ECVET Curriculum on supporting apprenticeship programmes to implement the SDGs in SMEs

Project Result 1 | October 2022

sustainable apprentices

Sustainable Apprentices

Training the workforce of the future to apply the SDGs in SMEs through Work-Based Learning in Apprenticeship programmes

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Project Result 1

ECVET Curriculum on supporting apprenticeship programmes to implement the SDGs in SMEs

Developed by

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Introduction

This document aims to facilitate the transfer and recognition of competences to implement the SDGs in SMEs through apprenticeship programmes. The contents can be used for policy makers when defining the process of recognition, validation, and certification of this profile.

The identification and definition of the learning units and the learning objectives is based on the EQF and ECVET guidelines. This product corresponds to the agreed EQF level, considering the complexity, range and level of learning expected to be achieved.

The ECVET Curriculum contains a detailed description of

- The learning units and the learning outcomes in terms of Knowledge, Skills and Responsibility and Authority
- The hours of blended learning, including contact hours, hands-on practice, self-study, and assessment, and allocated respective ECVET points.

Prior to the creation of this document the project consortium elaborated the Theoretical and Competence Framework which sets the base for the ECVET Curriculum. Therefore, each partner conducted national research which included analysis and reporting about the following topics:

- Description of the national qualification framework and its relation to the European Qualification Framework and ECVET implementation
- Profiling of VET educators and in-company trainers
- Identification of existing training programmes and relevant initiatives
- Perception regarding the training needs
- Opinion about the competencies to be developed through this project and
- Suggestions for Learning Outcomes included in the curriculum

The ECVET Curriculum is an Open Educational Resource (OER) available in English and all languages of the consortium, and accessible through the project site. This is considered a "beta version" because it is due to validation, which will take place within the project lifespan.

This document is based on the Theoretical and Competences Framework, which was elaborated by all project partners, namely:

- InnoQuality Systems Ltd. - Ireland
- Asociación de la Industria Navarra (AIN) and INFODEF - Spain
- Mindshift Talent Advisory – Portugal
- Centro Servizi Formazione (CSF) - Italy
- Government of Istanbul (GOI) - Turkey

Training Curriculum and terminology

EQF

The European Qualification Framework is a translation tool that helps understand and compare qualifications awarded in different countries and by different education and training systems, structured in eight levels

EQF Level

The European Qualification Framework (EQF) is based in eight reference levels defined in terms of learning outcomes. Before developing the Learning Outcomes, Partners should agree on a specific EQF level for the Curriculum.

ECVET points/ ECVET principles

ECVET points/credits allocation is based on using a convention according to which 60 points/credits are allocated to the learning outcomes expected to be achieved in a year of formal full-time learning. ECVET allocates points/credits to qualifications and not to education and training programmes. Each EU country has specific conditions on the implementation of ECVET methodology. Within this curriculum 25 hours of training correspond 1 ECVET credit. If 25 hours of training corresponds to 1 ECVET credit, then 150 hours training approach corresponds to 6 ECVET credits.

Learning Outcomes

Statements of what a learner knows, understands and is able to do on completion of a learning process, and which are defined in terms of Knowledge, Skills and Responsibility and Autonomy.

Hours of Learning

Number of hours needed to apply this Curriculum, distributed in contact, hands-on practice hours, self-study hours and assessment hours. In this Curriculum there are 6 Learning Units of 25 hours of blended learning each.

ECVET points

Number of credits that can be allocated after completion of this Curriculum. If 25 hours of training corresponds to 1 ECVET credit, then 150 hours training approach corresponds to 6 ECVET credits.

Learning Outcomes

Learning outcomes are statements that describe significant and essential learning to be achieved and can reliably demonstrate at the end of the training. In the EQF learnings outcome are described in terms of Knowledge, Skills, Responsibility and Autonomy

Knowledge

In the context of EQF, knowledge is described as theoretical and/or factual.

Skills

In the context of EQF, skills are described as cognitive (involving the use of logical, intuitive, and creative thinking) and practical (involving manual dexterity and the use of methods, materials, tools, and instruments).

Responsibility and Autonomy

In the context of the EQF responsibility and autonomy is described as the ability to apply knowledge and skills autonomously and with responsibility

EQF Level

Sustainable Apprentices Curriculum is aimed at EQF Level 4.

