

Strategy for VET curricula development and WBL skill provision for green jobs in Uganda

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GreenVET4U



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GreenVET4U

Building the capacity of VET providers and private entities to cooperate designing and delivering innovative curricula in skills for Green Jobs in Uganda

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Executive summary

This document presents the **Strategy for VET Curricula Development and Work-Based Learning Skill Provision for Green Jobs in Uganda**, developed under the GreenVET4U project (Grant Agreement No. 101129455). The strategy responds to Uganda's urgent need to modernise its vocational education and training (VET) system in light of the country's green transition, demographic trends, and persistent challenges in youth employment and inclusion.

Rooted in Uganda's national development policies — including the TVET Policy (2020), the National Development Plan III, the Uganda Green Growth Development Strategy (UGGDS) and the Education Digital Agenda Strategy — this strategy also aligns with the priorities set out in the EU–Uganda Multi-Annual Indicative Programme (2021–2027), particularly in the areas of green and climate-resilient development, youth skills, and education system reform.

The strategy identifies six key **areas of competence** that should guide curriculum reform and capacity-building across the Ugandan VET ecosystem:

1. Strengthening business–education partnerships for co-design of curricula and delivery of quality WBL;
2. Identifying labour market needs and translating them into occupational profiles and training content;
3. Promoting green entrepreneurship and innovation in VET learning;
4. Integrating digital competences and tools into curriculum design and assessment;
5. Fostering inclusion, civic engagement and common values in learning environments;
6. Enhancing quality assurance and digital-supported validation of learning outcomes.

Each area of competence is designed to be translated into modular, outcome-oriented Units of Learning Outcomes (ULOs). These are being further developed through Deliverable D3.2 – Competence Matrix on Design and Delivery of Innovative Curricula in Skills for Green Jobs, whose structure and conceptual framework have been directly informed by the present strategy.

In addition, the strategy provides a roadmap for the **integration of Work-Based Learning (WBL)** into green VET curricula. It recommends flexible WBL models (including apprenticeships, internships and community-based projects), and defines mechanisms for employer collaboration, learner supervision, and placement quality assurance.

This document has also served as a **conceptual foundation** for the planning of Work Package 4, which will involve the piloting of training programmes and digital tools for VET professionals. It offers both a strategic vision and a practical framework to support the transformation of Uganda's VET system into an inclusive, demand-driven and sustainability-oriented engine for development.

By supporting alignment between national reforms and international best practices, this strategy seeks to empower Ugandan VET institutions and professionals to contribute meaningfully to the country's green economy, and to offer young people the competences they need for a resilient and equitable future.

Contextual background

Green skills and the VET system in Uganda

Uganda is increasingly recognising the need to align its education and training systems with the challenges and opportunities presented by the transition to a green and inclusive economy. Rapid population growth, environmental degradation, youth unemployment and the climate crisis all demand a coordinated response, in which Vocational Education and Training (VET) plays a key role.

Several sectors of Uganda's economy — such as agriculture, energy, waste management, construction and tourism — are undergoing green transformation, creating demand for new occupational profiles and skill sets. As identified in the **Uganda Green Growth Development Strategy** (UGGDS 2017–2030) and the **National Development Plan III** (NDP III, 2020/21–2024/25), building a workforce capable of supporting sustainable production and low-carbon innovation is central to achieving national development goals.

However, the current VET system faces persistent limitations. These include outdated curricula, weak connections between training institutions and employers, limited digital infrastructure, and a lack of mechanisms to integrate sustainability and inclusion into programme design. The **TVET Policy** (2020) acknowledges these challenges and calls for a transition towards a demand-driven, competence-based, modular and inclusive system. It also promotes work-based learning (WBL),

the strengthening of public–private partnerships, and the use of quality assurance tools to improve relevance and learner outcomes.

