ACQF
African Continental
Qualifications Framework

ALL-AFRICA STUDENTS UNION
UNION PANAFRICAINE DES ETUDIANTS
UNIÃO DOS ESTUDANTES DE TODA A ÁFRICA
اتحاد طلاب عموم إفريقيا
AASU

TOOLKIT

on Greening Skills and Qualifications in Africa

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Toolkit on Greening Skills and Qualifications in Africa

This toolkit is designed to provide actionable guidance for engaging diverse stakeholders in Africa to address climate issues and promote greening skills and qualifications. It serves as a comprehensive resource for schools, students, policymakers, qualification authorities and religious/traditional leaders, offering practical strategies, tools, and frameworks to integrate green skills into education, policy, and community initiatives. The Toolkit has been developed as an outcome of the data collected from stakeholders from across Africa as part of the ACQF II Pilot Project on "Greening Skills and Qualifications in Africa – Users' Engagement".

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FOREWORD FROM THE AFRICAN CONTINENTAL QUALIFICATIONS FRAMEWORK (ACQF-II) PROJECT

Africa's transition towards greener and more sustainable economies is reshaping the nature of work, skills demand and qualifications across the continent.

The African Continental Qualifications Framework (ACQF) provides a common reference point to support this transformation. By promoting learning outcomes–based qualifications, transparency and comparability, the ACQF offers a powerful mechanism for embedding green skills into national qualifications frameworks, curricula and training pathways. Integrating sustainability competences into qualifications systems is essential to ensure that green transitions translate into recognised skills and employability opportunities.

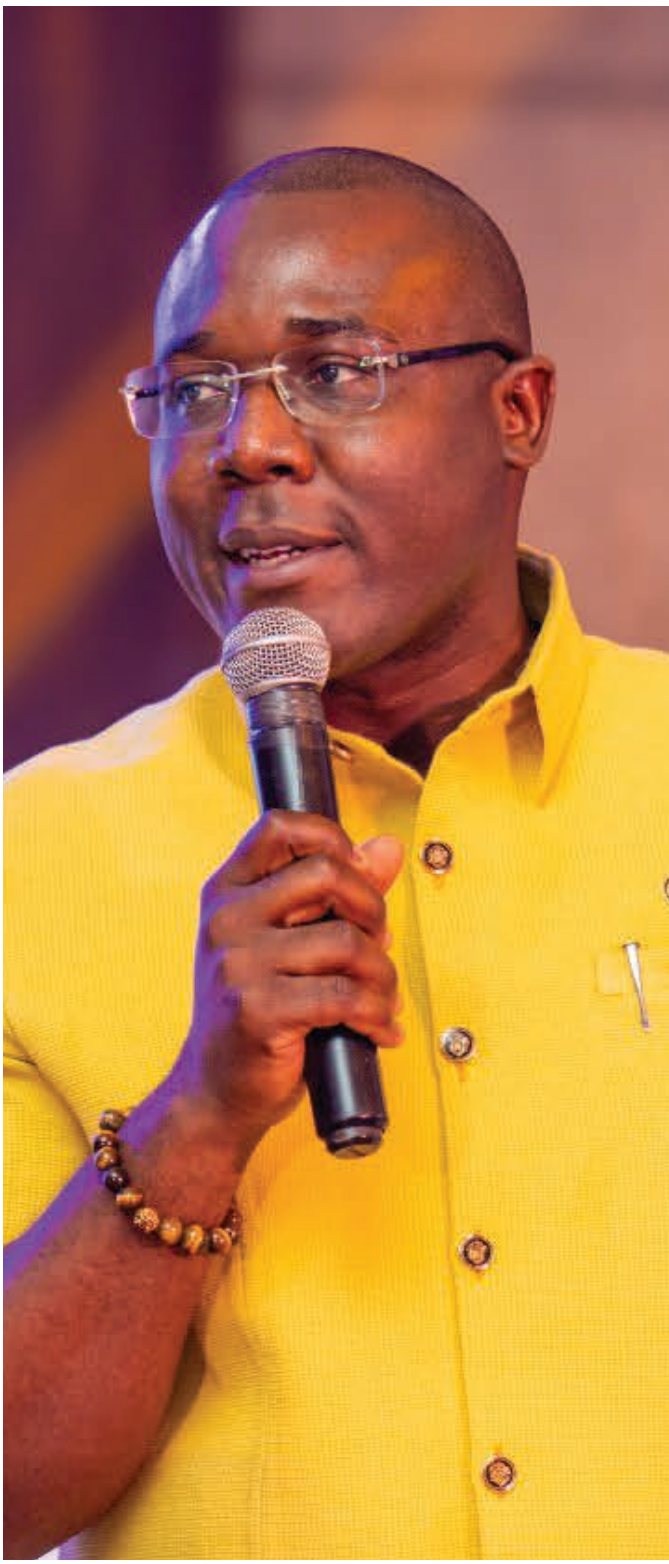
The "Toolkit on Greening Skills and Qualifications in Africa" is the result of a collaborative effort, drawing on the insights and experiences of stakeholders from across the continent as part of the AASU-ACQF Pilot Project on "Greening Skills and Qualifications in Africa – Users' Engagement". The collaboration reflects a shared commitment to place learners and youth at the centre of the green transition. As a pan-African student organisation with strong networks across higher education and TVET institutions, AASU brings a unique perspective, connecting policy discussions with the realities, aspirations and innovations of young people across the continent.
This toolkit is designed as a practical resource for educators, students, policymakers, qualification authorities, and community leaders. It offers actionable strategies, tools, and frameworks to help integrate green skills into education, policy, and community initiatives.

