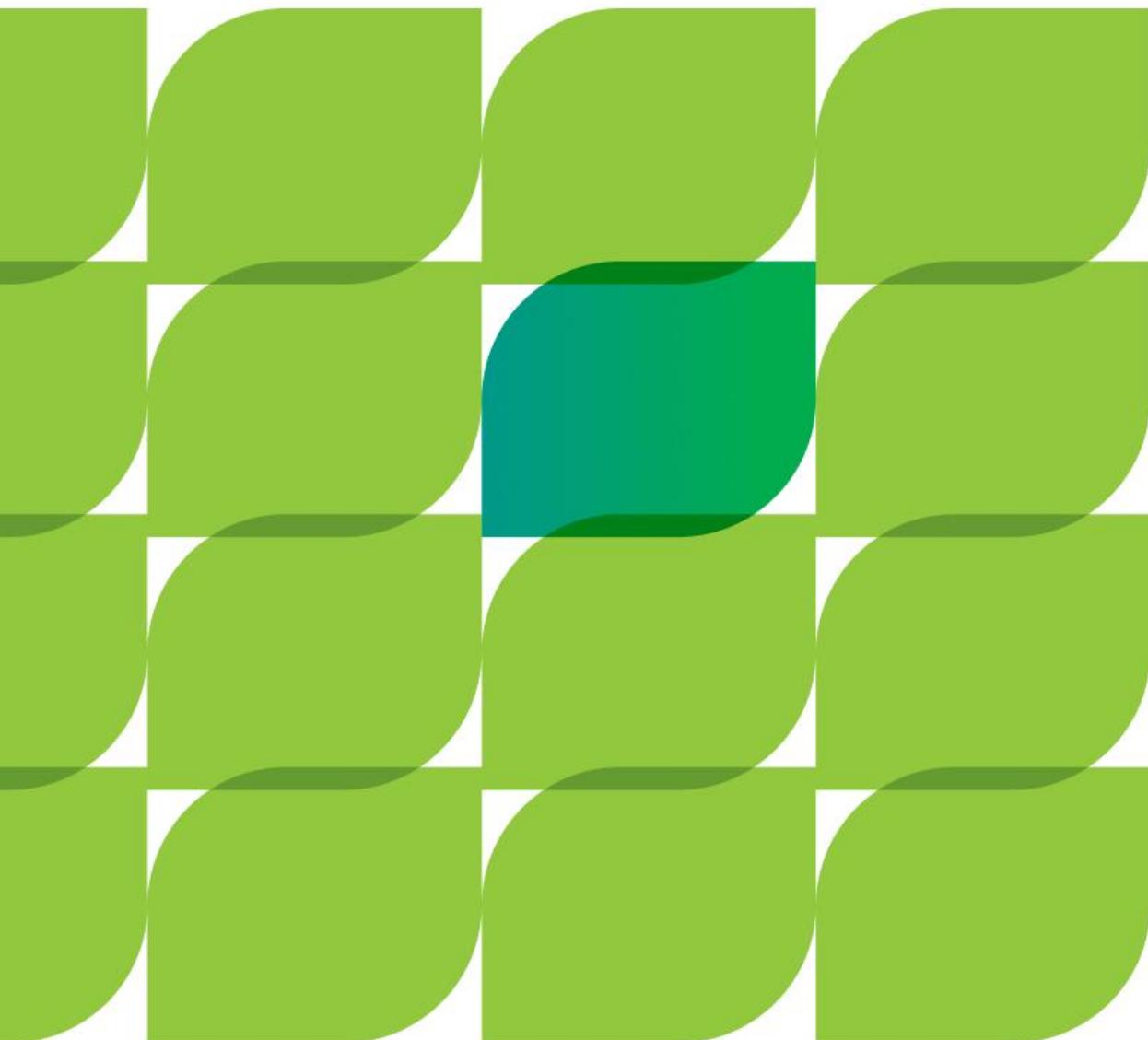


## **D3.2 Accreditation criteria and process for learning programmes**



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<b>Authors</b>	Alberto Hylander (DIGITALEUROPE), Paul Aertsen (Eduserpro)
<b>Reviewers</b>	Justina Bieliauskaite (DSME), Hadrévy Borbála (IVSZ), Bogdan Costel Mocanu (UPB), Serena Dell'Agli (DSME), Raphael Herding (Fastlane), Dietmar Janetzko (NCI), Laura Magalhães (UNIR), Elizaveta Osipovskaya (UAH), Mateja Pucibar Baebler (CCIS), Ants Sild (BCS Koolitus), Peter Walgemoed (Carelliiance).
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# About the Digital4Sustainability project