The need to develop **green skills** is increasingly evident within this reform context. Green skills are not only sector-specific technical abilities, but also include transversal competences such as systems thinking, resource awareness, ethical reasoning and problem solving. These are critical for enabling learners to adapt to changing environments and contribute actively to Uganda’s sustainable development.

Regional priorities of the Multi-Annual Indicative Programme for Uganda

The **EU–Uganda Multi-Annual Indicative Programme** (MIP) 2021–2027 reinforces the importance of green and inclusive growth, highlighting education, vocational training and youth employability as central pillars of bilateral cooperation. Under Priority Area 1 (“Green and Climate Resilient Development”), the MIP calls for strengthening skills systems, especially through curricula reform, promotion of green and digital competences, and scaling up work-based learning pathways. These priorities are fully aligned with Uganda’s national vision and are reflected in several policy documents, including the Green Growth Development Strategy (UGGDS) and the Education Digital Agenda (2021–2025).

In this context, the development of relevant VET curricula — supported by private sector participation and based on emerging occupational demands — is seen as essential to improving productivity, social inclusion and resilience. The MIP also stresses the importance of gender equality and inclusion of vulnerable groups in education and training. These objectives are aligned with Uganda’s TVET reform agenda and are strongly echoed in the GreenVET4U project design.

Deliverable D2.1 responds directly to these priorities by proposing a strategic framework to guide the development of green skills training across Uganda’s VET system. While Deliverable D3.2 (Competence Matrix on Design and Delivery of Innovative Curricula in Skills for Green Jobs) was still under development at the time of writing this strategy, the structure and thematic areas identified in this document have set the basis for shaping the competence framework adopted in D3.2.

Alignment with EU and national policies

This strategy is built on a solid foundation of national and regional policy frameworks that promote skills for sustainability, digital transformation and social inclusion. It is fully aligned with:

- Uganda's TVET Policy (2020), which promotes competence-based training, private sector participation, and modular curricula;
- The NDP III, which positions human capital development and green growth as strategic objectives;
- The Education Digital Agenda Strategy (2021–2025), which advocates for the integration of digital tools, platforms and content in education;
- The Uganda Green Growth Development Strategy UGGDS, which calls for building green skills in agriculture, energy, transport and industry.

At the regional and international level, the strategy reflects the orientations of the EU Green Deal, the European Youth Strategy, and frameworks such as GreenComp, EntreComp, DigComp, and EQUAVET. These serve as optional references to inform the development of competence-based curricula and should be adapted to fit the Ugandan context and national standards.

By integrating national reform goals with international frameworks, this strategy provides a roadmap for transforming the VET system into a key enabler of Uganda's sustainable development agenda. It prepares the ground for the operational design of curricula and training pathways — a task that will be addressed more concretely through the forthcoming Competence Matrix (D3.2).

Needs analysis

Key gaps and challenges in VET provision for green jobs

Uganda's current VET system, although undergoing progressive reform, still faces major structural and operational challenges in meeting the evolving demands of a green labour market. One of the most pressing issues is the misalignment between the skills taught in training centres and those required in emerging green sectors such as sustainable agriculture, renewable energy, waste management, eco-construction, and green entrepreneurship.

Curricula in many institutions remain outdated, supply-driven and insufficiently modular. They often lack an applied focus and fail to incorporate sustainability or digitalisation principles. This results in a situation where graduates possess limited employability, especially in sectors that demand practical, technology-enabled, and environmentally responsible skillsets.

Moreover, the professional development of trainers is often inadequate, both in pedagogical approaches and in sector-specific knowledge. Teachers are rarely trained to design competence-based programmes or to integrate transversal green and entrepreneurial competences into their courses. This leads to a weak implementation of the TVET Policy's ambition to move towards outcome-based learning.

Another challenge lies in the limited presence and coordination of work-based learning (WBL) schemes. While some apprenticeships and internships exist, these are generally fragmented, short in duration, and insufficiently supported by quality assurance frameworks. As highlighted by the Ministry of Gender, Labour and Social Development and other national stakeholders, WBL lacks systemic integration into formal qualifications.

