research evidence into practical interventions capable of supporting youth- and women-led clean energy enterprises. Organized by the KCA University project team, the workshop provided a platform for diverse stakeholders to collectively reflect on research findings, identify enterprise support needs, and develop an incubation framework responsive to the realities of the clean energy entrepreneurship ecosystem.

The workshop demonstrated that while youth- and women-led enterprises possess substantial potential to contribute to innovation, employment creation, clean energy adoption, and sustainable development, significant barriers continue to constrain their growth and scalability. These barriers extend beyond access to finance and include challenges relating to market access, mentorship, technical support, commercialization, ecosystem coordination, and regulatory compliance. Addressing such challenges requires comprehensive and integrated support mechanisms that accompany entrepreneurs throughout their development journey.

Through presentations, stakeholder discussions, and collaborative design exercises, participants developed a structured incubation framework comprising six interconnected phases: onboarding and entrepreneurial readiness, ideation and needs assessment, product development and technical validation, market validation, business model development, and commercialization and scaling. The framework reflects both the empirical evidence generated through the EVI-SICEE project and the practical experiences of ecosystem actors engaged throughout the workshop process.

Beyond framework development, the workshop generated valuable recommendations relating to programme operationalization, mentorship systems, market access support, partnership development, monitoring and evaluation, risk management, resource mobilization, and institutional sustainability. These recommendations provide a foundation for future implementation and offer strategic guidance for strengthening entrepreneurship support within the clean energy sector.

Moving forward, participants emphasized the importance of refining the incubation framework, strengthening strategic partnerships, mobilizing implementation resources, establishing governance mechanisms, and developing detailed operational plans. Particular attention should be given to embedding the programme within existing institutional structures at KCA University while simultaneously fostering collaboration with ACTS, government agencies, development organizations, innovation hubs, financial institutions, and private sector actors.

The workshop concluded that the proposed incubation programme has the potential to serve as an important platform for nurturing innovation, strengthening enterprise performance, supporting commercialization, and enhancing the contribution of youth- and women-led enterprises to sustainable development. By combining evidence-based design, ecosystem partnerships, and continuous learning, the programme can contribute meaningfully to enterprise growth, job creation, clean energy adoption, and inclusive economic transformation.

Ultimately, the workshop reaffirmed the value of collaborative and evidence-informed approaches to programme development. The incubation framework developed through this process represents not only a practical response to the challenges identified through the EVI-SICEE project but also a strategic investment in the future of clean energy entrepreneurship and innovation across the region.

ANNEXES

WORKSHOP PROGRAMME



Clean Energy Incubation Program Development Workshop Programme

Venue: Safari Park Hotel

Time: 8:30 AM – 4:30 PM

Objective: To co-develop an evidence-based program and implementation framework for Clean Energy Business Incubation Programme.

Background and Justification

The Project seeks to strengthen the commercialization, scale-readiness, and resilience of pre-identified clean energy SMEs and student-led enterprises in Kenya. The core implementation component focuses on business incubation and commercialization support tailored to the clean energy value chain.

Evidence generated under previous implementation phases, including the 2025 multi-stakeholder learning workshop on rethinking clean energy business incubation, highlighted several structural gaps:

- Fragmented incubation approaches not tailored to clean energy value chains
- Limited integration of regulatory compliance and standards
- Insufficient focus on commercialization tracking and revenue growth
- Gendered and youth-specific constraints in accessing finance and markets
- Weak alignment between research outputs and enterprise scaling

In response, the Workplan mandates the development of a tailored clean-energy-specific incubation curriculum that integrates regulatory, financing, market access, and technical validation components. This two-day curriculum development retreat is therefore a strategic implementation activity designed to operationalize the workplan and align incubation design with downstream activities including bootcamps, mentorship investment readiness, commercialization tracking and knowledge dissemination.

2. Purpose

To co-develop a structured, evidence-based and implementation-ready Clean Energy Incubation program aligned to the Clean Energy SMEs Support Project Workplan and donor reporting indicators.

3. Objectives

The retreat will deliver the following objectives, directly aligned to the Workplan:

Objective 1: Operationalize – Design of Tailored Incubation Programme

- Develop clean-energy-specific incubation modules
- Integrate regulatory, financing and market components
- Produce a structured incubation curriculum and toolkit

Objective 2: Strengthen Implementation Coherence Across WP2 Activities.

