REPUBLIC OF KENYA

MINISTRY OF EDUCATION
State Department For Technical, Vocational
Education and Training

Kenya Greening TVET Policy Framework

Proposed national framework for sustainable institutions and green skills development

May 2026

PREFACE

Technical and Vocational Education and Training (TVET) is fundamentally positioned at the intersection of education, industry, and community development. Preparing our youth and workforce for productive work and lifelong learning necessitates that our training systems adapt to ecological changes and emerging occupational demands.

The **Kenya Greening TVET Policy Framework** outlines a holistic, "Whole Institution Approach" structured around five core pillars: greening campus operations and infrastructure, curriculum and assessment, research and innovation, community and workplace engagement, and institutional culture and governance. This framework provides a practical roadmap for TVET providers to transition from

traditional operations to living laboratories that demonstrate resource efficiency, renewable energy adoption, circular production, and active climate adaptation.

The State Department for Technical, Vocational Education and Training is committed to coordinating the rollout of this policy, issuing operational instruments, and facilitating capacity building across all public and private institutions. Through rigorous baseline tracking, clear performance indicators, and continuous improvement, we will ensure that our institutions deliver measurable impacts in skills relevance, environmental performance, and graduate employability.

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ACKNOWLEDGEMENT

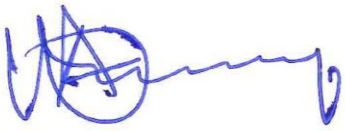
The development of the **Kenya Greening TVET Policy Framework** has been a collective, multi-stakeholder undertaking driven by a shared vision for sustainable skills development in Kenya.

We extend our deep gratitude to the leadership of the Ministry of Education and the State Department for Technical, Vocational Education and Training for their policy guidance, support, and steadfast commitment to climate action and TVET transformation.

We sincerely acknowledge the key contributions of our regulatory, curriculum, and qualification bodies—including TVETA, TVET CDACC, KNQA, and the Kenya School of TVET—for aligning standard systems and trainer capacity development mechanisms with green competencies. Special appreciation goes to the

heads of TVET institutions, council members, county governments, industry partners, civil society organizations, trainers, and learners whose operational insights and feedback shaped the core pillars and practical strategies contained within this framework.

Finally, we express our appreciation to all technical experts, development partners, and the national secretariat whose expertise, dedication, and coordinated efforts made the formulation of this comprehensive policy framework possible.



Anne Wambui Kamonjo

Director,

Greening TVET and Climate Change State Department for Technical, Vocational Education and Training

1.0 Purpose

This framework proposes a common policy direction for integrating environmental, social and economic sustainability into Kenya's TVET system. It connects green skills development with sustainable campus management, applied innovation, workplace partnerships and accountable institutional leadership.

2.0 Executive policy direction

Greening and climate resilience shall become part of institutional planning, teaching, assessment, procurement, operations and performance review. Every participating institution shall prepare a baseline, designate accountable leadership, adopt a costed institutional greening plan and demonstrate improvements in learner competencies and sustainability outcomes.

The State Department for TVET shall lead consultation and adoption, coordinate the implementation plan and issue common operational instruments. Regulatory and qualification bodies shall integrate the framework through their respective approved processes.

3.0 Policy context and rationale

The policy response is to connect institutional sustainability to the core purpose of TVET; preparing people for productive work, enterprise and lifelong learning. Campus investments should support practical training; curriculum reform should respond to occupational change; partnerships should generate workplace learning and verified benefits for communities.

Policy alignment

Source reference	Implication for this framework
UN 2030 Agenda and Sustainable Development Goals	Align institutional plans, curricula and performance indicators with sustainable development outcomes. Connect skills development and inclusion with water efficiency, clean energy, decent work, sustainable industry, responsible consumption and climate action. Measure both learner competencies and institutional sustainability results.