In addition, the VET system suffers from persistent barriers to inclusion. Young women, persons with disabilities, youth from rural areas, and refugees often face greater obstacles in accessing high-quality VET programmes. Gender stereotyping in training offers, the cost of participation, and the lack of adapted infrastructure contribute to this exclusion.

Finally, the use of digital tools in VET remains uneven, despite the existence of the Education Digital Agenda Strategy (2021–2025). While digital solutions can expand access and support innovative learning models, many institutions lack the infrastructure, content and trained personnel needed to adopt them effectively — particularly in rural and under-resourced areas.

Stakeholder and policy insights from national strategies

The challenges described above are well-documented in national policies and echoed by multiple institutional stakeholders. The following insights emerge clearly from Uganda's strategic documents:

- The TVET Policy (2020) calls for a shift to demand-responsive, competence-based curricula, and emphasises the importance of modular learning, public–private partnerships, and digitalisation.
- The National Development Plan III sets ambitious targets for human capital development and identifies green skills as a strategic lever for employment creation and productivity.
- The Uganda Green Growth Development Strategy (UGGDS) outlines priority sectors and the need to mainstream green competences into technical training, focusing on climate resilience and low-carbon technologies.
- The Education Digital Agenda Strategy advocates for enhanced access to digital resources, infrastructure development and capacity building for educators to integrate digital pedagogy.
- The Apprenticeship Programme Framework, developed by the Ministry of Gender, Labour and Social Development, promotes the expansion of workplace-based learning models and proposes mechanisms to increase employer engagement and standardisation.

Stakeholders consulted in national platforms such as the Sector Skills Councils, the Uganda Business and Technical Examinations Board (UBTEB), and the National Planning Authority (NPA) consistently emphasise the need to:

- Define and update occupational profiles aligned with real labour market needs;
- Ensure systematic collaboration with employers in curriculum design and delivery;
- Provide opportunities for continuous upskilling of trainers;
- Foster inclusive and gender-sensitive programme design;
- Promote a national quality assurance culture across all training providers;
- Increase financing for green and inclusive VET initiatives.

These insights reinforce the strategic direction proposed in this deliverable and lay the groundwork for the development of a competence matrix that reflects both national priorities and international standards — a task that was further advanced during the drafting of D3.2.

Strategic areas of competence to address

Building upon the needs analysis and policy insights above, this strategy identifies six interrelated areas of competence that should guide curriculum development and capacity building across the Ugandan VET system:

1. Building business–education partnerships

Strengthening institutional collaboration with employers for curriculum co-design, WBL implementation, and placement quality assurance.

2. Identifying labour market needs and translating them into skills

Developing the capacity to research green sectors, define occupational profiles and interpret skills frameworks for curriculum alignment.

3. Embedding green entrepreneurship

Fostering entrepreneurial mindsets and capabilities, particularly those aligned with sustainability, circular economy and community-based innovation.

4. Integrating digital competences and tools

Enhancing the ability to select, adapt and implement digital learning resources, platforms and assessment tools in line with the national Digital Agenda.

5. Promoting inclusion and civic engagement

Ensuring equitable access to learning opportunities and embedding values such as diversity, participation, social responsibility and ethical reflection.

6. Strengthening quality assurance and validation mechanisms

Applying tools and procedures (including digital ones) to assess learning outcomes and validate competences acquired through formal and informal routes.

These six competence areas have provided the strategic foundation for the design of the Competence Matrix (D3.2), which was under development in parallel to this strategy. The matrix is expected to operationalise these domains through structured Units of Learning Outcomes (ULOs), and will serve as a practical reference for curriculum developers and training providers across Uganda.

Strategic framework for curriculum development

Pedagogical and methodological principles

The design and development of innovative VET curricula for green jobs in Uganda requires a fundamental rethinking of pedagogical and methodological approaches. Traditional supply-driven

and content-heavy training models are no longer sufficient to address the demands of a rapidly evolving labour market shaped by climate change, technological disruption and social inequality.