Digital4Sustainability is a pioneering initiative aimed at accelerating Europe's twin transition by equipping the workforce with the essential skills needed to drive sustainability-focused innovation, as defined in the project objectives set out in the Grant Agreement. In response to the pressing need to achieve climate neutrality and meet the Sustainable Development Goals (SDGs), the project will develop a forward-thinking Digital Sustainability Skills Strategy as well as cutting-edge learning programmes. These efforts will address the urgent and emerging skills needs of the European industry, empowering the workforce to develop sustainable technologies that support Environmental, Social, and Governance (ESG) practices. By aligning closely with industry needs throughout the project, Digital4Sustainability will help European companies, particularly small and medium-sized enterprises (SMEs), achieve long-term competitiveness and growth through digital and sustainable transformation.

Funded by the Erasmus+ Programme of the European Union, this 4-year project unites 28 members of the Digital Large-Scale Partnership (Digital LSP) under the Pact for Skills, spanning 13 EU countries. The consortium includes digital and sustainability experts, business associations, universities, and Vocational Education and Training (VET) providers.

# The Digital4Sustainability Project Consortium

The Digital4Sustainability project consortium is an Erasmus+ Alliance for Sectoral Cooperation on Skills, bringing together 29 partners and Associated partners from 13 EU countries.

	<b>Partners</b>	<b>Acronym</b>	<b>Country</b>
<b>1</b>	Adecco Formazione Srl	Adecco Training	Italy
<b>2</b>	Adecco Italia Holding Spa	Adecco Holding	Italy
<b>3</b>	As Bcs Koolitus	BCS KOOLITUS	Estonia
<b>4</b>	Asociatia Cluj IT	CLUJ IT CLUSTER	Romania
<b>5</b>	Badgebox Srl	BadgeBox	Italy
<b>6</b>	CEFRIEL Societa Consortile A Responsabilita Limitata	CEFRIEL	Italy
<b>7</b>	Cooperatie Eduserpro U.A.	Eduserpro	Netherlands
<b>8</b>	Digital Technology Skills Limited	DTSL	Ireland
<b>9</b>	DIGITALEUROPE AISBL	DIGITALEUROPE	Belgium
<b>10</b>	European DIGITAL SME Alliance	DIGITAL SME	Belgium
<b>11</b>	Fast Lane Institute For Knowledge Transfer GmbH	FAST LANE	Germany
<b>12</b>	Gospodarska Zbornica Slovenije	GZS CCIS	Slovenia
<b>13</b>	Gospodarska Zbornica Slovenije Center Za Poslovno Uspozabljanje	GZS CPU	Slovenia
<b>14</b>	IVSZ - Digitalis Vallalkozasok Szovetsege	IVSZ	Hungary
<b>15</b>	Matrix Internet Applications Limited	MATRIX INTERNET	Ireland
<b>16</b>	National College Of Ireland	NCI	Ireland
<b>17</b>	Profil Klett D.O.O.	PK	
<b>18</b>	Sdruzenie Bulgarska Asociacia Na Softuernite Kompanii – Basscom	BASSCOM	Bulgaria
<b>19</b>	Stichting Hogeschool Utrecht	HU	Netherlands
<b>20</b>	Tekenable Limited	TEKenable	Ireland
<b>21</b>	Universidad De Alcala	UNI ALCALA	Spain
<b>22</b>	Universidad Internacional De La Rioja SA	UNIR	Spain

<b>23</b>	Universität Koblenz	UNI KO	Germany
<b>24</b>	National University of Science and Technology Politehnica Bucharest	POLITEHNICA Bucharest	Romania

