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Green skills development and skills competition

China Funds-in-Trust Phase III

Higher technical education in Africa for a technical and innovative workforce

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Agenda

PART 1

09h30-09h30 Ouverture

09h35-09h45 Message de bienvenue de l'UNESCO

09h45-10h00 Vue d'ensemble du projet CFIT III

10h00-10h20 Besoins en compétences vertes dans les pays du projet – Brèves réflexions

10h20-10h25 Sondage auprès des participants

10h25-10h35 Exposé technique - Écologisation du paradigme d'apprentissage dans les EES

10h35-10h50 Exposé principal - Des compétences vertes pour l'avenir de l'Afrique verte: où nous en sommes

10h50-11h00 Pause

09:30-09:35 Opening

09:35-09:45 Welcome from UNESCO

09:45-10:00 CFIT III Project Overview

10:00-10:15 Needs for green skills in the project countries – Short reflections

10:15-10:20 Participants' poll

10:20-10:50 Technical presentation - Greening the teaching paradigm in HEIs

10:50-11:00 Keynote presentation - Green skills for green Africa's future: where we are

10:50-11:00 Break

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Agenda

PART 2

1:00-11:15 Presentation on Unlocking a green and circular economy - a think tank perspective

11:15-11:30 Presentation on Making green and circular transition a reality- an entrepreneur's perspective

11:30-11:40 Question and answer

11:40-12:00 Spotlight: CFIT III Africa partners' perspectives
•Technical HTEI perspective by a senior educator from project stakeholders
•Youth voice by a youth representative from project stakeholders

12:00-12:15 Launch of the Green Skills Development Project vision and approach by UNESCO-UNEVOC

12:15-12:25 Next steps and announcements by UNESCO-UNEVOC

12:25-12:30 Closing by UNESCO CFIT III team

11h00-11h15 Exposé Libérer une économie verte et circulaire - la perspective d'une cellule de réflexion

11h15-11h30 Exposé Faire de la transition verte et circulaire une réalité - la perspective d'un entrepreneur

11h30-11h40 Questions et réponses

11h40-12h00 Coup de projecteur: perspectives des partenaires africains du projet CFIT III
Perspective d'un EETS par un éducateur de haut niveau relevant des parties prenantes du projet
Voix des jeunes par un représentant des jeunes relevant des parties prenantes du projet

12h00-12h15 Lancement de la vision et de l'approche du Projet de développement des compétences vertes par l'UNESCO-UNEVOC