UNESCO Strategy for TVET 2022–2029 and UNESCO UNEVOC approaches	Adopt a whole institution approach covering campus operations, curriculum and training, research, community and workplace engagement, and institutional culture. Strengthen skills anticipation, trainer capacity, industry partnerships and innovation to prepare learners for green, digital and inclusive economies and decent work.
UNESCO Futures of Education — Reimagining Our Futures Together, looking towards 2050 and beyond	Position TVET as a public good that enables learners to shape sustainable futures. Embed cooperation, environmental responsibility, critical thinking and interdisciplinary problem solving in teaching. Establish flexible lifelong learning pathways and participatory planning that responds to long term technological, ecological and social change.
ILO Centenary Declaration for the Future of Work and Work for a Brighter Future	Place people, decent work and lifelong learning at the centre of the green transition. Provide accessible opportunities for upskilling and reskilling, particularly for workers affected by occupational change. Engage employers and workers in skills planning, and integrate gender equality, occupational safety and labour rights into training and workplace partnerships.
UN Pact for the Future, Global Digital Compact and Declaration	Integrate green and digital transformation while protecting

on Future Generations	inclusion and the interests of future generations. Expand equitable access to connectivity, digital skills and responsible use of artificial intelligence. Include youth participation, digital safety, responsible data governance and assessment of long-term impacts in institutional decisions.
Paris Agreement and long-term low emission development strategies	Align skills development and campus investment with national mitigation, adaptation and long-term low emission priorities. Embed climate education and practical competencies in energy efficiency, renewable energy and climate resilient technologies. Develop measurable institutional emissions reduction and resilience plans supported by staff training and stakeholder participation.
UNESCO Education for Sustainable Development — ESD for 2030	Embed sustainability knowledge, skills, values and action across institutional policy and practice. Organize implementation around its five priority areas: advancing policy, transforming learning environments, building educator capacity, empowering youth and accelerating local action. Connect classroom learning with practical solutions on campus and in communities.
OECD Skills Outlook 2025	Strengthen literacy, numeracy, adaptive problem solving, and social and emotional skills alongside

	occupational green competencies. Address inequalities in access, achievement and adult learning through targeted support. Monitor whether learners from different backgrounds can acquire, use and benefit from their skills in employment and enterprise.
ILO Quality Apprenticeships Recommendation, 2023 — No. 208	Establish quality apprenticeships in relevant green and changing occupations through structured workplace and institutional learning leading to recognized qualifications. Require clear apprenticeship agreements, remuneration or other financial compensation, safe working conditions, inclusion, competent supervision and assessment. Engage employers and workers in programme design and quality assurance.

4.0 Scope and definitions

The proposed framework covers public and private TVET providers, national polytechnics, technical and vocational colleges, county vocational training centres and relevant workplace training partners. Application shall be phased through the appropriate national, county, regulatory and provider arrangements. It covers governance, qualifications, delivery, assessment, facilities, procurement, research, community engagement and graduate outcomes.

Greening TVET means reorienting the TVET system and institutions towards environmental, social and economic sustainability.

Green skills are the knowledge, practical competencies, values and attitudes needed to reduce environmental harm and support sustainable work.

Education for Sustainable Development develops informed decisions and responsible action.

A just transition means that changes in skills, technologies and work expand fair opportunities and support people at risk of exclusion.

An institutional greening plan is the governing body approved, costed programme for delivering this framework at provider level.

5.0 Vision, Mission, Goal and Objectives

- **Vision:** An environmentally sustainable, inclusive and climate resilient TVET system that equips people for decent work and contributes to Kenya's sustainable development.
- **Mission:** To integrate green competencies and sustainable practices into TVET governance, training, research, operations and partnerships through coordinated leadership, innovation and continuous improvement.
- **Overall goal:** To institutionalise greening across Kenya's TVET system and demonstrate improvements in skills relevance, resource efficiency, resilience, inclusion and livelihoods.
- **Policy objectives:**
    1. Establish coherent leadership, coordination and financing for greening TVET.
    2. Strengthen awareness, participation and a lasting institutional culture of sustainability.
    3. Integrate and assess green competencies in training while developing trainer capacity.
    4. Improve campus resource efficiency, environmental performance and climate resilience.
    5. Promote applied research, innovation, entrepreneurship and community and workplace partnerships.
    6. Measure results, verify performance and use findings for accountability and improvement.