Qualification level	Knowledge	Skills	Responsibility and Autonomy
4	Factual and theoretical knowledge in broad contexts within a field of work or study	A range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study	Exercise self-management within the guidelines of work or study contexts that are usually predictable, but are subject to change; supervise the routine work of others, taking some responsibility for the evaluation and improvement of work or study activities

Elaboration of Learning Units

In order to reach consensus about the competences to be developed and the learning units to include in this curriculum all partners provided their suggestions. The suggestions were analysed, and topic clusters were identified as follows:

- Sustainability
- Strategic planning
- SDG/SME
- Apprenticeship
- Training

The following tables show how the suggested competences and learning units were attributed to these topic clusters by colour coding them. Based on the provided contributions and discussion among the partners, the final learning units were defined and developed further. The information about the elaboration of the learning unit is included in this curriculum to display the potential amplitude within this subject and the careful choice of contents.

Colour coding: | Sustainability | Strategic planning | SDG/SME | Apprenticeship | Training |

Suggested competences to be developed

IT by CSF	TR by GOI	PT by Mindshift	ES by AIN & INFODEF	IRL by INQS
Green Management/Practitioner Skills	Defining Apprenticeship programmes' general mission	Understanding SDGs and their importance to small and medium sized businesses	Introduction to the framework of the 2030 agenda in business	Understanding sustainability in SMEs
Improve Corporate Sustainability	Describing the communication skills to promote understanding between group members	Importance of Green Jobs and Green Skills in companies	Understanding the challenges faced by SMEs in relation to the SDGs and the benefits of implementing them	Knowledge of SDGs
Accountability and Sustainability reporting software	Recognising the self-evaluation methods for gaining better insight	Assess business needs and opportunities within the framework of the SDGs	How to convey the values of the SDGs to trainees according to their VET training and the needs of the company	The role of apprenticeship (opportunities and characteristics)
Prepare a Strategic Sustainability Plan	Combining different strategies that to increase cooperation	Transform sustainability priorities into concrete strategies and actions in a business setup	How to mainstream the SDGs into the curriculum and internship programme.	Strategic planning and implementation
Sustainable Business Model	Choosing the right way and right person to consult in implementing SDGs	How the plan-do-check-act cycle model support the strategic plan implementation and monitoring in SMEs	Know how to set objectives and action plans for internships in line with the SDGs	2030 agenda in SMEs
	Explaining the points to be considered in the implementation of the work program for sustainability		Acquire the skills to communicate and lead this transition to a model focused on sustainable development	Implementing SDGs in SMEs
	Recalling the SDGs and their importance in general		Implementing good practices and sustainable processes in SMEs	Needs and aims regarding apprenticeship programmes

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Assessing the achievement of the objectives of internships in companies with a cross-cutting approach to the SDGs

Suggested Learning Units to be developed

Unit 1	Analysing sustainable learning needs	Introduction to Apprenticeship Programmes in general	Introduction of SDGs in Business	Analysis of the SDGs and their application in the Vocational Training	Sustainability in SMEs
Unit 2	Planning and organising apprenticeship sustainable programmes	Promoting coordination between Apprenticeship Programmes and in-Company Trainers	Understanding the role of Green Jobs and Green Skills in SMEs	How to apply the cross-cutting principles of the SDGs in VET training programmes	Introduction to SDGs
Unit 3	Facilitating Work Based Sustainable Learning for apprenticeships	Strategies that improve cooperation between Apprentices	Design the PDCA cycle model in the implementation and monitoring of strategic sustainability action plans in SMEs	Designing sustainability strategies and action plans (according to the VET field and curriculum) depending on the SMEs priorities, possibilities and field.	A practical view on SDGs in SMEs
Unit 4	Communicating Sustainability inside the company	Improving mentor/trainers skills on delivering better understanding the subject to Apprentice	Make recommendations on best practices to foster new sustainability-oriented strategies and business models	Promote joint actions between VET educators and VET centres and in-company trainers and SMEs.	Apprenticeship – opportunities, characteristics and frameworks
Unit 5	Agenda 2030 Gender Equality	Defining readiness level of Apprentices on understanding SDGs	Guide SMEs in the definition of business plans that prompt sustainable development	Assessing good practices and achievement of the programme by trainees in SMEs in relation to the SDGs	Creating sustainable business models

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Learning Units

The Learning Units defined by the partners based on the development process described above:

Unit #	Title	Topic
Unit 1	Sustainability and green practices in SMEs	Sustainability
Unit 2	Fostering the implementation of SDGs in SMEs through strategic planning	Strategic planning
Unit 3	Gamification to introduce the SDGs to the young workforce	SDG/SME
Unit 4	Good practices of work-based learning in SMEs	SDG/SME
Unit 5	Successfully managing apprenticeship programmes	Apprenticeship
Unit 6	Effective training for implementing sustainable practices	Training

Learning Unit 1. Sustainability and green practices in SMEs (including considerations in young workforce training)

AIM

This unit aims to train VET professionals and in-company trainers on the topics of sustainability and green practices and how to address them in young workforce training.