We invite you to use this toolkit as a guide and inspiration—adapting its approaches to your context, and joining forces in building a future-ready skills ecosystem that supports Africa's sustainable development.

ACQF
African Continental Qualifications Framework

ACQF-II Project Team
European Training Foundation (ETF)

FOREWORD FROM THE ALL-AFRICA STUDENTS UNION



Africa's transition to sustainable and low-carbon development pathways is both an environmental necessity and a strategic opportunity. With a rapidly growing youth population, the continent holds significant potential to drive innovation, strengthen resilience, and expand inclusive green employment. Realising this potential, however, requires skills systems and qualifications frameworks that are responsive, inclusive, and aligned with emerging labour market needs.

It is my privilege to present the Toolkit on Greening Skills and Qualifications in Africa, developed under the ACQF II Pilot Project on "Greening Skills and Qualifications in Africa – Users' Engagement." This toolkit comes at a critical moment for the African continent, as it confronts the intersecting challenges of climate change, economic vulnerability, and the urgent need to align education and training systems with the demands of a rapidly evolving green economy.

This toolkit responds directly to that need. Drawing on multi-country data, continental research, and practical case studies, it translates evidence into actionable guidance for stakeholders across education, policy, and community systems. It provides structured approaches to integrating green skills into curricula, strengthening policy coherence, and fostering collaboration between institutions, industry, and communities. It also highlights the importance of engaging youth, informal sector actors, and local knowledge systems in shaping Africa's green transition.

The All-Africa Students Union (AASU), through its partnership with ACQF II, remains committed to advancing transformative education and amplifying student voices in continental and global processes. This toolkit

reflects a shared vision of an Africa where skills development contributes to climate action, social equity, and sustainable livelihoods.

Policymakers, educators, qualification authorities, private sector actors, and community leaders are encouraged to actively utilise this toolkit and adapt it to their contexts. Its effectiveness will depend on collective action, sustained collaboration, and a commitment to building a future-ready workforce that supports Africa's sustainable and just transition.

Peter Kwasi Kodjie
Secretary General
All-Africa Students Union

1.0 INTRODUCTION

Africa's green transition is gaining momentum as the continent faces intensifying climate risks, economic vulnerabilities, and the urgent need to prepare its youthful population for emerging labour market opportunities. While climate impacts continue to threaten livelihoods and deepen inequalities, the global shift toward low-carbon and resource-efficient economies is creating new employment possibilities that require updated skills and qualifications.

The African Union, through ACQF II, has prioritised greening qualifications to respond to these demands. Evidence shows that green skills now span multiple sectors, including energy, agriculture, construction, transportation, waste management, the blue economy, and digitally enabled green services. However, skills mismatches, weak policy alignment, and limited inclusion of youth and informal workers remain significant challenges.

In this context, the AASU ACQF II partnership has developed this toolkit to support stakeholders in strengthening green skills and qualifications across the continent. Drawing on multi-country data, continental research, and insights from learners, educators, employers, and youth organisations, the toolkit provides a practical, evidence-based guide for building a future-ready skills ecosystem that supports Africa's sustainable and just transition.

1.1 About this toolkit

This toolkit builds on two core knowledge sources:

- The ACQF Concept on Greening Skills and Qualifications in Africa – Users' Engagement, which analyses how prepared NQFs, TVET and higher education systems, employers and community actors are to integrate green competences.
- The Book of Good Practices on Greening Skills and Qualifications in Africa that documents six detailed cases from Kenya, Nigeria, Mozambique, Zambia, The Gambia, and Egypt.

The toolkit translates this analytical and case-based evidence into practical steps, tools and suggested formats for stakeholder engagement.

1.2 Purpose of the Toolkit

The toolkit seeks to:

- Equip stakeholders with the knowledge, tools, and strategies required to integrate green skills and qualifications into education, training, policy, and community practices
- Support climate action, enhance social equity, and contribute to Africa's sustainable and just transition.
- Provide step-by-step guidance for designing and running participatory processes that define green competences, revise qualifications or curricula, and link local practices to national qualifications frameworks and the ACQF.
- It offers ready-to-use formats, workshop designs and communication ideas that different actors can adapt to their own contexts, drawing inspiration from good practices across Africa in areas such as school-based environmental education, blue economy skills, circular bioeconomy and climate literacy certification.

1.3 How to Use the Toolkit

You can use this toolkit in several ways:

- Guided Navigation: Users can navigate through the toolkit based on their role, including educators, policymakers, TVET providers, students, or community leaders, with each section offering tailored guidance.
- Implementation Pathways: Practical steps are proposed to support curriculum reform, policy alignment, community engagement, and collaboration with industry.
- Cross-Sector Collaboration: The toolkit highlights opportunities for joint action among schools, youth organisations, traditional and religious authorities, government agencies, employers, and civil society.

You do not need to use every section. You can pick the modules that are most relevant to your current stage and add your own tools, national data and case examples.