12h15-12h25 Prochaines étapes et annonces par l'UNESCO-UNEVOC

12h25-12h30 Clôture par l'équipe UNESCO CFIT III

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Project vision

Green Skills Development for Higher Technical Education

by: Kenneth Barrientos, UNESCO-UNEVOC

United Nations Campus Bonn, Germany

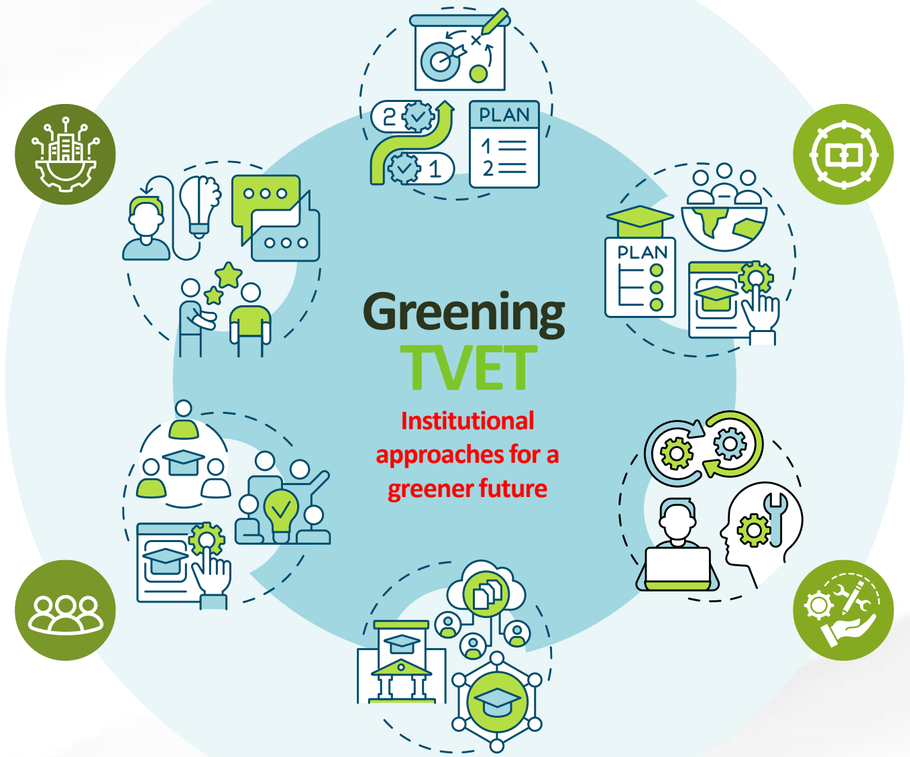
Mission

- Increase the quality, relevance, attractiveness, and accessibility of national TVET systems
- Promote cooperation among Member States

Institutional planning and culture

Research, innovation and enterprise

Curriculum and pedagogy



Community, workplace and lifelong learning

Teachers' and trainers' professional development

Campus and learning environment

Six institutional approaches

Rapid needs assessment (July 2025)

Ethiopia: The Climate-Resilient Green Economy Strategy emphasizes green jobs and renewable energy but lacks systematic integration in TVET curricula.

Uganda: The Green Growth Development Strategy promotes green manufacturing, agriculture, and energy, with a growing focus on skills, though implementation is still limited

Senegal: The Plan Sénégal Émergent and National Adaptation Plan highlight sustainable development, but green skills are not yet reflected in institutional strategies

Côte d'Ivoire: Policies support climate-smart agriculture and circular economy principles, but most green initiatives remain at the pilot stage within training institutions.

Gabon: Sustainable development goals are central in the *Plan Stratégique Gabon Émergent*, yet education policies lag behind in addressing green skills or curricula

Tanzania: The Five-Year Development Plan III and climate strategies recognize the importance of the green economy, with potential to expand practical, sector-specific training

Aims to enhance the capacity of higher technical education institutions and TVET to support green transitions and the integrated sustainable development agenda.

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Intervention approach

Green Skills Development for Higher Technical Education

by: Kenneth Barrientos, UNESCO-UNEVOC

Quality and relevant green skills development as the focus

TECHNICAL SKILLS

- the skills required to adapt or implement standards, processes, services, products and technologies to protect ecosystems and biodiversity and to reduce energy, materials and water consumption. Technical skills can be occupation-specific or cross-sectoral

Source: Cedefop/Inter-Agency Group forTVET Working Group on WBL (2022)

TRANSVERSAL SKILLS

- linked to sustainable thinking and acting, relevant to work (in all economic sectors and occupations) and life. Alternatively referred to as "sustainability competencies", "life skills", "soft skills", or "core skills."

Source: Cedefop/Inter-Agency Group forTVET Working Group on WBL (2022)

Learning Path

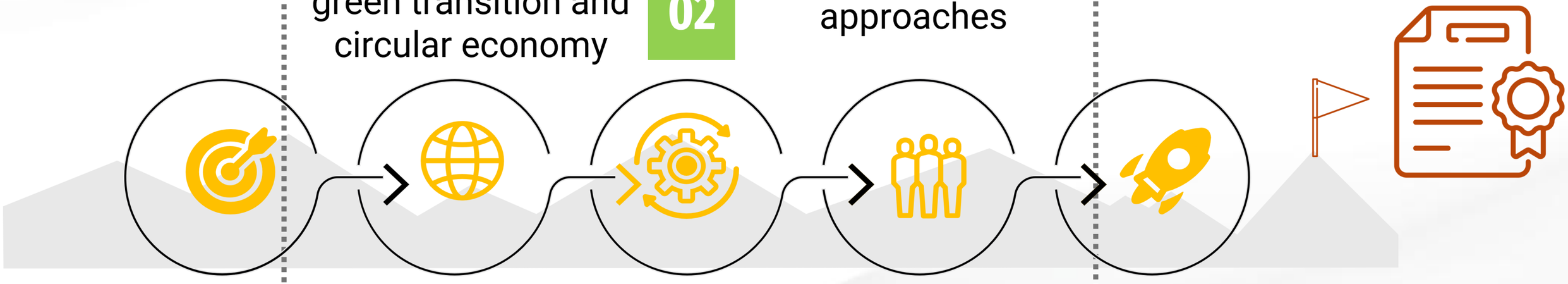
Module 1

Foundation of the green transition and circular economy

02

Module 3

Pedagogical approaches



01

Module 2

Application of green and circular business models

03

Self-paced learning (online)