6.0 Guiding principles

- **Whole institution responsibility:** Sustainability shall inform all institutional functions and occupations.
- **Environmental stewardship:** Prevent pollution, protect ecosystems and use resources responsibly.
- **Resource efficiency and circularity:** Reduce consumption and retain product and material value through maintenance, repair, reuse and recovery.
- **Climate responsibility:** Reduce emissions and strengthen preparedness for climate hazards.

- **Equity and a just transition:** Address barriers affecting women, persons with disabilities and underserved learners and workers.
- **Industry relevance and practical competence:** Align learning with occupational needs and demonstrate skills through practice.
- **Participation and shared ownership:** Involve learners, staff, employers and communities in decisions.
- **Evidence and accountability:** Use measurable baselines, transparent reporting and verified results.

7.0 Policy commitments across the five pillars

7.1 Greening campus operations and infrastructure

Institutions shall manage their campuses as practical learning environments that demonstrate sustainable resource use and safe, resilient operations:

- Establish energy, water, waste and environmental baselines and maintain auditable records.
- Prioritise efficiency, preventive maintenance and low-cost improvements before major capital investment; assess renewable energy and clean cooking options on technical suitability and whole life costs.
- Provide safe water, sanitation and hygiene facilities; repair leaks and adopt appropriate water conservation and reuse measures.
- Apply waste prevention, segregation, reuse and recovery; maintain safe arrangements for hazardous waste, workshop chemicals, batteries and electronic waste.
- Integrate sustainable specifications, durability, repairability and disposal planning into procurement through applicable procedures.
- Assess flood, drought, heat, fire and other relevant risks; maintain accessible emergency arrangements and continuity plans.
- Protect biodiversity and suitable green spaces, track tree survival and promote safe, lower impact transport options.

7.2 Greening curriculum training and assessment

All programmes shall progressively integrate relevant sustainability competencies and demonstrate them in delivery and assessment. Curriculum change shall follow the responsible bodies' approval processes.

- Map occupational tasks and industry needs to identify common sustainability competencies and trade specific skills.
- Embed climate literacy, resource efficiency, safe materials handling and responsible workplace practice in relevant programmes; develop

specialisations where demand and delivery capacity justify them.
- Align occupational standards, learning outcomes, teaching resources and practical assessment evidence.
- Use workshops, campus systems, field projects and structured workplace learning to demonstrate competence.
- Build trainer and assessor capacity through needs based continuing professional development, industry exposure and peer learning.
- Use approved recognition and qualification pathways to support experienced workers, including those in informal employment.

7.3 Greening research innovation and enterprise

Institutions shall support applied research that solves practical sustainability problems and creates opportunities for learners and enterprises:

- Develop research priorities from campus audits, community needs and employer requirements.
- Use living laboratories to test energy, water, circular production and climate resilient solutions; record cost and performance evidence.
- Provide access to shared innovation facilities, mentorship, enterprise support and partner networks.
- Support safe prototyping, intellectual property arrangements and viable routes to adoption; assess benefits beyond competition participation.

7.4 Greening community and workplace engagement

Institutions shall establish partnerships that connect skills development to sustainable production, community resilience and decent livelihoods:

- Co-design training and outreach with employers, county actors, community organisations and relevant technical agencies.
- Agree written arrangements for workplace learning, supervision, safety, assessment, inclusion and partner contributions.
- Offer appropriate short courses and extension support for workers, small enterprises and community groups.
- Use community projects to demonstrate practical solutions, with agreed maintenance responsibilities and beneficiary feedback.
- Collect employer feedback and graduate tracer information to improve programme relevance and identify emerging skills needs.