<b>Associated partners</b>		<b>Acronym</b>	<b>Country</b>
<b>1</b>	Asociacija Infobalt	INFOBALT	Lithuania
<b>2</b>	SKILLNET IRELAND Company Limited By Guarantee	SKILLNET IRELAND	Ireland
<b>3</b>	The Council of European Professional Informatics Societies	CEPIS	Belgium
<b>4</b>	Universidad Complutense De Madrid	UCM	Spain

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# 1. Introduction

## 1.1 Rationale and scope of the deliverable

### 1.1.1 Project context

Digital4Sustainability is a European initiative addressing the growing need for professionals capable of combining digital and sustainability competences. The project aims to design coherent learning pathways, training programmes and supporting frameworks that enable VET providers, higher education institutions and other learning organisations to equip learners with the skills required to drive Europe's twin transition, referring to the combined digital and green transition as defined in European Commission policy documents (European Commission, 2020).

### 1.1.2 Work Package context (WP3)

Work Package 3 focuses on the design of digital sustainability learning pathways, learning units and supporting quality frameworks. It aims to ensure that the educational offers developed within the project are coherent, transparent, quality-assured and aligned with the competence needs identified in WP2. WP3 brings together curriculum design, quality criteria and validation mechanisms to support consistent implementation and future uptake.

### 1.1.3 Deliverable D3.2

Deliverable D3.2 responds to Task 3.3 of the Grant Agreement (“Design of accreditation criteria for digital sustainability learning programmes”) by defining a structured and proportionate set of quality criteria and a reference evaluation process for Digital4Sustainability Learning Programmes.

The deliverable does not establish a formal academic accreditation or awarding mechanism, nor does it define binding governance or implementation structures. Instead, it provides a quality label framework that supports learning providers in assessing their capacity to design, deliver and continuously update digital sustainability learning in line with European quality assurance principles.

For clarity, while this deliverable uses the term “accreditation” in a functional and operational sense, the proposed criteria and process do not constitute a formal accreditation scheme, but rather a voluntary quality reference framework to support transparency, comparability and continuous improvement.

In this deliverable, the term “learning programmes” is used as an umbrella concept covering formal education, non-formal training and industry-oriented learning initiatives, provided that they address Digital4Sustainability competences and learning outcomes.

Deliverable D3.2 is fully complementary to the other WP3 outputs:

- the design of learning units and curriculum architecture is anchored in Deliverable D3.1;
- the treatment of certification/ micro-credentials is aligned with Deliverable D3.3;
- validation principles are consistent with the piloting approach applied in WP4.

Any considerations related to implementation, governance or post-project endorsement are presented exclusively in annexes for illustrative purposes and fall outside the formal scope of Task 3.3.

### 1.2 Context and objectives

Europe’s twin transition is reshaping the skills demanded across industries, particularly in sectors that rely heavily on digital technologies to reach sustainability targets. Organisations increasingly need professionals capable of using digital tools, data, and emerging technologies to advance

sustainability objectives, optimise resource efficiency, and meet Environmental, Social and Governance (ESG) expectations (European Commission, 2020).

The Digital4Sustainability project responds to this challenge by designing a comprehensive set of learning pathways and training programmes that enable VET providers, Higher Education Institutions (HEIs), and training organisations to develop professionals equipped to drive sustainable digital innovation across Europe. These include both initial training (VET/HE) and upskilling/reskilling opportunities for the existing workforce, delivered through modular, flexible, and learner-centred formats, in line with emerging European policy priorities on lifelong learning and skills development (Council of the European Union, 2022).

To ensure a consistent level of quality, transparency, and recognition across these programmes, Digital4Sustainability will establish a provider-level quality label. This framework serves three core purposes:

- To define clear, shared quality criteria that learning providers must meet to offer Digital Sustainability Learning Programmes;
- To support VET/HE institutions in aligning their programmes with recognised European Quality Assurance (QA) standards, notably ESG and EQAVET (European Commission, 2015; European Commission, 2020);
- To ensure long-term recognition of digital sustainability education and training across countries, sectors, and institutional types.