This strategy is grounded in a **competence-based and learner-centred approach**, inspired by European methodological frameworks such as **ECVET** (European Credit System for VET) and the **EQF** (European Qualifications Framework), while remaining flexible and adaptable to the Ugandan context. It prioritises the development of learning outcomes that are transferable, assessable, and aligned with occupational needs, particularly in green sectors.

Key pedagogical and methodological principles to guide curriculum development include:

- **Outcome orientation**

Programmes should be structured around clearly defined Units of Learning Outcomes (ULOs), each of which describes what learners are expected to know, understand and be able to do.

- **Labour market relevance**

Curricula must be informed by up-to-date analysis of green employment trends, occupational standards, and skills needs.

- **Work-based learning integration**

WBL components should be embedded in all programmes, with clear learning objectives and quality assurance mechanisms.

- **Inclusivity and accessibility**

Curricula must address the needs of diverse learners, with particular attention to gender, disability, language, and geographical barriers.

- **Digital innovation**

Learning design should incorporate digital resources and delivery models, including blended learning, mobile learning and open educational resources (OER).

- **Ethical and sustainability principles**

Curriculum content and teaching methods should promote responsible citizenship, environmental stewardship and social equity.

These principles will serve as the foundation for the operationalisation of training content through the Competence Matrix (D3.2), which at the time of this strategy's elaboration was being developed to translate these strategic priorities into structured Units of Learning Outcomes.

Key competence areas and learning domains

As outlined in the previous section, this strategy identifies six key areas of competence which reflect both national development priorities and international guidance on green skills. These domains serve as the strategic pillars for curriculum development and will inform the structuring of ULOs in subsequent phases of the project.

1. Business–education partnerships

Enhancing collaboration between training institutions and employers for co-design of curricula, mentoring, and evaluation of workplace learning experiences.

2. Labour market intelligence and skill mapping

Strengthening the ability to conduct local and national research on green job trends, analyse occupational profiles and use competence frameworks to inform training design.

3. Green entrepreneurship

Promoting innovation, self-employment, and sustainability-oriented business skills among VET students, especially those in under-resourced regions.

4. Digital integration

Building digital literacy and educational technology competences among educators, as well as fostering digital inclusion in the delivery and assessment of learning.

5. Inclusion, values and civic engagement

Embedding social responsibility, human rights, active citizenship and inclusive practices in curricula, particularly in relation to marginalised learners.

6. Quality assurance and validation

Developing quality management tools and recognition systems, including the use of digital credentials and portfolio-based assessments.

These areas are intended to be operationalised in Competence Matrix (D3.2) through a matrix of Units of Learning Outcomes (ULOs) that reflect real occupational demands and support learner mobility across institutions and regions. At the time of writing, this matrix was under development and being shaped directly by the strategic orientation presented in the current document.

Integration of green, digital and entrepreneurial skills

The green transition is not only a technological challenge, but a societal one. It requires professionals who are adaptable, creative and capable of working in interdisciplinary and evolving

environments. Therefore, this strategy emphasises the integration of transversal competences across all areas of curriculum development.

- **Green competences**

Drawn from frameworks such as GreenComp (European Sustainability Competence Framework), these include systems thinking, critical analysis of environmental impact, sustainable resource use, and problem-solving. These competences should be infused across all learning domains, not restricted to technical green subjects.

- **Digital competences**

Based on models such as DigComp and DigCompEdu, digital skills should be developed both in terms of learner capacity (information management, communication, content creation, digital safety) and educator ability to use digital tools for planning, delivery and assessment.

- **Entrepreneurial competences**

Inspired by EntreComp, these involve the ability to take initiative, manage projects, identify opportunities, collaborate with others, and make decisions grounded in ethical and sustainable thinking.