7.5 Greening institutional culture and governance

Governing bodies and institutional management shall embed sustainability in decisions, staff responsibilities and learner participation. Greening shall be a

continuing management responsibility:

- Adopt an institutional greening policy and a costed plan linked to strategic plans, annual workplans and budgets.
- Appoint a greening coordinator with a written role, reporting line and allocated work time; establish a representative committee that meets at least quarterly.
- Include relevant deliverables in departmental plans and staff performance review arrangements.
- Provide accessible induction, learning resources, learner leadership opportunities and staff engagement activities.
- Maintain feedback and grievance channels, record decisions and disclose verified progress in an accessible annual summary.

8.0 Cross cutting requirements

Inclusion shall be built into recruitment, learning materials, facilities, protective equipment, workplace placements and innovation support. Participation and outcomes shall be disaggregated where feasible and appropriate, with privacy safeguards. Institutions shall identify barriers and agree corrective actions rather than relying on attendance totals alone.

Digital tools shall support accessible learning, efficient administration and reliable monitoring. Digital procurement shall consider energy use, device life, repair and responsible disposal. Institutions shall retain practical alternatives where connectivity or accessibility limits participation.

Health, safety and safeguarding shall apply to all greening activities, including waste handling, tree growing, laboratory work and community projects. Learner participation shall have appropriate supervision and risk controls.

Environmental, social and governance accountability shall be reflected in the same institutional plan and dashboard: environmental performance, fair access and safe learning, and transparent decisions, spending and reporting. These are proposed operational requirements that strengthen the source documents' inclusion and accountability commitments.

9.0 Leadership and institutional responsibilities

The following arrangements are proposed for validation. They allocate coordination and delivery responsibilities without changing statutory mandates or county functions. Existing committees should be used where they can perform these functions effectively.

Actor	Proposed responsibility and accountability
Ministry leadership	Provide policy direction, sponsor adoption, oversee sector performance and resolve barriers through established governance arrangements.
State Department for TVET through the function responsible for greening and climate change	Act as national secretariat; coordinate instruments, technical support, resource mobilisation and consolidated annual reporting.
Proposed national coordination mechanism	Bring together relevant agencies, counties, providers, industry and partners; review quarterly progress, dependencies and corrective actions under approved terms of reference.
TVETA	Consider sustainability criteria in quality assurance through authorised procedures; provide guidance and verify relevant institutional evidence.
TVET CDACC and other responsible curriculum and assessment bodies	Integrate occupational green competencies, learning outcomes and assessments within their respective approved systems.
Kenya School of TVET and relevant trainer development providers	Support trainer development, leadership training, pedagogy and practical teaching resources.
KNQA and relevant qualification bodies	Support qualification coherence and recognition pathways through their respective mandates.
County governments and other	Coordinate adoption within their

public and private providers	responsibilities, support institutions and align plans and reporting through agreed arrangements.
Institutional councils and boards	Approve policy, plans and budgets; review quarterly performance and risks; require corrective action and endorse annual reporting.
Principal or institutional head	Remain accountable for delivery, allocation of responsibilities, expenditure controls, evidence quality and reporting to the governing body.
Greening coordinator and representative committee	Coordinate baselines and plans, support departmental teams, compile evidence and escalate implementation gaps. Include trainers, learners and relevant operational staff.
Departments, trainers, learners and operational teams	Deliver assigned actions, teach and demonstrate competencies, maintain records and participate in improvement.
Industry, communities, technical agencies and partners	Provide occupational input, workplace opportunities, expertise and agreed resources; verify shared project results.

Regional or county peer networks may support mentoring and learning where agreed. Their role should be facilitative, with reporting lines defined to avoid parallel authority structures.