1.4 Who should use this toolkit

This resource is designed for:

- Schools and training institutions
- Students and youth organisations
- Policymakers and regulatory agencies, including ministries responsible for education, labour, youth, environment, energy, agriculture and industry.
- Religious and traditional leaders
- Community-based and civil-society stakeholders
- National Qualifications Authorities

1.5 Key Objectives

The toolkit aims to:

- Promote the integration of green skills into education and training systems.
- Empower youth and communities to take meaningful climate action.
- Strengthen policy and qualifications frameworks to support green skills development.
- Leverage cultural and indigenous knowledge to advance climate justice.

1.6 What are green skills and green qualifications

ACQF and partner organisations use a broad definition of green skills. Green skills refer to the knowledge, skills, values, and attitudes that individuals need to live, work, and act in ways that reduce environmental harm, support climate resilience, and enable the sustainable use of natural resources. This includes:

- Transversal competences such as systems thinking, responsible citizenship, problem solving, collaboration, respect for biodiversity and resource efficiency
- Skills for greening existing occupations, such as eco-efficient construction, cleaner production, sustainable tourism, climate-smart agriculture and improved waste management
- Highly specialised skills that support the development and deployment of green technologies, such as solar and wind engineering, environmental auditing or climate data analysis

ACQF Case Book on Green Skills and Green Qualifications Good Practices.

Green qualifications are formal, non-formal or hybrid credentials that validate sustainability-related learning outcomes aligned with occupational and societal needs in Africa's climate-resilient transition. Green qualifications recognise competences acquired through structured training, work experience, informal practices, and indigenous knowledge, and they provide flexible, stackable, and labour market-responsive pathways included in national qualification frameworks. They may be full qualifications at any NQF level or shorter micro--credentials that certify specific green competences.

2.0 STAKEHOLDER SPECIFIC ENGAGEMENT STRATEGIES

This section outlines tailored approaches for engaging key stakeholder groups in advancing green skills and climate action. It aligns user-focused guidance with the broader strategic and operational objectives of the AASU–ACQF II initiative, ensuring that each group contributes effectively to a just and sustainable transition.

2.1 Schools: Guideline for Integrating Green Skills into Curricula

The purpose of the guideline is to support schools in embedding green competences and climate education within teaching and learning systems.

2.1.1 Guideline 1: Align Curriculum with Emerging Green Skills Needs

What Schools Should Do?
Integrate green competences across relevant subjects including science, geography, technology, technology and vocational subjects.

Why Does This Matter?
Africa's labour market demands are shifting toward renewable energy, waste management, sustainable agriculture, green mobility, and nature-based solutions. Early curriculum alignment prepares learners for future qualifications and green-sector opportunities.

How do you integrate Green Skills into the Curriculum?

- Map existing subjects against priority green sectors, as well as other general sectors.
- Introduce green modules, topics or practical lessons linked to real-world applications into the existing curriculum.
- Utilise findings from continental and national green skills studies to inform content. See ACQF Case Book on Green Skills and Green Qualifications Good Practices_16-11-2025.docx and Greening Skills and Qualifications in Africa – Users' Engagement.docx among others
- Begin the integration process now at the school level and proceed to the national qualification authority for accreditation and subsequent implementation.

Potential Challenges
- Low readiness of national qualification systems
- Limited curriculum guidance and slow national reforms.

Solutions
- Apply incremental curriculum updates at the school level.
- Utilise open-source green education resources to supplement knowledge gaps.
- Consult local experts, NGOs and environmental agencies for technical input.

2.1.2 Guideline 2: Strengthen Teacher Capacity in Green Competences

What Schools Should Do?
Build teacher skills in sustainability, green technologies and systems thinking.

Why Does This Matter?
Surveys reveal major capacity gaps among teachers, especially in TVET and science subjects. Due to limited training and infrastructure.

How to strengthen Teacher Capacity in Green Competences

- Establish continuous professional development (CPD) on green skills.
- Leverage partnerships with universities, TVET institutions and environmental bodies to build the capacity of Teachers.
- Utilise online, modular, or blended training when trainers are scarce.
- Encourage teachers to incorporate simple, real-world, and practical demonstrations into lessons.

Potential Challenges
- Shortage of qualified trainers.
- Insufficient practical infrastructure (labs, equipment, tools).

Solutions
- Create teacher-learning circles for peer training.
- Invite mobile trainers or regional experts on a rotational basis to provide expertise and support.
- Use low-cost, improvised teaching materials.

2.1.3 Guideline 3: Use best practices from Africa to Encourage Application

What Schools Should Do?
Incorporate practical examples from successful African school initiatives.

Why Does This Matter?
Case studies demonstrate feasibility, motivate adoption and provide step-by-step models for replication, especially in low-resource contexts.

How to use practices from Africa to encourage Application?

- Compile case stories from local and regional schools using cost-effective innovations.
- Integrate case studies into teacher training and school improvement planning.
- Prioritise examples that address resource constraints and community engagement.

Potential Challenges
- Limited documentation of effective school-based green initiatives.

Solutions
- Encourage schools to document and share their own innovations.
- Collaborate with NGOs and youth climate groups to collect and publish case studies.

2.1.4 Guideline 4: Promote Practical, Hands-On Environmental Learning

What Schools Should Do?
Utilise project-based learning, student clubs, and community projects to develop practical competencies.