The quality framework developed in this deliverable builds on the evidence generated in *D2.1 – Roles and Skills Needs Analysis Report*, which provides a comprehensive overview of the emerging roles, competence needs, and skills gaps in digital sustainability across Europe (Digital4Sustainability Project Consortium, 2024). The needs analysis highlights that digital sustainability professionals require a unique combination of digital, sustainability, and sector-specific competences, and that current VET and Higher Education programmes only partially address these requirements.

Beyond providing a reference approach for quality assurance, this deliverable D3.2 also plays a structuring role within the project. It provides a common quality backbone for the design of learning units and curricula developed under WP3, supports the piloting and validation activities foreseen in WP4, and contributes to ensuring coherence and consistency across current digital

sustainability training initiatives and, where relevant, potential future applications beyond the project's lifetime, subject to further validation and stakeholder interest.

The Digital4Sustainability quality criteria, therefore, aim to ensure that learning providers can design and deliver programmes aligned with the skills demand identified in D2.1, while incorporating the level of flexibility, modularity, industry relevance, and continuous updating that stakeholders deem critical for this fast-developing domain. Grounding the quality framework in D2.1 ensures consistency between the diagnostic work carried out in WP2 and the quality criteria developed in WP3, ultimately supporting the long-term recognition of digital sustainability learning across Europe (Digital4Sustainability Project Consortium, 2024).

This deliverable is designed to complement and support the other WP3 outputs. The design of learning units and curriculum architecture is fully anchored in Deliverable D3.1 and is not redefined here. Similarly, the processes related to certification/micro-credentials are aligned with the framework developed in Deliverable D3.3. Deliverable D3.2 focuses exclusively on defining quality criteria and reference procedures that enable learning providers to implement these outputs consistently and with high quality.

To provide a complete and future-oriented view of the proposed quality label, this deliverable is complemented by annexed sections addressing implementation guidelines (Annex 5.4) and governance considerations (Annex 5.5). These annexes are provided for illustrative and exploratory purposes only and do not form part of the formal task requirements under WP3. They outline possible pathways for piloting, implementation and long-term endorsement beyond the project lifetime, without implying any binding commitments.

### 1.3 Terminology in Digital4Sustainability

In the context of this deliverable, the term “*accreditation*” is used in its official broad sense, referring to a quality assurance process through which an education or training provider, or a specific learning programme, is recognised and approved following an assessment against predetermined standards (CEDEFOP, 2024). The same definition is also used when talking about accreditation of a learning programme (CEDEFOP, 2024).

In this project, this understanding of accreditation is adapted to a voluntary, provider-level quality assurance framework rather than a formal public accreditation system. As such, accreditation is not limited to national or regional formal procedures linked to the awarding of legally recognised

qualifications by higher education or VET institutions, such as bachelor degrees, but is used as a general reference point for quality assurance processes in education and training contexts.

Accreditation in this project refers to a structured quality assurance (QA) procedure that evaluates whether a learning provider has the capacity, processes and competence alignment required to deliver high-quality digital sustainability learning programmes.

This means that in this project, it does not refer to the kind of accreditation that is carried out by national quality assurance agencies, ministries, or bodies holding legal authority over higher education or VET systems (European Commission, 2015; European Commission, 2020).

There are several reasons for this, including:

- The focus of Blueprint projects is on (up- and re)skilling solutions for quick uptake (European Commission, 2025). In most cases this will not be full degree programmes that are the subject of national academic or VET accreditation.
- The focus of Blueprint projects is on (higher) VET and not on academic programmes (European Commission, 2025). The consortium consists, among other partners, of VET providers and higher education providers both higher VET providers and academic providers. Only focusing on academic accreditation would be limiting and excluding consortium partners.
- Accreditation processes for full degree programmes in other projects that are related to digital skills turned out to be challenging (ASIIN, 2024; VLUHR QAB, 2024).
- In the digital/ ICT field, the market also values other prove of competence than only formal qualifications. For example, vendor related certifications are in many cases considered at least as valuable as formal qualifications (CEDEFOP, 2024).