ALLOCATED ECVET POINTS

1 point (25 hours of blended learning)

LEARNING OUTCOMES
Upon completion of this unit, the adult educator will be able to

Knowledge	Skill	Responsibility and Autonomy	Hours of Learning
K1. Define the key elements of sustainability and green skills **K2.** Define strategies for achieving better understanding and implementation of sustainability goals in the workplace **K3.** Identify the three pillars of sustainability (social, environmental, economic) and their aspects and impact **K4.** Outline how green practices can be implemented by SMEs **K5.** Indicate the importance of sustainability and green skills in current contexts	**S1.** Describe how SMEs can benefit from implementing green practices **S2.** List key sustainable development issues and their effects on the society with different perspectives (economic, social etc.) **S3.** Analyse sectoral, local, regional, and national practices in the fields of sustainability and green practice	**RA1.** Make suggestions for the implementation of SDGs and for green business strategies that will be most effective in generating advantages in a particular business sector **RA2.** Guide colleagues to collaborate with different stakeholders for promoting and implementing sustainability practices in VET institutions	Contact hours: 8 Hands-on practice hours: 8 Self-study hours: 6 Assessment hours: 3

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Learning Unit 2. Fostering the implementation of SDGs in SMEs through strategic planning

AIM

This unit aims to support VET educators and in-company trainers to acquire the relevant knowledge and skills to foster the implementation of SDGs in SMEs through the introduction, development, implementation, and evaluation of a strategic sustainable action plan (SSAP), especially focussing on training and development of the young workforce.

ALLOCATED ECVET POINTS

1 point (25 hours of blended learning)

LEARNING OUTCOMES Upon completion of this unit, the adult educator will be able to			
Knowledge	**Skill**	**Responsibility and Autonomy**	**Hours of Learning**
K1. Outline the basics of strategic planning **K2.** Explain the process of implementation and the key steps to turn strategies and plans into action **K3.** Emphasise the relevance of strategic planning skills to foster the implementation of the SDGs in SMEs **K4.** Name specific considerations in strategic planning regarding the training and development of young workforce	**S1.** Draft a strategic sustainable action plan (SSAP) for the implementation of the SDGs in SMEs **S2.** Test the implementation of a SSAP **S3.** Evaluate the efficacy of a SSAP through a sustainability governance model **S4.** Evaluate the efficacy of a SSAP in training and development of the young workforce	**RA1.** Make recommendations on best practices to foster sustainable oriented strategies in SMEs **RA2.** Advise about the role of strategic planning and implementation for sustainable oriented business development in SMEs **RA3.** Monitor the implementation of a strategic sustainable action plan (SSAP) in SMEs **RA4.** Provide guidance about particularities in training and development of the young workforce in strategic planning	Contact hours: 8 Hands-on practice hours: 7 Self-study hours: 8 Assessment hours: 2

Learning Unit 3. Gamification to introduce the SDGs to the young workforce

AIM

This unit aims to instruct VET educators and in-company trainers on how to use gamification to gain a comprehensive understanding of the strong impact that the SDGs have on our personal and working lives and the benefits that their application in SMEs through young workers can bring far-reaching benefits.

ALLOCATED ECVET POINTS

1 point (25 hours of blended learning)

LEARNING OUTCOMES Upon completion of this unit, the adult educator will be able to…			
Knowledge	**Skill**	**Responsibility and Autonomy**	**Hours of Learning**
K1. Describe different types of gamification (play, game, serious play, simulation, challenges) and how this applies to virtual and face-to-face gamification **K2.** Recognise the motivational impact of gamified designed contents in apprenticeship programmes **K3.** Outline gamified designed elements as educational tools to understand SDGs in the SME context **K4**. Explain business opportunities that implementing the SDGs can	**S1.** Make use of motivational aspects of gamification in apprenticeship programmes to implement the SDGs **S2.** Illustrate examples of how different SDGs identify at organisational level (in relation to their business goals) and working level (how it affects their workforce) with SMEs **S3.** Emphasise the importance of aligning with sustainable practices in order to attract business with large companies, suppliers, and customers in a society that is increasingly aware of the SDGs **S4.** Understand how gamification can foster the SDGs to promote pride and a sense of belonging and identity	**RA1.** Educate trainees on the global and specific scope of the SDGs (and how they influence our personal and working lives) through gamification **RA2.** Advice on diverse areas where SDGs can be implemented depending on the SMEs business and proper strategies	Contact hours: 8 Hands-on practice hours: 7 Self-study hours: 8 Assessment hours: 2

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bring to SMEs and young entrepreneurs **K5.** Recognise the key role of the new generations of workers in the implementation of sustainable practices in their workplaces **K6**. Gather examples of how to work on the SDGs through gamification	among the workforce, thereby increasing their engagement, motivation, and intrapreneurship		

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Learning Unit 4. Good practices of work-based learning in SMEs

AIM

This unit aims to introduce the young workforce in SMEs to the practical application of the SDGs through work-based learning. Learners should be able to identify, analyse and convey good practices and examples that have contributed to real improvement.