- Align curriculum design with:
 - Advanced Bootcamps.
 - Mentorship & Technical Advisory.
 - Product Refinement & Pilot Strengthening.
 - Market Access & Partnership Development.
 - Investment & Scale Readiness.
 - Commercialization Tracking.

Objective 3: Embed Monitoring, Evaluation and Learning.

- Define measurable incubation milestones.
- Develop KPIs aligned to commercialization, partnerships, and investment readiness.
- Integrate knowledge capture for outputs.

Objective 4: Strengthen Knowledge Consolidation.

- Establish structured documentation mechanisms.
- Embed policy-relevant learning into incubation activities.
- Create a basis for policy briefs and dissemination outputs.

DAY 1: Designing the Incubation Architecture

Focus: Programme Structure, Curriculum Modules and Integration of Digital Technologies

Time	Session	Description	Responsible / Facilitator
8:30-9:00	Arrival & Registration	Participant arrival and networking tea	Secretariat
9:00-9:20	Opening Remarks	Welcome and overview of retreat objectives	KCAU Project Lead – Prof. Christine Simiyu
9:20-9:40	Retreat Objectives & Expected Outputs	Outline expected outputs including curriculum framework and modules	Alexander Njuguna – KCAU
9:40-10:10	Reflection on Previous Clean Energy Incubation Workshop	Key insights and lessons from the previous workshop on rethinking incubation models	Mourine Cheruiyot – ACTS
10:10-10:40	Overview of the Clean Energy	Presentation of the workplan and reporting	Alexander Njuguna – KCAU

	SMEs Support Project Workplan	indicators to align curriculum design	
10:40-11:00	Health Break		
11:00-12:30	Working Session 1: Designing the 8-Month Incubation Journey	Define incubation phases, milestones and entrepreneur outcomes	Dr. Abraham Rotich – KCAU
12:30-1:30	Lunch Break		
1:30 -2:30	Working Session 2: Program Modules Development	Breakout groups go through the incubation modules proposed for enhancement and Feedback.	Dr. Gladys Bunyasi – KCAU
2:30 -3:15	Expert Talk: AI, Cloud and Digital Transformation for Clean Energy Businesses	Presentation on how AI and cloud computing improve business efficiency, customer management, energy monitoring, predictive maintenance and data-driven decision making	Erick Odipo – Silicon Overdrive
3:15 -4:15	Plenary: Consolidation of Curriculum Modules	Groups present and agree on curriculum structure and module sequence	Dr. Fanice Waswa – KCAU
4:15- 4:30	Reflections & Close of Day 1	Summary of progress and next steps	Rapporteur

DAY 2: Operationalizing the Incubation Programme

Focus: Bootcamps, Mentorship, Investment Readiness and Monitoring Framework

Time	Session	Description	Responsible / Facilitator
8:30 – 9:00	Arrival & Networking Tea	Informal networking	Secretariat
9:00 – 9:20	Recap of Day 1	Summary of agreed curriculum modules and incubation phases	Rapporteur
9:20 – 10:30	Working Session 3: Bootcamp Design	Develop structure for three advanced incubation bootcamps including technical and business components	Facilitator: KCIC
10:30–10:50	Health Break		
10:50–12:00	Working Session 4: Mentorship and Technical Advisory Framework	Design mentorship structure, mentor engagement timelines and technical advisory support	Facilitator: ACTS
12:00 – 1:00	Lunch Break		
1:00 – 2:00	Working Session 5: Market Access and Partnership Development	Design approaches for facilitating partnerships, B2B engagements and market linkages	Maurice Murimi – YEDF
2:00 – 2:15	Health Break		
2:15 – 3:15	Working Session 6: Monitoring, Evaluation and Commercialization Tracking	Develop KPIs, commercialization tracking indicators and monitoring dashboards aligned with the project reporting framework	Joshua Nyangidi - KCAU
3:15 – 4:00	Closing Session	Final remarks and way forward	KCAU / ACTS

LIST OF PARTICIPANTS

Clean Energy Incubation Programme Development Workshop 17–18 March 2026, Safari Park Hotel, Nairobi