These transversal skills should be contextualised to Ugandan realities, and embedded in both theoretical and practical learning modules, with strong emphasis on experiential learning methodologies such as project-based learning, design thinking, and community-based innovation.

Quality assurance and partnership with employers

Quality assurance (QA) is essential to ensure the consistency, credibility and relevance of newly developed curricula. This strategy encourages the use of national QA tools where available, and recommends drawing inspiration from European frameworks such as **EQUAVET** to structure continuous improvement processes across planning, implementation, monitoring and revision phases.

Employers play a critical role in curriculum quality, particularly in relation to work-based learning and validation of occupational relevance. Stronger partnerships between training centres and businesses should be institutionalised through:

- Co-development of curricula and learning outcomes;

- Joint supervision of WBL placements;
- Shared assessment responsibilities;
- Employer involvement in advisory boards and curriculum review panels.

Finally, the strategy promotes the **use of digital tools to support QA**, including electronic learner portfolios, digital feedback loops, and the issuing of micro-credentials. These innovations can improve transparency, learner motivation, and recognition of learning acquired in both formal and informal contexts.

Strategy for work-based learning

Role of work-based learning in green skills acquisition

Work-Based Learning (WBL) constitutes a vital pillar of VET transformation in Uganda. It bridges the gap between theoretical instruction and the real-world application of competences, particularly in fast-evolving green sectors such as renewable energy, climate-smart agriculture, sustainable construction, and eco-tourism.

The **TVET Policy** (2020) explicitly calls for the integration of WBL across all training programmes as a means to strengthen the relevance and quality of vocational education. Through WBL, learners not only acquire technical skills but also develop key transversal competences such as problem-solving, teamwork, communication, adaptability, and professional ethics — all critical in the context of green job markets.

In sectors undergoing ecological transition, WBL allows learners to engage directly with sustainable technologies, work processes, and organisational practices. It enables them to understand the environmental, social and economic dimensions of sustainability in practice, while also building networks with employers that may facilitate future employment.

As of the writing of this strategy, Uganda's national WBL systems remain fragmented and insufficiently institutionalised. The **Apprenticeship Programme Framework** developed by the Ministry of Gender, Labour and Social Development, and various pilot schemes led by public–private initiatives, provide a foundation for further expansion. However, more coordinated, scalable

and quality-assured approaches are needed to mainstream WBL across Uganda's VET ecosystem — especially in green economy sectors.

This strategy anticipates that Deliverable D3.2 will provide a competence-based foundation for structuring WBL, including Units of Learning Outcomes (ULOs) related to WBL coordination, mentoring, placement design and assessment, particularly within the area of competence defined as Business-Education Partnerships.

Types of work-based learning schemes recommended

Recognising the diversity of institutional capacities and sectoral contexts in Uganda, this strategy recommends a flexible, multi-model approach to work-based learning (WBL) implementation. Various forms of WBL should be promoted, depending on the characteristics of the training programme, the maturity of the private sector in the region, and the learners' needs.

Recommended work-based learning modalities include:

- **Formal apprenticeships**
Long-term training arrangements, typically combining centre-based instruction with on-the-job experience, governed by formal agreements. These are well-suited for technical sectors such as energy, mechanics, construction and industrial processing.
- **Industrial attachments and internships**
Shorter-term placements (ranging from a few weeks to several months), often used as part of diploma or certificate requirements. These are valuable in fields such as agriculture, eco-tourism, environmental conservation, and community development.
- **Dual training schemes**
Structured alternation between school and enterprise-based training, inspired by successful European models but adapted to Ugandan realities. These require strong coordination mechanisms between VET centres and employers.
- **Community-based project learning**
Learners engage in solving real challenges in collaboration with local stakeholders (e.g., water conservation projects, clean cooking initiatives, waste recycling campaigns). This is particularly effective in remote or informal contexts where traditional employer-based placements are not feasible.

Each work-based learning model should be designed to meet clearly defined learning outcomes, ensure adequate supervision and mentoring, and contribute to the acquisition of competences identified in the broader curriculum framework.

