



Unit of Competency: Practice Green TVET in Training Delivery

Unit Code: TBA

Nominal Duration: 10 Hours

BNQF Level: Level 4 (Trainer and Assessor Qualification)

Unit Descriptor

This unit covers the knowledge, skills, and attitudes required by a TVET trainer to interpret environmental sustainability directives, incorporate green skills into competency-based training delivery, manage eco-friendly workshop environments, and lead continuous green improvements across technical training institutions.

Elements and Performance Criteria

Elements	Performance Criteria
1. Identify green economy principles and environmental standards in TVET	1.1 Relevant national environmental policies, circular economy concepts, and technical education guidelines on sustainability are identified and interpreted. 1.2 Environmental standards, energy efficiency benchmarks, and eco-friendly trade competencies are identified within National Occupational Standards (NOS). 1.3 Institutional targets for power conservation, water efficiency, carbon footprint mitigation, and materials reuse are reviewed.
2. Embed green concepts into session planning and learning resources	2.1. Identify the Green Concept in TVET 2.2. Learning materials and session plans are audited to identify entry points for environmental and resource conservation concepts.



	2.3. Specific, measurable learning tasks addressing waste reduction, material efficiency, and environmental compliance are incorporated into lesson plans. 2.4. Digital media, virtual simulators, reusable resources, and low-waste consumables are prioritized over disposable physical materials.
3. Implement green practices in training workshops and laboratories	3.1. Identify the <u>workshop resources</u> to apply green practice 3.2. Sort, set in order, Shine, Standardize, and Sustain protocols are implemented with explicit waste segregation and resource optimization criteria. 3.3. Strict operational procedures for machinery start-stop cycles, low-power modes, water conservation, and idle equipment shutdown are maintained. 3.4. Hazardous by-products, electronic scrap, chemicals, and general <u>waste</u> are segregated, stored, and routed to authorized recyclers in line with Occupational Safety and Health (OSH) standards. 3.5. <u>Digital tools</u> are utilized to minimize paper consumption.
4. Monitor and promote continuous green TVET improvements	4.1. Trainee observance of green operating procedures and environmental safety practices is tracked during practical workshop sessions. 4.2. Material yields, energy footprints, and scrap generation rates from practical projects are measured and documented. 4.3. Inefficiencies in instructional resource usage are analyzed and addressed through updated lesson delivery strategies. 4.4. Peer collaboration, tree plantation drives, campus energy reduction efforts, and



	community greening events are organized with trainees and industry partners.
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Range of Variables

Variable	Scope / Context
1. Green concepts	1.1. 5R principles (Reduce, Reuse, Recycle, Recover, Redesign) 1.2. Circular economy 1.3. Life-cycle analysis 1.4. Carbon footprint tracking 1.5. Clean technology 1.6. Resource productivity.
2. Environmental standards	2.1. Department of Environment (doe) standards 2.2. Industrial effluents guidelines 2.3. BNQF green skills descriptors 2.4. Institutional standard operating procedures (sops).
3. Workshop resources	3.1. Machine tools 3.2. Test equipment 3.3. Raw materials 3.4. Solvents 3.5. Electricity supplies 3.6. Compressed air systems 3.7. Water networks.
4. Waste	4.1. Organic waste 4.2. Recyclable paper and plastics 4.3. Metallic scrap 4.4. E-waste 4.5. Toxic chemical residues 4.6. Contaminated PPE.
5. Digital tools	5.1. Learning management systems (LMS) 5.2. Mobile assessment apps



	5.3. Interactive pdfs 5.4. Digital work instructions 5.5. Virtual simulation software.
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Evidence Guide

1. Critical Aspects of Competency	1.1. Integrated explicit green competencies into at least two distinct trade-specific CBT&A session plans. 1.2. Facilitated a practical training session demonstrating green 5S, energy saving, and safe waste segregation. 1.3. Conducted a workshop resource audit identifying specific material waste points and proposing viable mitigation strategies. 1.4. Maintained paperless instructional records through an approved digital management platform.
2. Underpinning Knowledge	2.1. National environmental legal frameworks and Bangladesh climate strategies. 2.2. Concepts of green economy, industrial green transformation, and sustainable development goals. 2.3. Green skills taxonomies, core green competencies, and trade-specific green technologies. 2.4. Principles of environmental risk assessment and hazardous waste handling in technical workshops. 2.5. Energy audit basics, power-factor awareness, and water conservation practices. 2.6. Digital pedagogy workflows reducing material consumption.



3. Underpinning Skills	3.1. Conducting environmental audits of technical training facilities. 3.2. Designing contextualized competency-based learning packages embedded with green skills. 3.3. Applying green 5S and hazard isolation measures in workshops. 3.4. Calculating scrap ratios and material usage efficiencies during practical training exercises. 3.5. Mentoring trainees on environmental ethics and clean workplace discipline.
4. Resource Implications	4.1. Fully equipped technical training workshop or simulation facility. 4.2. Applicable National Occupational Standards (NOS) and BNQF Level 4 training packages. 4.3. Digital teaching aids, smart display devices, and relevant software platforms. 4.4. Multi-stream waste disposal bins, chemical storage enclosures, and spill containment kits. 4.5. Standard measurement instruments for energy and material usage tracking.
5. Assessment Methods	5.1. Direct observation of practical session delivery in a workshop or laboratory setting. 5.2. Portfolio evaluation of developed green session plans, CBLM adaptations, and resource audit sheets. 5.3. Written examination covering environmental standards, circular economy basics, and green TVET pedagogy. 5.4. Structured oral questioning evaluating decision-making on hazardous waste disposal and energy conservation.
6. Context of Assessment	6.1. Competency must be evaluated in a recognized TVET training institute, registered training organization (RTO), or an accredited



	CBT&A assessment center under conditions that simulate a live instructional environment.
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