NO	NAME	ORGANIZATION	Gender
1	Fanice Waswa	KCA	F
2	Munene Laibon	KCA	M
3	Mourine Chepkemai	ACTS	F
4	Rispah Khamonyi	KCA	F
5	Joshua Nyangidi	KCA	M
6	Yvonne Gitu	ACTS	F
7	Erick Odipo	Silicon Overdrive	M
8	Antony Ochieng	KCA	M
9	Tiffany Nyakairo	ACTS	F
10	Jemimah Mawia	YEDF	F
11	Sarah Njeru	ACTS	F
12	Felix Otieno	Ruri Green	M
13	Tracy Kiraki	Silicon Overdrive	F
14	Joyce Gathaci	ACTS	F
15	Gladys Bunyasi	KCA	F
16	Eunice Njagi	KCA	F
17	Morris Murimi	YEDF	M
18	Righan Sedellar	KCAU	F
19	Faith Kiprop	DEKUT	F
20	Feiswal Dindi Onyango	KCA	M
21	Kiprono Chebelyon	KCA	M
22	Alexander Njuguna	KCA	M
23	Abraham Rotich	KCA	M
24	Caroline Ntaara	KCA	F
25	Vincent Ogaya	KCIC	M

WORKING SESSION MATERIALS

WORKING SESSION MATERIALS



Clean Energy Incubation Program Development Workshop

Working Session 1 – Facilitator Guide

Working Session One: Defining Incubation Phases, Milestones, and Entrepreneur Outcomes

Workshop: Modules Development Workshop for the Clean Energy Business Incubation Programme

Session Duration: 1 hour 30 minutes

Session Format: Interactive Working Session with Breakout Groups

1. Purpose of the Session

The purpose of this session is to design the overall structure of the 8-month Clean Energy Business Incubation Programme by defining:

- The phases of the incubation programme
- The key milestones entrepreneurs should achieve in each phase
- The expected outcomes for participating entrepreneurs

This session provides the foundation for all other sessions, as the modules, bootcamps, mentorship activities, and monitoring indicators will be structured around the incubation phases defined here.

2. Expected Outputs

By the end of the session, participants should produce:

1. A clear 7-month incubation journey structure
2. Defined incubation phases
3. Milestones entrepreneurs must achieve during each phase
4. Expected entrepreneur outcomes by phase
5. Initial ideas for learning activities within each phase

These outputs will later feed into:

- Curriculum module development
- Bootcamp design
- Mentorship planning
- Monitoring and evaluation indicators

3. Guiding Question for the Session

The facilitator should guide the discussion using the main question:

“What should the journey of a clean energy entrepreneur look like from entry into the incubation programme to becoming investment or market ready?”

Supporting questions:

1. What stage are most entrepreneurs likely to enter the programme at?
2. What critical capabilities should entrepreneurs gain during the programme?
3. What milestones must entrepreneurs achieve to progress from one phase to the next?
4. What measurable outcomes should define success at the end of the programme?

4. Suggested Incubation Framework (Reference Only)

To guide participants, the facilitator may introduce a reference framework for discussion.

Example:

Phase	Duration	Focus
Phase 1	Month 1	Diagnostic and Readiness Assessment
Phase 2	Months 2–3	Business Foundations and Capacity Building
Phase 3	Months 4–5	Product Refinement and Market Testing
Phase 4	Months 6–7	Investment and Market Scaling
Phase 5	Month 8	Commercialization and Showcase

Participants may refine, merge, or redesign these phases.

5. Step-by-Step Facilitation Process

Step 1: Session Introduction (10 minutes)

The facilitator should:

- Explain the objective of the session.
- Clarify the importance of defining incubation phases before designing modules.
- Present a short overview of the incubation journey concept.

Key message:

The programme must guide entrepreneurs from early-stage development to commercialization and investment readiness.

Step 2: Breakout Group Work (45 minutes)

Participants are divided into 3 small groups.

Each group is asked to design:

1. Proposed incubation phases
2. Key milestones entrepreneurs should achieve in each phase
3. Entrepreneur outcomes for each phase

Each group should record their results on a flipchart or template.

Group Task Template

Phase	Duration	Key Activities	Milestones	Entrepreneur Outcomes
Phase 1				
Phase 2				
Phase 3				
Phase 4				

Examples of Milestones

The facilitator may give examples such as:

- Completion of business model canvas
- Prototype or product refinement
- Customer validation
- First pilot or field test
- Partnership agreement
- Investor-ready pitch deck

These examples are meant to stimulate thinking, not limit ideas.