Mechanisms for collaboration with employers

Strengthening employer engagement is central to the successful implementation of work-based learning strategies. This requires going beyond ad hoc placements to develop structured and mutually beneficial partnerships.

Recommended mechanisms include:

- **Memoranda of Understanding (MOUs)** or WBL agreements between training institutions and enterprises, outlining the objectives, roles, timelines, and evaluation criteria for each placement.
- **Joint development of WBL plans**, aligned with curriculum objectives and the ULOs under design (as anticipated in D3.2). These should specify tasks, expected outcomes, and assessment responsibilities.
- **Mentor training and support**, including guidelines for supervisors, orientation workshops, and clear communication channels with training institutions.
- **Feedback and monitoring systems**, involving regular evaluations by learners, mentors and tutors, and continuous improvement mechanisms based on results.
- **Incentive schemes for employers**, such as public recognition, links to corporate social responsibility agendas, and potential access to support programmes for green transition initiatives.

The institutionalisation of these mechanisms can be supported by national coordination platforms, such as **Sector Skills Councils**, regional employer networks, and public–private working groups on green economy development. These platforms can help mobilise placement opportunities, standardise quality benchmarks, and facilitate the scaling of successful WBL models.

In anticipation of the Competence Matrix (D3.2), this strategy provides a conceptual framework for integrating work-based learning into competence-based training provision. It is expected that the matrix under development will include specific ULOs addressing the design, coordination and quality management of work-based learning, thus translating these strategic recommendations into practical, actionable tools for VET actors across Uganda.

Roadmap for implementation

From strategy to practice: role of the Competence Matrix (D3.2)

The strategic orientations laid out in this document have provided the foundation for the development of Deliverable D3.2 – **Competence Matrix on Design and Delivery of Innovative Curricula in Skills for Green Jobs**. At the time of writing this strategy, the D3.2 matrix is being designed as a practical tool to translate the six strategic competence areas identified in this document into modular, operational Units of Learning Outcomes (ULOs).

The development of D3.2 has been closely guided by the core principles defined in this strategy, particularly:

- The need for competence-based, outcome-oriented curriculum design;
- The integration of green, digital and entrepreneurial transversal skills;
- The emphasis on inclusivity, modularity, and relevance to the labour market;
- The alignment with national frameworks (TVET Policy, NDP III, UGGDS) and international references (EQF, ECVET, GreenComp, EntreComp).

The matrix under development is expected to provide a structured reference framework for curriculum developers and training providers. It will enable them to design training modules aligned with labour market needs and green transition priorities. Each Unit of Learning Outcome will include:

- Clearly defined competences relevant to green VET;
- Specific and measurable learning outcomes;
- Associated performance criteria;
- Detailed descriptors of knowledge, skills, responsibility and autonomy, adaptable to EQF level 5 or 6.

By setting the conceptual and thematic basis for this matrix, the current strategy (Deliverable D2.1) has played a central role in ensuring consistency, strategic alignment and usability of the competence model that will be finalised in the Competence Matrix.

Next steps: piloting, training delivery and beyond

Following the completion of the current strategic framework (D2.1) and the development of the competence matrix (D3.2), the project will enter a new phase through piloting and training delivery (work package 4). This work package will translate the strategy and competence matrix into real-world training offers, materials and digital tools, with the aim of strengthening the capacity of VET professionals and institutions in Uganda.

The implementation roadmap foresees the following steps:

- Development of **training programmes** based on the Units of Learning Outcomes (ULOs) defined in D3.2, targeting VET trainers, curriculum developers and institutional leaders;
- Design and deployment of **digital learning solutions**, including online modules, interactive resources, and open-access platforms, aligned with Uganda's Education Digital Agenda Strategy;
- Piloting of **blended training formats**, combining face-to-face, self-directed and work-based learning opportunities;
- **Validation of competences** through formative and summative assessment tools, potentially including digital credentials and portfolio-based recognition.