10.0 Financing and resource management

Implementation shall use a costed national plan and costed institutional plans aligned with available resources and approved budget processes. Funding

proposals should distinguish essential management measures, training and curriculum costs, recurrent maintenance and capital projects. Institutions shall not assume that adoption creates an automatic funding entitlement:

- Use approved government and institutional allocations, development partner support, industry contributions and other permissible sources.
- Prioritise basic safety, baseline data, leadership capacity and low-cost resource savings, then phase larger investments according to readiness and impact.
- Appraise capital projects for technical fit, affordability, operational savings, training value, maintenance capability and environmental and social impacts.
- Record partner contributions and procurement decisions; disclose conflicts of interest and apply existing financial controls.
- Verify savings against documented baselines and account for changes in tariffs and activity; reinvest only through authorised budget arrangements.

Its section 8.3.1 prints KSh 686,100.00 and some activity entries also require reconciliation. These figures are historical planning estimates, not an approved allocation for this framework. A successor plan should be re-costed and independently reconciled before submission.

11.0 Implementation and transition

The framework shall follow the guidelines' improvement cycle: assign leadership, review the baseline, plan, implement, monitor and renew.

Period	Priority deliverable	Lead
First 3 months	Confirm scope and coordination; issue common templates; identify participating providers and focal persons; prepare technical and financing support arrangements.	State Department and participating providers
Months 3 to 6	Complete initial institutional baselines and risk screening;	Institutional heads and governing bodies

	establish representative committees; approve costed plans and priority curriculum mapping.	
Months 6 to 12	Deliver quick improvements, trainer development and initial assessed green competencies; establish workplace partnerships and first verified annual summaries.	Institutions and responsible agencies
Years 2 and 3	Scale curriculum integration and viable investments; strengthen graduate tracking, innovation and independent verification; undertake a midterm review.	State Department agencies and institutions
Years 4 and 5	Consolidate national coverage and outcome evidence; evaluate effectiveness and financing; renew the policy and implementation plan.	Ministry and implementation partners

12.0 Monitoring evaluation and accountability

The national secretariat shall issue a common indicator dictionary and reporting template. Institutions shall establish a baseline within six months of adoption, track progress quarterly and report annually. Each result shall have an owner,

evidence source, reporting boundary and approved target. The governing body shall review exceptions and record corrective actions.

Indicator and definition	Evidence and frequency	Proposed target approach
Institutional readiness: institutions with an approved policy, costed plan, coordinator and committee divided by all institutions in the agreed scope	Approved records; annual, with quarterly progress	All participating institutions by end of Year 1; national expansion milestones agreed after baseline
Curriculum integration: programmes with approved green outcomes, delivery evidence and assessment criteria divided by programmes offered	Curriculum mapping and assessment records; annual	All new and revised programmes from adoption; close existing programme gaps through an approved schedule
Trainer competence: relevant trainers demonstrating required green teaching and technical competencies divided by trainers identified as needing them	Needs assessment, CPD and observed practice; annual	Targets by programme and identified capacity gap
Learner competence: learners meeting specified green assessment	Moderated assessment records; each assessment cycle	Targets aligned to approved competency requirements

criteria divided by learners assessed		
Resource performance: total energy in kWh and water in cubic metres, plus each per full time equivalent learner	Meters, bills and enrolment records; quarterly	Set reductions from baseline with service quality and activity changes explained
Waste recovery: mass reused or recovered divided by total measured waste; report hazardous streams separately	Weighing records and transfer evidence; quarterly	Set by waste stream after baseline; identify unmeasured quantities
Climate resilience: high priority risks with completed funded actions divided by high priority risks identified	Risk register, completion evidence and drill records; annual	Close urgent safety gaps first; approve remaining milestones
Equitable outcomes: participation, completion and competence results by sex and disability where appropriate	Accessible enrolment and assessment data; annual	Set gap reduction actions after baseline
Employment relevance: traced graduates using specified green competencies in work or enterprise divided by valid respondents	Tracer study 6 to 12 months after completion; annual	Set cohort targets; disclose response rate and job definitions
Innovation and	Adoption records and	Targets reflect local

community benefit: solutions adopted and verified beneficiary or resource outcomes	partner confirmation; annual	priorities and demonstrated use

Where emissions are reported, record the inventory boundary, activity data, emission factors and method. Do not infer carbon neutrality from tree planting or renewable energy installation alone. Tree programmes should report survival at defined follow up dates, not only seedlings planted.