Step 3: Group Presentations (20 minutes)

Each group presents their framework.

Presentation guidelines:

- Maximum 5 minutes per group
- Focus on logic of phases and milestones
- Highlight unique insights

Step 4: Plenary Consolidation (15 minutes)

The facilitator leads the plenary to:

- Compare proposed structures
- Identify common elements
- Agree on a single incubation journey framework

The rapporteur records the final structure.

6. Role of the Facilitator

The facilitator should:

- Keep discussions focused on entrepreneur journey and outcomes
- Encourage participation from all participants
- Prevent the discussion from becoming too theoretical
- Ensure outputs are practical and measurable
- Guide participants toward consensus

7. Materials Required

Materials need for the session include:

- Flipcharts
- Sticky notes
- Markers
- Printed Group Task Templates
- Projector (optional)

8. Information Participants Should Consider

Participants should consider the realities of clean energy entrepreneurship in Kenya, including:

- Technology readiness levels
- Regulatory and certification requirements
- Financing challenges
- Market entry barriers
- Gender and youth inclusion

The incubation design should address these ecosystem challenges.

9. Role of the Rapporteur

The rapporteur should:

- Capture the agreed incubation phases
- Document milestones and outcomes
- Compile the outputs into the incubation curriculum development report

10. Final Deliverable from the Session

The session should produce a clear incubation structure close to the example below.

Phase	Duration	Milestone
Diagnostic & Readiness	Month 1	Business readiness assessment completed
Business Development	Months 2–3	Business model validated
Product & Market Testing	Months 4–5	Product tested with customers
Investment Readiness	Months 6	Investor pitch prepared
Commercialization	Month 7	Market traction demonstrated



Clean Energy Incubation Program Development Workshop

Working Session 2 - Programme Module Development

Facilitator Guide:

Workshop: Modules Development Workshop for the Clean Energy Business Incubation Programme

Session Duration: 1 hour 30 minutes

Session Format: Interactive Working Session (Breakout Groups + Plenary)

1. Purpose of the Session

The purpose of this session is to develop the core modules of the 7-month Clean Energy Business Incubation Programme.

Building on Working Session 1, which defines the incubation phases and milestones, this session focuses on what entrepreneurs will learn and how the programme will deliver that learning.

Participants will collaboratively design practical training modules that equip entrepreneurs with the skills, knowledge, and tools required to:

- Develop viable clean energy business models
- Navigate regulatory and certification environments
- Access finance and partnerships
- Improve operational efficiency
- Prepare for commercialization and scale

The session will ensure the incubation programme provides structured and targeted capacity building aligned to the needs of clean energy entrepreneurs.

2. Expected Outputs

By the end of this session, participants should produce:

1. A list of programme modules aligned to incubation phases
2. Module titles and thematic areas
3. Key learning objectives for each module
4. Suggested delivery formats (workshops, bootcamps, mentorship, practical labs)
5. Initial ideas on tools and resources required for each module

These outputs will contribute directly to the Incubation Curriculum Framework.

3. Key Question Guiding the Session

The facilitator should guide the session around the following question:

“What knowledge, skills and tools do clean energy entrepreneurs need to move successfully through the incubation programme and achieve commercialization?”

Supporting questions:

1. What skills are most critical for clean energy entrepreneurs in Kenya?
2. Which capabilities are missing in existing incubation programmes?
3. What topics should be mandatory for all incubated entrepreneurs?
4. What delivery methods will ensure practical learning?

4. Key Areas to Consider for Module Development

To guide participants, the facilitator may present suggested thematic areas.

Participants should refine, add or reorganize these areas.

Possible Module Areas

1. Entrepreneurship and Business Model Development
2. Clean Energy Market Systems and Value Chains
3. Financial Modelling and Unit Economics
4. Regulatory Compliance and Standards
5. Product Development and Innovation
6. Market Access and Customer Acquisition
7. Partnership Development
8. Investment Readiness
9. ICT Sensitization (AI and Cloud for Business Efficiency)
10. Gender and Inclusive Entrepreneurship
11. Monitoring Impact and Business Performance

These themes serve as discussion prompts rather than fixed modules.