Beyond the scope of GreenVET4U, the present Strategy for VET curricula development and WBL skill provision for green jobs in Uganda (D2.1) also offers guidance for mainstreaming its outcomes into national systems. To do so, it is recommended that:

- **National stakeholders** such as the Ministry of Education and Sports, UBTEB, NCDC, and Sector Skills Councils formally consider the integration of the competence matrix and resulting curricula into national TVET reform processes, (in line with the TVET Policy and the NDP III), thus strengthening institutional capacities to sustain innovation in curriculum design, quality assurance, and digital transformation;
- **Training centres and VET providers** adopt the ULO-based approach to restructure existing courses, enhance flexibility and improve relevance;
- Digital platforms and open educational resources developed under WP4 be sustained and scaled, including through **partnerships with national digital education initiatives**;

- **Public–private partnerships and community-based organisations** continue to embed green and digital competence development into sector skills development plans, and support the expansion of work-based learning, especially in underserved regions.

This roadmap serves not only as a plan for the remaining phases of the GreenVET4U project, but as a longer-term framework for reform, innovation and excellence within Uganda’s VET ecosystem. It enables policymakers, educators and employers to collaborate in building a more responsive, inclusive and sustainable skills development system for the green economy.

Conclusions and recommendations

This strategy has set the foundations for developing innovative and responsive VET curricula and work-based learning (WBL) models in Uganda, with the ultimate goal of supporting a just transition to a green and inclusive economy. Rooted in national policies such as the **TVET Policy (2020)** and the **National Development Plan III**, and aligned with the EU–Uganda Multi-Annual Indicative Programme (MIP), this document provides a coherent roadmap to enhance VET provision, foster employability, and promote environmental and social sustainability.

The strategy is structured around six key competence areas, which were later translated into operational Units of Learning Outcomes (ULOs) within the framework of Deliverable D3.2. These areas reflect strategic priorities such as public–private collaboration, digital transformation, inclusion, quality assurance, and entrepreneurship in the green economy.

To support the successful implementation of this strategy and ensure its long-term impact, the following recommendations are proposed:

- **Institutionalise the D3.2 competence matrix within national TVET reform initiatives and sector skills planning**

The Deliverable D3.2, once finalised, should be formally integrated into ongoing curriculum reform processes led by the Ministry of Education and Sports and national agencies such as UBTEB and the National Curriculum Development Centre (NCDC). It provides a modular and transferable structure that can serve as a reference model for updating VET programmes, defining occupational standards, and aligning sector skills plans with Uganda’s green growth agenda.

- **Ensure strong public–private cooperation mechanisms for curriculum co-development and WBL provision**

Collaboration between VET providers and employers must move beyond consultation towards co-responsibility in training design and delivery. Formal mechanisms such as sector skills councils, memoranda of understanding (MOUs), and joint curriculum boards should be established or strengthened to ensure business involvement in work-based learning schemes, curriculum co-creation, mentoring, and evaluation.

- **Invest in capacity building for trainers and curriculum developers, particularly in green, digital and entrepreneurial skills**

The successful delivery of modernised curricula depends on the competences of VET trainers. Targeted investment is required to train educators in areas such as green technologies, digital pedagogy, and project-based entrepreneurship education. Continuous professional development (CPD) initiatives and peer-learning exchanges should be embedded in institutional strategies.

- **Promote inclusive access to VET opportunities for disadvantaged groups, with targeted support measures**

Specific strategies must be implemented to reach young women, persons with disabilities, youth from rural or marginalised communities, and other groups traditionally excluded from formal VET. These should include financial incentives, inclusive teaching methodologies, accessible infrastructure, and outreach campaigns that demonstrate the value of green skills and employment.

- **Leverage digital technologies to enhance access, quality and validation of learning outcomes**

Digital tools should be used not only to deliver content, but also to foster interaction, personalise learning, and document competences. National efforts to implement Uganda's Education Digital Agenda must prioritise the development of open educational resources (OER), low-bandwidth solutions, and mobile-friendly platforms that support blended and distance learning, particularly in rural areas.