- Knowledge
- Tools
- Case studies

Design of a Learning structure

- Application in the pedagogical practice, theory of change and decision-making processes
- Mentoring and support
- Skills assessment

Key objectives and expected outcomes

Training of Trainers

UNDERSTAND
GREEN TRANSITION AND CIRCULAR ECONOMY

Understand key concepts of the green skills and its application in green transition and circular economy, and the roles of education in supporting these

EXPLORE
GREEN AND CIRCULAR ECONOMY APPLICATIONS

Explore real-world applications of green and circular economy principles, , energy transition and climate resilience through case studies and tools

APPLY
TEACHING STRATEGIES TO DELIVER GREEN SKILLS

Apply learner-centered teaching strategies and assessment methods to deliver green and circular skills across diverse learning contexts

Key objectives

Microlearning

UNDERSTAND
KEY CONCEPTS OF THE GREEN TRANSITION

IDENTIFY
EMERGING GREEN JOBS AND GREEN SKILLS DEMANDS

EXPLORE
REAL-WORLD APPLICATIONS OF GREEN AND CIRCULAR ECONOMY PRINCIPLES

DEVELOP
GREEN PROJECTS

Learning Path

Module 1

Foundation of the green transition and circular economy

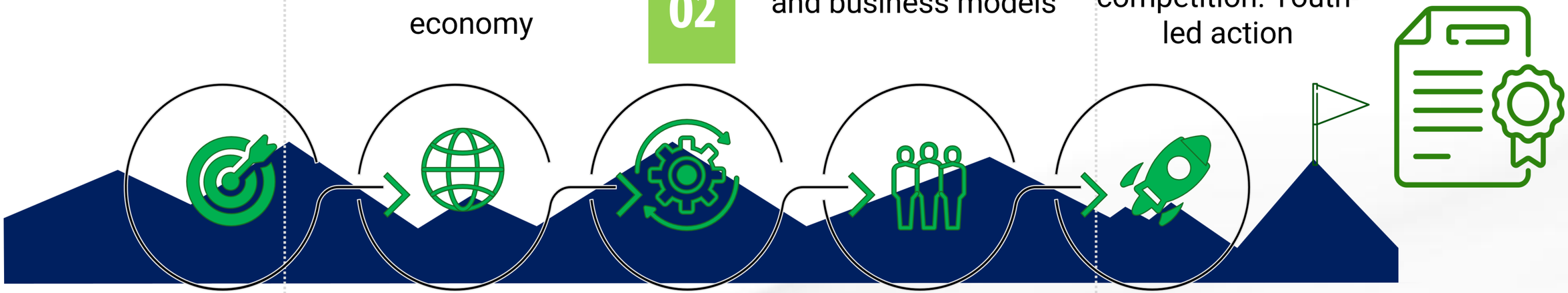
02

Module 3

Circular innovation and business models

Module 4

Green skills competition: Youth-led action



Self-paced learning (online)

- Knowledge
- Discussion forums
- Case studies

01

Module 2

Green and circular economy- jobs, skills and systems thinking

03

Skill and knowledge development

- Practical application of knowledge to skills to green skills competition
- Networking
- Skills assessment

I. Delivery of ToT and Microlearning self-reading materials

https://openlearning.unesco.org

ENGLISH

Partners Programs Find Courses Kenbar

- ✓Launching of the online materials on **2 August 2025 (00:00h)** (En/ Fr)
- ✓Registration to the platform (By invitation only)
- ✓Completion and Certification

ToT Webinars:

5 to 7 August 2025

Morning: 9:30 – 13:00 CEST

10:30 a.m. EAT

EN

7:30 a.m. GMT

Afternoon: 14:30 – 18:00 CEST

FR

15:30 EAT

12:30 GMT

Microlearning Webinars:

12-15 August 2025

Morning: 10:00 – 12:30 CEST

11:00 a.m. EAT

8:00 a.m. GMT

Skills Competition:

Sept-October 2025

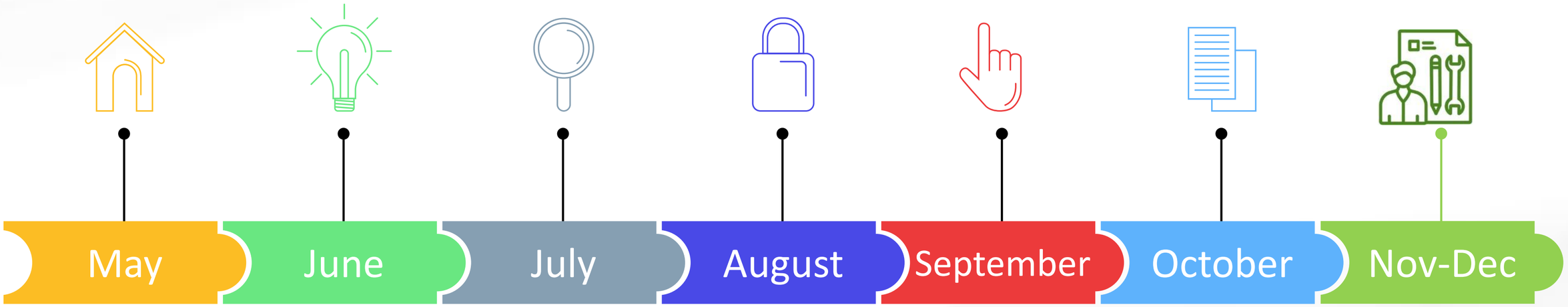
Partners & contributors

- Circle Economy (The Netherlands)
- Renewable Energy Academy (Germany)
- Circulab Academy (France)
- Niagara College (Canada)
- Kenya School of TVET (Kenya)
- Construction Industry Funds Trust (Botswana)
- Witwatersrand University (South Africa)
- World Skills International

Partners & contributors continued

- African Union
- UNEVOC Network (selected case studies)
- Jacob's Ladder Africa
- Africa Circular
- Yabba College of Technology (Nigeria)
- Yetroselane Fashion Hub

Overall Timeline



- Data collection
- Contracting
- Partner identification & management
- Kick off/ inception
- Work-plan finalization

- Rapid review of needs
- Review & adaptation of training materials
- Skills competition guidelines & indicator development
- Checklist devt
- Translation of self-learning & training materials (as available)

- Translation (con't)
- Online platform devt + skills competition webpage devt
- Kick-off Webinar
- ToT implementation
- Micro-learning implementation

- Skills competition
- Mentoring session and monitoring of project progress

- Skills competition evaluation & awarding of prizes/ certificates

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Green Skills Competition Overview

Guidance for Mentors & Students

by: Veronia Jackson
UNESCO-UNEVOC

Objectives of The Green Skills Competition

To provide participants with hands-on experience in applying their knowledge and green skills by developing project-based solutions to environmental challenges. This includes promoting sustainability principles and emphasizing resource and energy efficiency in business systems, enterprise solutions, industry practices, and community actions.