5. Step-by-Step Facilitation Process

Step 1: Session Introduction (10 minutes)

The facilitator should:

- Recap the incubation phases developed in Working Session 1
- Explain that the objective is to design modules that support those phases
- Emphasize that modules must be practical, actionable and relevant to clean energy SMEs

Key message:

Each module should help entrepreneurs achieve the milestones defined in the incubation journey.

Step 2: Breakout Group Work (45 minutes)

Participants resume their groups formed in working session 1.

Each group is tasked with designing programme modules.

Groups should complete the Module Development Template.

6. Module Development Template

Module Title	Objective of the Module	Key Topics	Delivery Method	Expected Outcome

Example

Module Title	Objective	Topics	Delivery Method	Outcome
Financial Modelling for Clean Energy SMEs	Enable entrepreneurs to understand cost structures and revenue projections	Unit economics, pricing models, cost analysis	Workshop + mentorship	Entrepreneurs develop financial models

7. Special Instruction: ICT Module Integration

One of the modules should include Digital Transformation for Clean Energy Enterprises.

This module will cover:

- Artificial Intelligence for SMEs
- Cloud computing tools for startups
- Data-driven decision making
- Digital platforms for operations and customer engagement

This module will be built on the AI and Cloud session presented during the workshop.

8. Group Presentations (20 minutes)

Each group presents their proposed modules.

Presentation guidelines:

- Maximum 5 minutes per group
- Highlight:
 - Module titles
 - Learning objectives
 - Unique topics proposed

9. Plenary Consolidation (15 minutes)

The facilitator leads the plenary to:

- Identify overlapping modules
- Merge similar modules
- Agree on a final list of programme modules

The rapporteur records the agreed modules.

10. Role of the Facilitator

The facilitator should:

- Ensure modules are aligned to incubation phases
- Encourage practical thinking
- Preventing duplication of modules
- Guide participants toward a manageable number of modules
- Ensure inclusion of technical, business, and digital competencies

11. Materials Required

Materials required include:

- Flipcharts
- Markers
- Sticky notes
- Printed Module Development Templates
- Projector (optional)

12. Information Participants Should Consider

Participants should reflect on:

- Challenges faced by clean energy SMEs
- Skills needed to commercialize technologies
- Financing and investment barriers
- Regulatory environments for clean energy products
- Opportunities created by digital technologies

The programme should equip entrepreneurs to navigate these realities effectively.

13. Role of the Rapporteur

The rapporteur should:

- Capture all proposed modules
- Document agreed module titles and objectives
- Compile outputs into the incubation curriculum development report

14. Final Deliverable from the Session

The session should produce a structured list of programme modules, for example:

Module	Focus
Business Model Development	Entrepreneurial strategy
Clean Energy Market Systems	Sector understanding
Financial Modelling	Business sustainability
Regulatory Compliance	Certification and standards
Market Access	Customer acquisition
Investment Readiness	Funding preparation
ICT for Clean Energy Enterprises	AI and Cloud adoption



Clean Energy Incubation Program Development Workshop

Working Session 3 - Bootcamp Design

Facilitator Guide:

Workshop: Modules Development Workshop for the Clean Energy Business Incubation Programme

Session Duration: 1 hour 30 minutes

Session Format: Interactive Working Session (Group Work + Plenary)

1. Purpose of the Session

The purpose of this session is to design the structure and content of the bootcamps that will be delivered during the 7-month Clean Energy Business Incubation Programme.

Bootcamps are intended to provide intensive, hands-on learning experiences that accelerate entrepreneurs' progress at key stages of the incubation journey. They complement the regular programme modules, mentorship sessions, and technical advisory support.

This session will determine:

- The number of bootcamps within the programme
- The focus and objectives of each bootcamp
- The key topics to be covered
- The delivery format and learning activities

The outputs from this session will support implementation activities related to capacity building and advanced training within the incubation programme.

2. Expected Outputs

By the end of the session, participants should produce:

1. A clear structure for the bootcamps within the 7-month incubation programme
2. The focus and objectives of each bootcamp
3. Key topics and learning activities for each bootcamp
4. Suggested timing within the incubation timeline
5. Recommended experts or facilitators for each bootcamp

These outputs will help define intensive learning components that strengthen the capacity of incubated entrepreneurs.