- **Embed sustainability values and ethical reasoning as core elements of all VET curricula**

Green skills development should go beyond technical knowledge to include critical thinking, responsible citizenship, and ethical decision-making. Environmental and social sustainability must be mainstreamed across subjects and learning activities, in line with the Uganda Green Growth Development Strategy and inspired by frameworks such as GreenComp.

- **Establish national coordination platforms to connect stakeholders and scale successful models across regions**

To ensure scalability and sustainability, the government and its partners should promote the creation of coordination platforms that bring together training providers, employers, local authorities, civil society, and development partners. These platforms can support knowledge exchange, joint planning, monitoring and advocacy for VET transformation aligned with Uganda's green and digital transition.

Ultimately, this strategy seeks to empower Uganda's VET institutions and professionals to play a leading role in shaping a **resilient, inclusive and environmentally sustainable future**. By aligning training provision with real labour market needs, strengthening partnerships, and fostering innovation, the strategy offers a pathway to increase the relevance, equity and impact of vocational education and training in the country.

Annexes

Key reference frameworks and policy documents

Framework / policy	Institution of origin	Relevance to the strategy D2.1
GreenComp	European Commission	Supports the integration of sustainability competences in training design and delivery.
EntreComp	European Commission	Provides a structured approach to embedding entrepreneurial learning.

DigComp & DigCompEdu	European Commission	Serve as reference models for digital skills development in learners and educators.
EQUAVET	European Commission	Informs quality assurance systems and continuous improvement in VET.
ECVET	European Commission	Guides the structuring of modular, transferable and outcome-based training.
TVET Policy (2020)	Ministry of Education and Sports, Uganda	Provides the national vision for reforming vocational education through modularisation, competence-based learning, and public–private cooperation.
National Development Plan III (2020–2025)	National Planning Authority, Uganda	Outlines national human capital and green growth priorities, with an emphasis on job creation and skills development.
Uganda Green Growth Development Strategy (UGGDS)	National Planning Authority, Uganda	Provides the framework for Uganda’s transition to a low-carbon and climate-resilient economy.
Education Digital Agenda Strategy (2021–2025)	Ministry of Education and Sports, Uganda	Guides the integration of digital tools and content into education and training systems.
Apprenticeship Programme Framework	Ministry of Gender, Labour and Social Development, Uganda	Supports the institutionalisation of structured work-based learning models in Uganda.

Strategic competence areas and competence matrix structure

At the time of writing Deliverable D2.1, the structure of the Competence Matrix (D3.2) was still under development. The table below reflects the planned alignment between the strategic areas identified in this strategy and the emerging structure of the Competence Matrix.

Strategic area (D2.1)	Area of competence (D3.2)	Units of Learning Outcomes (ULOs)
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Business-education partnerships	1. Building business-education partnerships for curriculum design and work-based learning delivery	ULO 1.1 – Strategic collaboration ULO 1.2 – WBL coordination
Labour market analysis and skills identification	2. Identifying skills for green jobs	ULO 2.1 – Labour market research ULO 2.2 – Framework translation
Green entrepreneurship	3. Introducing green entrepreneurship skills in curricula	ULO 3.1 – Entrepreneurial mindset ULO 3.2 – Sustainable business design
Digital competences	4. Integrating digital technologies and educational contents in the curriculum	ULO 4.1 – Digital tool selection ULO 4.2 – Digital learning design ULO 4.3 – Digital assessment
Inclusion and civic values	5. Addressing inclusion and diversity, common values, civic engagement and participation in curricula delivery	ULO 5.1 – Inclusion and access ULO 5.2 – Civic and ethical learning
Quality and validation	6. Quality assurance and digital supported validation of competences	ULO 6.1 – QA in green curricula ULO 6.2 – Digital validation systems