Why Does This Matter?
Hands-on activities connect classroom learning to real-life environmental challenges and industry expectations, even where technical infrastructure is limited.

How to promote practical, hands-on environmental learning

- Establish or strengthen environmental clubs.
- Introduce simple, practical projects, such as school gardens, tree planting, reuse/recycling initiatives, water audits, and climate awareness campaigns.
- Link students with community practitioners in agriculture, waste management and energy.
- Use local environments as open laboratories when indoor labs are inadequate.

Potential Challenges
- Limited equipment, budgets and technical facilities.

Solutions
- Adopt low-tech, low-cost project models.
- Mobilise parents, local businesses and community groups as resource partners.
- Seek micro-grants from environmental institutions and local authorities.

2.2 Students: Guideline for Empowering Youth for Climate Action

The objective of this guideline is to equip students with tools and motivation to become climate leaders and active contributors to Africa's green transition.

2.2.1 Guideline 1: Strengthen Youth Engagement in Climate Action

The objective is to build student-led initiatives that promote sustainability and mobilise peers and communities.

Why does it matter?
Youth-led activities foster environmental responsibility, leadership and collaboration. They provide real-life exposure to climate challenges, build confidence and strengthen student ownership of sustainability initiatives, especially important in contexts where formal climate education is limited.

What should students do?

- Form or join a climate club, environmental brigade, or sustainability society.
- Organise climate awareness campaigns, clean-up activities, exhibitions and community outreach projects.
- Participate in youth climate networks at the school, community, national or regional levels.
- Collaborate with peers to develop practical solutions, such as recycling initiatives, tree-planting projects, water conservation initiatives, or green innovations.

Potential Challenges

- Limited adult mentorship and insufficient school structures to support youth-led initiatives.
- Few platforms for young people to engage in climate decision-making.

Solutions

- Seek mentorship from teachers, NGOs, youth groups and community leaders.
- Establish student committees to coordinate climate activities.
- Use free digital platforms to organise, document and share initiatives.

2.2.2 Guideline 2: Build Green Skills for the Future Workforce

Why does it matter?

Africa's labour market is shifting toward green and climate-resilient sectors. Students who develop early green skills gain a competitive advantage, improve employability and contribute to solving community environmental challenges. These skills also support lifelong learning and innovation.

What should students do?

- Enrol in short courses or online modules on renewable energy, waste management, sustainable agriculture, water conservation and green entrepreneurship.
- Join hands-on school or community projects to gain practical experience.
- Participate in green innovation contests, hackathons or environmental competitions.
- Form peer-learning groups to explore climate-related topics and emerging green careers.

Potential Challenges

- Limited access to training equipment, digital tools and specialised educators.
- Unequal access to digital learning resources.

Solutions

- Use free or low-cost online learning platforms and downloadable content.
- Share devices and materials through peer groups or school ICT centres.
- Seek mentorship from local technicians, artisans and environmental practitioners.

2.2.3 Guideline 3: Strengthen Youth Advocacy and Policy Engagement

Why does it matter?

Youth perspectives are essential for designing effective, community-responsive climate policies. Advocacy builds confidence, fosters civic responsibility, and cultivates leadership. When young people are involved in decision-making, local climate solutions become more inclusive and sustainable.

What should students do?

- Learn basic advocacy skills, including writing, public speaking and negotiation.
- Engage school boards, local assemblies, traditional leaders or district authorities on climate issues.
- Participate in community consultations, youth forums and environmental dialogues.
- Prepare policy briefs, petitions or position papers to express youth concerns and recommendations.

Potential Challenges

- Youth voices are often overlooked in decision-making spaces.
- Limited experience with advocacy tools and policy processes.

Solutions

- Partner with youth-led organisations to access advocacy training.
- Utilise school clubs as opportunities to develop communication and leadership skills.
- Work with mentors who can support youth participation in local dialogues.

2.2.4 Guideline 4: Use Digital Platforms to Learn, Educate and Mobilise

Why does it matter?
Digital tools expand access to climate knowledge, connect students to global networks and enhance visibility for youth-led action. They also help students monitor progress and demonstrate impact, which strengthens advocacy and accountability.

What should students do?

- Utilise educational apps, climate trackers, digital libraries, and virtual learning platforms to expand your knowledge.
- Document and share climate projects on social media to inspire peers.
- Join online events, webinars and virtual youth conferences on sustainability.
- Track personal or school environmental footprints using digital tools.

Potential Challenges
- Limited devices, high data costs and digital inequality.
- Misinformation is circulating online.

Solutions
- Use low-data applications and offline learning options.
- Verify information using credible scientific sources.
- Share devices through peer groups or community ICT centres.

2.3 Policymakers: Supporting Green Skills Frameworks

To equip policymakers with clear, evidence-based actions for developing and implementing coherent green skills and qualifications policies that respond to Africa's climate and labour-market realities.

2.3.1 Guideline 1: Develop Coherent National and Regional Green Skills Policy Frameworks

Why does it matter?
Strong policy alignment provides the foundation for systemic transformation. Coherent frameworks help countries embed green competences across qualifications, ensure institutional accountability and avoid fragmented approaches that slow down the green transition.

What should policymakers do?