3. Guiding Question for the Session

The facilitator should guide the discussion using the main question:

“What intensive learning experiences do clean energy entrepreneurs need at critical stages of the incubation programme to accelerate their growth and commercialization?”

Supporting questions:

1. At what stage of the programme would entrepreneurs benefit most from intensive training?
2. What complex topics require deeper engagement beyond normal workshops?
3. What practical exercises or simulations should entrepreneurs undertake?
4. Which experts or ecosystem actors should contribute to these bootcamps?

4. Suggested Bootcamp Approach (Reference for Discussion)

The facilitator may present a reference structure to stimulate discussion.

Participants may adjust or redesign this structure.

Example Bootcamp Framework

Bootcamp	Timing in Programme	Focus
Bootcamp 1	Month 2	Business Foundations and Market Understanding
Bootcamp 2	Month 4	Product Development, Standards and Market Validation
Bootcamp 3	Month 6	Investment Readiness and Business Scaling

These bootcamps should help entrepreneurs progress through key programme milestones.

5. Step-by-Step Facilitation Process

Step 1: Session Introduction (10 minutes)

The facilitator should:

- Briefly recap the incubation phases and programme modules developed in previous sessions.
- Explain the role of bootcamps in accelerating learning and progress.
- Emphasize that bootcamps should be practical, hands-on, and focused on solving real business challenges.

Key message:

Bootcamps should help entrepreneurs move from knowledge to practical application.

Step 2: Group Work (45 minutes)

Participants Resume their groups (Three Groups).

Each group will design one bootcamp.

Groups should focus on:

- Bootcamp objective
- Topics to be covered
- Key practical activities
- Expected outcomes for entrepreneurs

Participants should complete the Bootcamp Design Template.

6. Bootcamp Design Template

Bootcamp Title	Timing in Programme	Objective	Key Topics	Practical Activities	Expected Outcomes
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Example

Bootcamp Title	Timing	Objective	Topics	Activities	Outcome
Market Validation Bootcamp	Month 4	Help entrepreneurs validate market demand	Customer discovery, pricing strategies	Customer interviews, prototype testing	Market validated product

7. Key Areas Bootcamps May Address

The facilitator may suggest possible areas such as:

- Clean Energy Market Systems and Value Chains
- Regulatory Compliance and Product Certification

- Product Development and Technical Validation
- Financial Modelling and Cost Structures
- ICT, AI and Cloud Tools for Operational Efficiency
- Market Entry and Customer Acquisition
- Investment Readiness and Pitch Development

These areas should reflect the practical needs of clean energy enterprises.

8. Group Presentations (20 minutes)

Each group presents their bootcamp design.

Presentation guidelines:

- Maximum 5 minutes per group
- Highlight:
 - Bootcamp objective
 - Topics covered
 - Key learning activities

9. Plenary Consolidation (15 minutes)

The facilitator leads a discussion to:

- Compare the proposed bootcamps
- Identify overlaps
- Agree on the final set of bootcamps and their timing

The rapporteur documents the agreed structure.

10. Role of the Facilitator

The facilitator should:

- Ensure bootcamps are aligned with incubation milestones
- Encourage ideas that emphasize hands-on learning
- Ensure the bootcamps include technical, business, and digital topics
- Guide the group toward a clear and realistic structure

11. Materials Required

The Materials required include:

- Flipcharts
- Sticky notes
- Markers
- Printed Bootcamp Design Templates
- Projector (optional)

12. Information Participants Should Consider

Participants should consider:

- The complexity of clean energy technologies
- Regulatory and certification requirements
- Market access barriers
- Financing challenges for SMEs
- The importance of digital technologies such as AI and cloud tools

Bootcamps should help entrepreneurs overcome these challenges through intensive learning and collaboration.