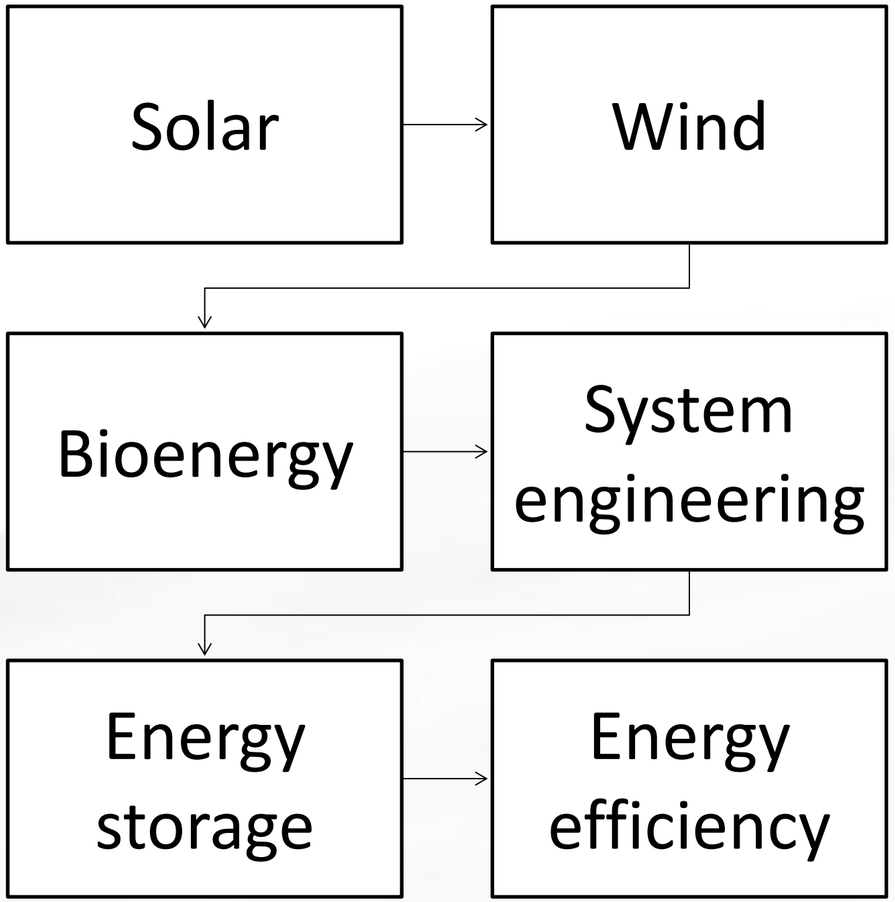
To empower participants to apply advanced technical and vocational skills that drive green innovation within their areas of expertise.

Green Skills Competition: Eligibility Criteria

1. Gender participation is open to teams or groups comprising 3–5 students; gender diversity within teams is strongly encouraged.
2. Participants must be between 16 and 35 years of age.
3. Participants must have proficiency in English or French as the official language for the competition.
4. Students must be currently enrolled in technical disciplines at institutions actively engaged in the CFIT III project.
5. Each team must have a mentor

Key Skills Competition

Energy and Renewable Energy Solutions



Circular Economy Business Solutions

- Waste Minimization
- Resource Efficiency
- Eco-design And Product Lifecycle Management,
- Material Innovation
- Reverse Logistics
- Responsible Recycling
- Disposal Of Plastic And E-waste

Sustainable Agriculture And Food Systems

Sustainable Farming Practices	Food Processing And Handling	Biodiversity Conservation
Supply Chain Management	Food Safety	Irrigation Technology
Agroforestry	Soil Conservation	Post-harvest Loss Management

Green Building and Design

- Sustainable Design Principles
- Responsible Procurement
- Material Selection
- Construction Methodologies
- Energy Optimization
- Waste Management Within The Built Environment

Water Conservation & Management

- Water Systems And Efficiency
- Harvesting And Recycling Techniques
- Pollution Prevention
- Related Technological Applications

Environmental Education & Advocacy

Digital media

3D modelling

Environmental awareness campaigns

Eco-Tourism

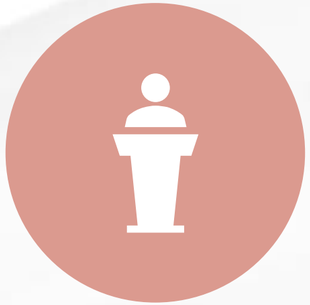
- Community-led eco-tourism initiatives
- Development of anti-poaching tools
- Reforestation efforts

Project Cycle

Awareness & Recruitment

Proposal Submission

Project Development & Mentorship



Final Presentation & Judging

Benefits of Participation in the Skills Competition

- Hands-on Experiential Learning
- Enhanced Skill Development
- Professional Networking
- Portfolio Building
- Fostering Innovation & Leadership

Mentorship & Guidance Provisions

Ongoing mentorship from selected Mentor

Additional guidance from experts in green skills-related fields via remote information session and webinars

Progress reports and regular monitoring

Criteria for Judging Projects

Impact on individual, economy and environment (including business viability, policy scalability or community impact)

Technical execution

Innovation & creativity

Replicability and scalability

Presentation & communication

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Question & Answer

Please place your questions in the chat and we will respond accordingly.