- Develop or update national green skills strategies that align with Agenda 2063, CESA 26–35,the Africa Continental TVET Strategy 2025-34, the AU Climate Change Strategy, UNESCO's sustainability frameworks, and the ILO's Just Transition principles.
- Include green competences, occupational standards and learning outcomes in education, TVET and labour policies.
- Harmonise national strategies with regional and continental frameworks to ensure comparability and mobility across Africa.

Potential Challenges

- Fragmented policy landscapes and overlapping mandates across ministries.
- Limited national guidance on green competences and qualifications reform.
- Inconsistent integration of green skills across education, climate and economic policies.
- lack of labour market data.

Solutions

- Establish cross-ministerial taskforces to harmonise policy development.
- Use ACQF and continental guidelines to define green competences and learning outcomes.
- Integrate green skills into national development, climate and employment strategies to ensure coherence.
- Apply qualitative labour market intelligence by partnering with the industry and green projects, use sector-based signals (climate and green growth strategies, national adaptation plans).
- Use international skills taxonomies can be another complementary option.

2.3.2 Guideline 2: Strengthen Stakeholder Collaboration and System Coordination

What should policymakers do?

- Facilitate structured collaboration among schools, TVET institutions, higher education, industry, employers, youth groups and community stakeholders.
- Establish national green-skills coordination bodies or working groups.
- Create platforms for the industry to regularly share labour-market insights and emerging skill needs.

Why does it matter?
Green transitions require multi-sector collaboration. Coordinated systems prevent duplication, improve the relevance of training, support effective qualification reforms and ensure that skills development responds to real market demands and community needs.

Potential Challenges
- Weak institutional coordination and siloed policy implementation.
- Limited mechanisms for industry and communities to influence qualifications and curricula.
- Insufficient engagement of youth and informal sector actors.

Solutions
- Formalise stakeholder engagement mechanisms (national councils, advisory boards, intersectoral committees).
- Institutionalise industry consultation in curriculum review and occupational standards development.
- Include youth, women's groups and community organisations in policy consultations.

2.3.3 Guideline 3: Mobilise Sustainable Funding for Green Skills Development

Why does it matter?
Without sustainable financing, even well-designed policies cannot be implemented effectively. Adequate funding ensures that institutions can acquire equipment, train educators, update curricula and deliver high-quality green skills training.

What should policymakers do?

- Allocate dedicated budget lines for green skills, curriculum updates, infrastructure and capacity building.
- Mobilise external financing from climate funds, development partners, and global green transition initiatives.
- Create incentives and co-financing mechanisms for private-sector participation.
- Support innovation hubs and green entrepreneurship programmes targeting youth.

Potential Challenges
- Limited national budgets and competing priority sectors.
- Low awareness of climate finance mechanisms and donor programmes.
- Weak public–private collaboration in financing training.

Solutions
- Integrate green skills financing into national budget frameworks, climate adaptation plans and economic development strategies.
- Leverage global climate funds (GCF, GEF, Adaptation Fund) and ODA resources.
- Encourage industry co-investment and performance-based financing models.

2.3.3 Guideline 3: Mobilise Sustainable Funding for Green Skills Development

Why does it matter?
Robust M&E ensures accountability, supports continuous improvement and enables data-driven decision-making. Labour-market intelligence strengthens the relevance of training and ensures that systems respond to dynamic climate and employment realities.

What should policymakers do?

- Establish M&E systems to measure the performance of green skills policies, qualifications reforms and institutional programmes.
- Develop national labour-market intelligence systems to track emerging green jobs and forecast skills needs.
- Use evidence to update qualifications, occupational standards and curricula.
- Set targets and indicators aligned with ACQF II and national qualifications frameworks.

Potential Challenges
- Weak data systems and limited institutional capacity for monitoring and evaluation (M&E) and skills forecasting.
- Fragmented data collection across ministries, qualifications authorities and industry.
- Infrequent updates to qualifications and curricula.

Solutions
- Strengthen collaboration between labour ministries, national statistics agencies, industry and training institutions.
- Invest in capacity-building for monitoring and evaluation (M&E) and data analysis.
- Use ACQF tools to harmonise indicators and promote comparability across countries.

2.4.0 Religious and Traditional Leaders: Leveraging Cultural Influence

Religious and traditional leaders are trusted custodians of values, identity and communal responsibility. Their influence makes them essential partners in shaping attitudes toward the environment, guiding behaviour change, and strengthening community ownership of climate action. The following guidelines outline what leaders should do and why it matters for advancing climate justice and the adoption of green skills.

2.4.1 Guideline 1: Align Climate Action With Cultural and Religious Values

Why does it matter?
When climate action is grounded in cultural and spiritual values, communities are more likely to embrace it. This fosters deep, lasting behavioural change and connects environmental responsibility to shared identity, faith, and tradition.

What should leaders do?

Embed messages about environmental stewardship, conservation, and responsible resource use into sermons, festivals, community rituals, cultural narratives, and moral teachings.

2.4.2 Guideline 2: Mobilise Communities for Grassroots Climate Initiatives

Why does it matter?
Grassroots mobilisation turns climate education into real, visible action. It empowers young people, strengthens community cohesion and accelerates the adoption of green practices across households, schools and local institutions.

What should leaders do?