ALLOCATED ECVET POINTS

1 point (25 hours of blended learning)

LEARNING OUTCOMES Upon completion of this unit, the adult educator will be able to…			
Knowledge	**Skill**	**Responsibility and Autonomy**	**Hours of Learning**
K1. Recognise the main pedagogical methods and techniques that apprentices can use to transmit the importance of working in an SME with an approach toward SDGs **K2.** Identify the didactic resources and means that are available **K3.** Recognise the different students'profiles and learning methods **K4.** Identify the examples and best practices set up in the SME, as well as real examples from other companies that can be used as inspiration for future improvement actions	**S1.** Design a training action that effectively conveys the need to apply the SDGs to future trainees in an SME **S2.** Manage dynamic and motivational techniques to achieve a successful outcome **S3.** Run practical workshops to analyse which actions could be introduced **S4.** Evaluate the acquired knowledge through learning evaluation tools such as test, exercises, real cases and so on	**RA1.** Create a training of trainers' guideline that will be useful as a guide and support for other colleagues **RA2.** Propose new actions to be implemented in the deployment of the different trainings, always incorporating the observations gathered in the different training sessions and workshops	Contact hours: 6 Hands-on practice hours: 8 Self-study hours: 8 Assessment hours: 3

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Learning Unit 5. Successfully managing apprenticeship programmes

AIM

This unit aims to help SMEs' managers, in-company trainers and VET educators, find appropriate and coordinated strategies to design apprenticeship programs that are aligned with the SDGs and that are competitive and adapted to the needs of students and SMEs by ensuring the integration of theoretical knowledge with practical experience.

ALLOCATED ECVET POINTS

1 point (25 hours of blended learning)

LEARNING OUTCOMES Upon completion of this unit, the adult educator will be able to…			
Knowledge	**Skill**	**Responsibility and Autonomy**	**Hours of Learning**
K1. Have the knowledge to create an apprentice job position

K2. Recognise learners and SMEs' needs aligned with the SDGs

K3. Define the success factors for matching apprentices and companies

K4. Identify differences between theory and practice in the professional context regarding apprentices

K5. Identify apprentices' learning needs that are aligned with the SDGs | **S1.** Apply information collecting methods for current work processes and situations

S2. Map relevant elements for job description for apprentices' positions

S3. Match job profiles to future trends aligned with the SDGs in the professional field of an SME

S4. Draft job profile descriptions taking into account the SDGs for potential apprentices

S5. Announce available apprenticeship programmes opportunities for apprentices | **RA1.** Act in compliance with company's policy and national training requirements as well as the SDGs

RA2. Independently promote and manage relationships and territorial networks for job placements

RA3. Support the creation of apprenticeship programmes that are aligned with the SDGs | Contact hours: 6

Hands-on practice hours: 8

Self-study hours: 8

Assessment hours: 3 |

Learning Unit 6. Effective training for implementing sustainable practices

AIM

This unit aims to promote work- and project-based learning for implementing sustainable practices in SMEs through their young workforce.

ALLOCATED ECVET POINTS

1 point (25 hours of blended learning)

LEARNING OUTCOMES Upon completion of this unit, the adult educator will be able to			
Knowledge	**Skill**	**Responsibility and Autonomy**	**Hours of Learning**
K1. Have knowledge of work- and project-based learning **K2.** Identify techniques to transmit sustainable practices (for apprentices) **K3.** Recognise the success factors to enhance learning effectiveness in work- and project-based learning	**S1.** Provide examples of work- and project-based learning as references **S2.** Explain sustainable practices in the work-environment from an apprentice position **S3.** Design learning experiences for apprentices in their work environment	**RA1.** Design and monitor work- and project-based learning practices **RA2.** Combine the topic of sustainable practice with work- and project-based learning **RA3.** Supervise a process of work- and project-based learning for apprentices for implementing sustainable practices	Contact hours: 8 Hands-on practice hours: 8 Self-study hours: 6 Assessment hours: 3