13.0 Verification improvement and recognition

Institutional management shall check completeness and accuracy before reports go to governing bodies. The secretariat should coordinate proportionate sample verification and independent evaluation, using existing quality assurance and audit mechanisms where appropriate. Recognition should reward verified progress and learner outcomes and must not be presented as regulatory accreditation unless formally authorised.

Missed targets shall trigger a documented diagnosis, a named action owner, support requirements and a revised completion date. Repeated delivery failures shall be escalated through existing management and oversight arrangements. Any sanctions shall rely on applicable law and approved procedures; this draft creates no new penalties.

A midterm evaluation should assess implementation, costs, equity and emerging outcomes. An end of cycle evaluation should test whether changes improved competencies, operational performance and work outcomes, using baselines and comparative evidence where feasible. Findings shall inform the next implementation cycle.

14.0 Risks and policy responses

Risk	Required management response
Insufficient finance or unequal institutional capacity	Phase investment, protect essential measures, use shared facilities and direct technical support to institutions with the largest gaps.

Unclear responsibilities or overlapping structures	Approve a responsibility matrix and reporting lines; use existing governance wherever suitable.
Limited trainer capacity or delayed curriculum approvals	Sequence CPD and curriculum work jointly; confirm materials, equipment and assessment readiness before delivery.
Weak records or overstated environmental benefits	Use common definitions, retain source evidence, disclose missing data and verify a sample of reported results.
Technology failure or inadequate maintenance	Assess whole life costs, train operators and assign maintenance and replacement responsibilities before procurement.
Exclusion or unsafe participation	Provide accessible opportunities, supervision, appropriate equipment and feedback mechanisms; monitor outcomes by relevant groups.

15.0 Operational instruments and adoption pathway

The following instruments shall be developed with the framework so that institutions can translate policy into daily practice:

- A national implementation plan with reconciled costs, financing sources, milestones and a responsibility matrix.
- An institutional greening manual with baseline audit tools, risk screening, committee terms of reference and a costed action plan template.
- Curriculum mapping, trainer development and practical assessment guidance issued through responsible bodies.
- A monitoring and verification toolkit with indicator definitions, dashboards, evidence requirements and annual reporting templates.
- Partnership and investment appraisal templates covering contributions, inclusion, maintenance and reporting.

Annex 1: Institutional action plan template

Each institution should maintain a single consolidated plan. All targets should link to its baseline and budget, with progress reviewed at least quarterly.

Field	Required entry
Priority and baseline	Pillar, problem, baseline value and date, evidence and affected groups
Result and target	Expected outcome, indicator, target value and deadline
Action and ownership	Activities, accountable manager, delivery team and partners
Resources	Capital and recurrent cost, confirmed and proposed finance, maintenance provision
Risk and safeguards	Delivery risks, accessibility, safety measures and mitigation owner
Monitoring and review	Evidence source, reporting frequency, current status, corrective action and next review

Illustrative entry requiring local validation

- **Priority:** Reduce avoidable water loss.
- **Baseline:** Measured water uses and leak survey completed in Month 3.
- **Action:** Repair identified leaks and introduce monthly meter checks.
- **Accountable owner:** Manager responsible for facilities.
- **Target:** All identified urgent leaks repaired by Month 6 and a board approved reduction in water use per learner by Year 2.
- **Evidence:** Meter readings, repair records and learner numbers.
- **Financing:** Approved maintenance allocation.
- **Safeguard:** Preserve reliable water access and hygiene services.