Organise and lead community-based climate activities, such as clean-ups, tree plantings, youth training sessions, eco-clubs, and awareness campaigns, through religious gatherings, clan systems, local councils, and community meetings.

2.4.3 Guideline 3: Promote and Protect Indigenous Ecological Knowledge

Why does it matter?
Indigenous knowledge contains practical, place-based solutions that have sustained communities for generations. Integrating it into climate education enhances resilience, honours cultural heritage and aligns with ACQF principles on recognising informal and indigenous learning.

What should leaders do?

Document, preserve, and actively teach traditional ecological practices, such as water conservation customs, land stewardship rituals, the use of medicinal plants, and local climate observation methods.

2.4.4 Guideline 4: Advocate for Climate Justice and Inclusive Climate Policies

Why does it matter?

Leaders help ensure that climate decisions consider the voices of vulnerable groups. Their advocacy strengthens accountability, bridges the gap between policy and community realities, and promotes a justice-driven transition that benefits all.

What should leaders do?

Use your platforms, religious networks, traditional councils, public ceremonies and media spaces to advocate for fair climate policies and champion community needs in national and local dialogues.

3.0 FOCUS AREAS FOR GREENING SKILLS AND QUALIFICATIONS

This section outlines three priority thematic areas essential to strengthening green skills systems in Africa. Each focus area provides guidance, tools and applied examples drawn directly from six case studies, demonstrating scalable, evidence-based models applicable across diverse African contexts.

3.1 Practical Applications of Indigenous Knowledge

Purpose of this Focus Area

To highlight how indigenous knowledge systems provide practical, culturally grounded solutions for climate adaptation, environmental stewardship and skills development. The aim is to support education institutions, communities, and policymakers in integrating these knowledge systems into mainstream green skills strategies.

3.1.1 Key Strategies and Tools

A. Case Studies: Indigenous Knowledge in Action

Africa's rich ecological traditions already offer proven climate solutions. The following cases illustrate how indigenous practices can be strengthened and formalised:

Case 1, Climate and Child Initiative (CCI), (Kenya): Use of indigenous tree species, agroforestry techniques and community-based restoration rooted in ancestral stewardship practices.

Case 2, Blue Florest (Mozambique), MARMO – Mar Moçambique: Local ecological knowledge on mangrove regeneration, fisheries management and coastal adaptation integrated into training, monitoring and micro-credentials.

Case 3, GreenCoal (Gambia), GreenUp Gambia: Conversion of organic waste into biochar builds on long-standing knowledge of biomass utilisation and resource efficiency.

These cases demonstrate that community-rooted knowledge accelerates climate adaptation and improves programme uptake and sustainability.

B. Integration Strategies for Education and Training

To embed indigenous knowledge meaningfully into formal systems:

1. **Curriculum Infusion:**
   - Incorporate local ecological practices, such as seed selection, agroforestry, water harvesting, and seasonal cycles, into science, TVET, agriculture, and geography curricula.
   - Aligns with ACQF objectives on recognising informal and indigenous competences.

2. **RPL and Micro-Credentials:**
   - Validate practical knowledge held by farmers, fishers, waste workers, herbalists and artisans through recognition of prior learning.
   - Enables upward mobility and formal labour-market access.

3. **Community Co-Teaching Models:**
   - Involve elders, indigenous practitioners and local experts as co-facilitators in schools, TVET centres and training programmes.
   - Demonstrated in Blue Florest and CCI's intergenerational learning.

C. Community Engagement Tools

Effective indigenous-knowledge integration requires participatory approaches:

Community Forums & Learning Exchanges: Facilitate joint school–community restoration actions, similar to CCI's Environmental Days.
Co-Designed Curricula: Use participatory design with community members to ensure cultural accuracy and ownership.
Applied Learning Sites: Establish community nurseries, seed banks, mangrove restoration sites, and circular-economy workshops.

3.1.2 Impact on Skills and Qualifications Systems

- Strengthens ACQF priorities on diverse learning pathways.
- Supports competency-based green-skills frameworks grounded in real-world knowledge.
- Enhances cultural legitimacy and community buy-in for climate action.
- Provides scalable models suitable for both rural and urban contexts.

3.2 Multi-Level Stakeholder Collaboration

Purpose of this Focus Area

To promote effective collaboration among local, national and regional actors, enabling coordinated climate action, harmonised qualifications, and shared responsibility across systems.

3.2.1 Key Strategies and Tools

A. Partnership Models

The six cases offer diverse partnership configurations that can be replicated:

CCI **(Kenya):** School–community alliances for forest restoration and environmental education.

CLP/WAGEDI **(Nigeria):** Multi-institutional partnerships linking universities, youth groups, governments and global accreditation bodies.

Blue Florest **(Mozambique):** Collaboration between TVET schools, universities, local authorities and community groups for coastal skills development.

KWEZ, (Tourism, Wildlife and Environmental Sustainability Education Project, **TWESEP (Zambia):** Partnerships between schools, wildlife authorities, and tourism stakeholders.

GreenCoal, GreenUp Gambia **(Gambia):** Municipal–community partnerships for waste-to-energy solutions.

Egypt Circular Economy Study: CSO–SME–Community Linkages for Youth and Women Inclusion in Circular Sectors.

These examples demonstrate that greening skills flourish when actors pool their mandates, expertise, and resources.