13. Role of the Rapporteur

The rapporteur should:

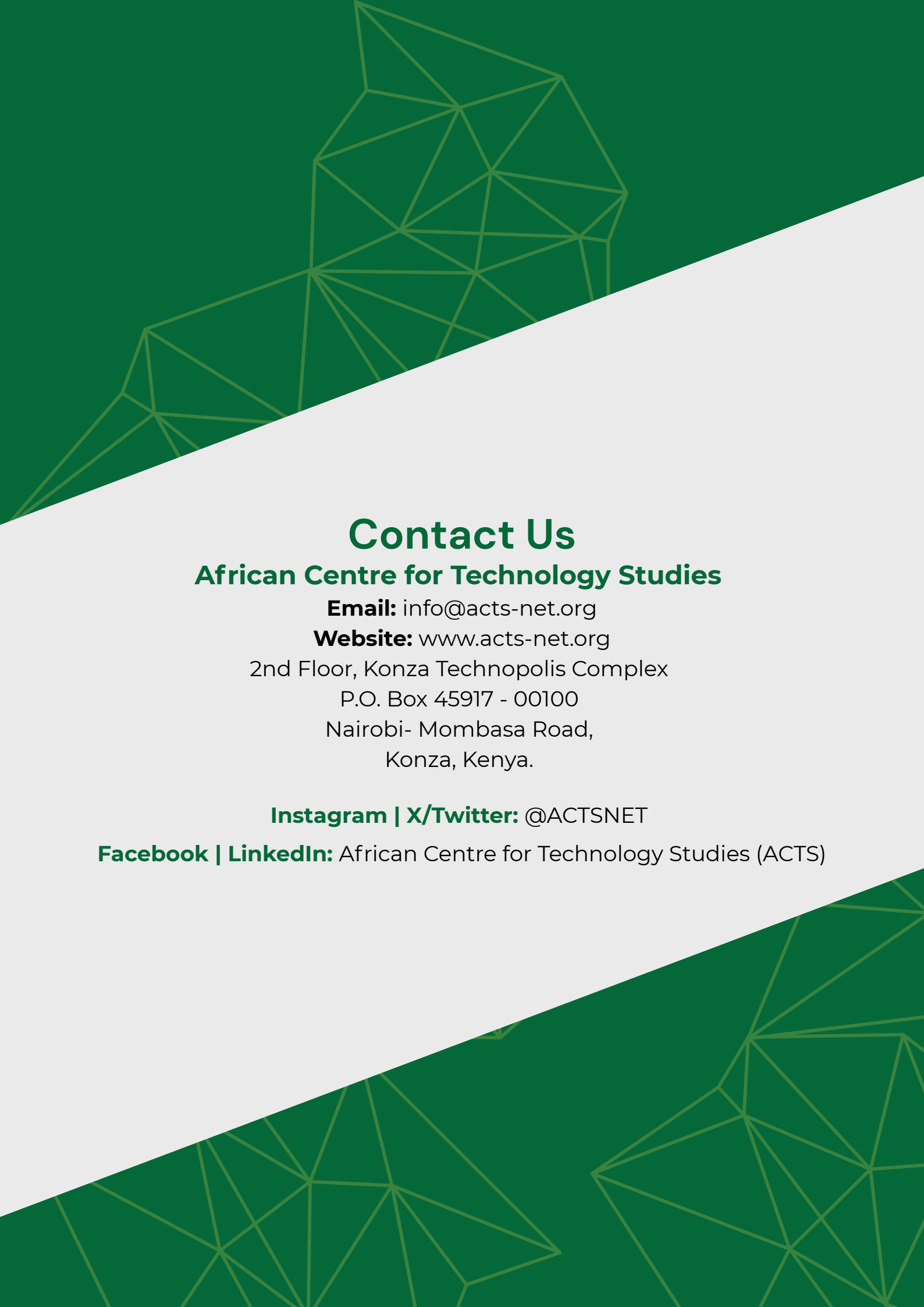
- Capture the final bootcamp structure
- Record the objectives and key topics
- Document agreed timing within the incubation programme

These outputs will be included in the incubation curriculum framework.

14. Final Deliverable from the Session

The session should produce a structured bootcamp plan close to the example below:

Bootcamp	Focus	Timing
Bootcamp 1	Business Foundations and Market Systems	Month 2
Bootcamp 2	Product Validation and Standards	Month 4
Bootcamp 3	Investment Readiness and Scaling	Month 6



Contact Us

African Centre for Technology Studies

Email: info@acts-net.org

Website: www.acts-net.org

2nd Floor, Konza Technopolis Complex

P.O. Box 45917 - 00100

Nairobi- Mombasa Road,

Konza, Kenya.

Instagram | X/Twitter: @ACTSNET

Facebook | LinkedIn: African Centre for Technology Studies (ACTS)