B. Collaboration Tools

1. **Stakeholder Mapping Templates:**
   - Identify the roles of ministries, schools, TVETs, civil society, industry, and community actors.

2. **Partnership Agreements & MoUs:**
   - Standardise roles, responsibilities and expected outputs.

3. **Joint Training & Capacity-Building Platforms:**
   - CLP's facilitator model demonstrates how shared training builds scale.
   - Blue Florest's multi-partner micro-credentials offer a replicable example.

4. **Coordination Mechanisms:**
   - District climate committees
   - School- community advisory groups
   - Multi-stakeholder task teams for curriculum review

C. Communication & Knowledge-Sharing Strategies

- Regular multi-stakeholder forums for policy dialogue (e.g., used by GreenCoal in municipal spaces).
- Digital repositories for sharing curricula, case studies, and training modules.
- Peer-learning exchanges under ACQF II for cross-country harmonisation.
- Youth leadership platforms leveraging CLP and TWESEP models.

3.2.2 Contribution to System Strengthening

- Supports policy coherence across ministries and institutions.
- Increases efficiency by pooling resources.
- Accelerates qualification harmonisation under ACQF.
- Ensures learning is grounded in real-world labour-market needs.

3.3 Embedding Green Skills into Education and Training

Purpose of this Focus Area

To provide practical tools, methods, and models that enable institutions to integrate green competencies into foundational education, TVET, higher education, and community-based learning.

3.3.1 Key Strategies and Tools

A. Curriculum Design

Drawing on insights from the cases:

- **CCI and TWESEP:** demonstrate experiential, project-based learning formats that can be embedded into curricula.
- **CLP:** shows how modular, competency-based climate-learning programmes can fit into formal and informal systems.
- **Blue Florest:** provides templates for integrating sector-specific green skills into coastal and marine training.

Curriculum development should include:

- Clear Green Learning Outcomes: mapped to ACQF levels and following ACQF principles.
- Practical and Contextual Learning: such as tree nurseries, waste valorisation, and mangrove monitoring.
- Integration across subjects: (science, agriculture, geography, business, entrepreneurship).
- Adaptability for local contexts: (urban, rural, coastal, forest, arid zones).\

B. Vocational Training & TVET Integration

TVET systems require:

- Sector-specific modules (e.g., biomass energy, coastal ecology, circular economy).
- Micro-credentials, as demonstrated by Blue Florest and GreenCoal.
- RPL systems to recognise indigenous and informal-sector skills.
- Industry partnerships ensure alignment with emerging green jobs.

C. Professional Development for Educators

Insights from all six cases indicate that educator capacity is a significant barrier. Institutions should adopt:

- Facilitator training models (CLP's global ToT system).
- Continuous in-service teacher training on sustainability, green technologies and climate science.
- Peer mentoring models (used by TWESEP and CCI).
- Digital learning platforms for scalable, cost-effective delivery.

D. Certification and Accreditation Frameworks

Green skills must be formally recognised to drive mobility and employability. Models include:

- CLP's accredited certifications, aligned with measurable action pledges.
- Blue Florest's micro-credentials for coastal competencies.
- GreenCoal's RPL-driven credentials for waste valorisation competences.
- Circular Economy profiles emerging from the Egypt study for TVET reform.

Key considerations:

- Embed green competences within NQF levels.
- Ensure portability across regions by referencing NQFs to the ACQF.
- Recognise informal learning through structured RPL pathways.

3.3.2 System-Level Impact

- Supports qualifications harmonisation under the ACQF initiative.
- Expands access to green jobs for youth and women.
- Improves institutional readiness for climate-responsive training.
- Strengthens workforce mobility across sectors and countries.

4.0 RESOURCES

Case Study Compendium: Detailed examples of best practices in green skills integration can be found here: **Book of Good Practices for the Greening of Skills and Qualifications in Africa**

5.0 IMPLEMENTATION ROADMAP

This section presents a suggested process that you can adapt to your own scale and context. You can conduct a light version over a few weeks or a deeper national process over several months.

Step 1: Map the context and set objectives

5.1 Analyse the policy and labour market context

Begin with a concise mapping exercise:

- Identify national policies and strategies relevant to green transition, climate change, energy, agriculture, industry, employment and education.
- Review the current status of your NQF, TVET reforms and higher education qualifications. Which sectors already mention environmental outcomes, and which do not.
- Collect available labour market information on green sectors. This may include statistics on renewable energy, waste management, tourism, the blue economy, sustainable agriculture, or the circular economy.

Use the ACQF concept and case book as references for common patterns and data sources.

5.2 Clarify your objectives and scope

Based on initial mapping, agree on clear objectives.
Examples:

- Integrate green competences into existing sector qualifications in energy, agriculture or tourism
- Develop new green qualifications or microcredentials priority sectors
- Design a recognition of prior learning pathway for workers in a specific green practice (for example, informal recyclers or community-based conservation groups)
- Align existing pilot projects with national qualifications frameworks and ACQF instruments

Define the scope: Will you work at the national, regional, institutional or community level? Which sectors or value chains will you focus on? Which time horizon is realistic?

Step 2: Convene a multi-stakeholder platform

5.3 Identify and invite key actors

Use your mapping to identify actors who must be present. In most contexts, this will include:

- Qualifications and quality assurance authorities
- TVET and higher education institutions that deliver relevant programmes
- Ministries in charge of the target sectors and education
- Employers and sector bodies
- Youth and student organisations, community groups and NGOs
- Representatives of informal workers and social enterprises active in green areas

Send invitations that explain the purpose, expected contributions and benefits for each actor. Make sure venues, timing and language are accessible to all.

5.4 Design the first consultation workshop

A typical first workshop will:

- Share key facts about the green transition and labour market trends
- Present the objectives of the greening skills initiative
- Gather perspectives from different actors on current gaps and opportunities
- Begin to build a shared language around green skills and qualifications

You can use participatory methods such as:

- World café-style discussions around tables for each sector
- Story circles where practitioners share real experiences from their work
- Gallery walks of posters describing existing projects, programmes or qualifications

End the workshop with a simple agreement on next steps and a small task team or steering group to guide the process.

Step 3: Diagnose existing qualifications and programmes

5.5 Review qualifications and curricula

The steering group should lead a structured review process, which may include:

- Listing all relevant qualifications at different NQF levels in the target sectors
- Analysing learning outcomes to see where environmental and sustainability aspects already appear and where they are missing
- Reviewing curricula, course outlines and assessment methods to identify current practice
- Comparing national qualifications with regional and international good practices documented in the ACQF case book and other sources

This diagnosis highlights entry points where you can embed green competences and identify qualifications that may need full revision.

5.6 Identify gaps and priority changes

Based on the review, summarise:

- Gaps in learning outcomes (for example, absence of resource efficiency or climate adaptation competencies)
- Gaps in practical training infrastructure or teacher competencies
- Misalignment between what employers require and what graduates can do
- Opportunities to draw on existing community-based practices or pilots

Clarify which qualifications or programmes you will work on first and what type of change is feasible in the short, medium and long term.

Step 4: Define green competences and learning outcomes

5.7 Develop a competence framework

Use existing models from the ACQF concept, ILO and UNESCO as references to develop a simple competence framework tailored to your sectors.

Greening Skills and Qualifications

The framework may include:

- Transversal green competences that all learners should acquire, regardless of sector
- Sector-specific competences linked to concrete tasks and processes
- Advanced competences for specialised occupations or leadership roles

Describe each competence in clear, observable terms that can later be assessed

5.8 Align competences with NQF levels and ACQF

For each qualification or module, specify:

- Which competences it should cover
- At which NQF level do these competences sit
- How they correspond to ACQF level descriptors and principles

This alignment strengthens portability and recognition across institutions and countries.

Step 5: Design or revise qualifications, curricula and assessment

5.9 Revise learning outcomes and modules

For existing qualifications:

- Update qualifications descriptions and their learning outcomes to include green dimensions
- Adapt existing modules to integrate environmental content and practical activities
- Add new modules or units where necessary, for example, on renewable energy basics, climate-smart agriculture, eco-tourism practices or circular economy processes

For new qualifications or micro credentials:

- Use your competence framework as the starting point
- Build modules that are coherent, stackable and flexible
- Ensure that practical learning and community or workplace exposure form a core part of the design

5.10 Integrate recognition of prior learning and micro credentials

Many green skills are acquired in informal or non-formal settings. The good practices in Mozambique, The Gambia, and Egypt demonstrate how RPL and microcredentials can recognise and validate such competences.

ACQF Case Book on Green Skills

When you revise qualifications:

- Incorporate RPL pathways so experienced workers can obtain full or partial recognition of competencies
- Define shorter micro credentials that correspond to specific bundles of competences and can stack into full qualifications
- Ensure that credentials awarded through RPL and micro-credentials follow clear quality assurance procedures and are included on the NQF

5.11 Update assessment methods and tools

Green competences often require practical demonstration. Move beyond written exams by using:

- Practical project assignments
- Work-based assessments in companies or community projects
- Portfolios that include evidence from workplace or community experience
- Simulations, role plays or problem-based tasks

Assessment criteria should reflect both technical and transversal aspects, including teamwork, innovation and environmental ethics.

Step 6: Pilot, learn and scale

5.12 Implement pilots

Select a manageable number of pilot sites, such as:

- A group of TVET colleges in one sector
- A cluster of schools or universities running new green modules
- A set of community projects that integrate RPL or micro credentials

Provide support for trainers and mentors, and establish simple monitoring tools to track participation, completion, satisfaction, and early employment outcomes.

5.13 Capture lessons and adjust

Use regular reflection sessions with trainers, learners and employers to:

- Identify what works well and why
- Document challenges in content, delivery, assessment or organisation
- Adjust curricula, methods or support in response to feedback

This reflective learning approach mirrors the iterative methodology used in the ACQF case book documentation and cross-case analysis.

5.14 Plan for scaling and institutionalisation

Once pilots demonstrate results:

- Embed revised qualifications and RPL arrangements in official regulations
- Include green competences and modules in national curricula and provider guidelines
- Mobilise funding for infrastructure, teacher development and expansion to more institutions or regions
- Share experiences through ACQF peer learning platforms and regional networks

ACQF
African Continental
Qualifications Framework

AASU
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UNION PANAFRICAINE DES ETUDIANTS
UNIÃO DOS ESTUDANTES DE TODA A ÁFRICA
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