The instrument developed in Digital4Sustainability is best understood as a provider-level quality label for the delivery of digital for sustainability learning programmes. This terminology is used deliberately to avoid the confusion that comes along with using the word “accreditation”, which by a lot of people is only associated with the accreditation of (degree) programmes leading to a formal qualification like a bachelor degree (European Commission, 2015).

The approach focuses on provider level, enabling providers to design and deliver Digital Sustainability learning programmes in a consistent and quality-assured manner. Reasons for approaching it on provider level are:



- The field of digital sustainability is still rapidly developing, and this will certainly lead to (even fundamental) changes in the skills needs and with that the Digital4Sustainability learning programmes (CEDEFOP, 2024). Accreditations on a learning programme level have restrictions on what can be changed in the programme and if the changes are bigger than that threshold, a complete new procedure will need to be done. This limits the flexibility of learning providers which is much needed in the current rapid changing world.
- The quality criteria for learning providers include the quality criteria for learning programmes. The quality criteria for learning programmes consist of general and subject specific criteria (European Commission, 2015; European Commission, 2020). The general criteria are criteria that are the same for every learning programme and therefore only need to be checked once on provider level. The specific criteria are related to a specific programme or set of programmes. These can be formulated in such a way that they are the same for every programme in for example digital sustainability. This can include criteria like that a provider should underpin their intended learning outcomes by referring to the educational profiles defined in the project. This means that the criteria for learning programmes are addressed within this approach, as further specified in the quality criteria and annexes.
- The fact that the quality label is focused on provider level does not mean that it necessarily has to involve the complete provider. It is only about the part(s) of the provider that are involved in Digital4Sustainability learning programmes. The consequence of this is that the quality label is only issued to a provider for delivering Digital4Sustainability learning programmes. It also implicates that not the whole organisation of the learning provider needs to be involved.

For clarity, within this deliverable the term “quality label” is used in two closely related but distinct ways, which reflect common practice in European quality assurance initiatives (European Commission, 2015; European Commission, 2020):

- to describe the quality assurance approach and criteria defined in this deliverable, which specify how quality is assessed at provider level; and

- to refer to the positive outcome of this process, namely the recognition that a provider meets the defined quality requirements for delivering Digital4Sustainability learning programmes.

This dual use is applied consistently throughout the document and is made explicit here to avoid ambiguity.

The Digital4Sustainability quality label is designed to support a wide range of organisations offering digital sustainability learning opportunities, including higher education institutions, VET providers, and other learning providers delivering full programmes, modular learning pathways, and short up- and reskilling. The approach is applicable to both formal education and non-formal learning contexts, provided that the organisation operates an internal quality assurance system. While the Digital4Sustainability approach provides a quality label for digital sustainability learning programmes, partners who independently or collectively wish to seek *regional or national* recognition for specific programmes may of course do so outside the scope of this project. Such procedures—usually conducted through national or recognised QA agencies—remain entirely separate from the project's quality label since this is out of the scope of the project. During these potential procedures, the agency executing them can of course take the Digital4Sustainability quality label into consideration as proof of the quality, but that is up to them.

## 1.4 Quality assurance in Digital Sustainability Education

Digital sustainability is an emerging and rapidly evolving domain in which competence requirements are still being defined (CEDEFOP, 2024). As shown in D2.1, organisations report a limited awareness of how digital technologies can support sustainability goals, a shortage of professionals who can combine digital and sustainability competences, and a strong need for flexible, modular, and industry-relevant training.

A quality label plays a crucial role in helping learning providers respond to these challenges (European Commission, 2015; European Commission, 2020). The Digital4Sustainability quality label addresses the identified gap by offering a shared and transparent quality approach that enables learning providers to:

- Ensure alignment with current industry needs and the role profiles identified in D2.1 (Digital4Sustainability Consortium, 2024);

- Design programmes that support “M-shaped professionals”, individuals who combine digital, sustainability, and sector-specific skills (European Commission, 2022; CEDEFOP, 2024);
- Integrate sustainability as a transversal dimension across curricula (European Commission, 2022);
- Adopt modular learning programmes including work-based learning formats (European Commission, 2020; European Commission, 2022); and
- Maintain quality and relevance through continuous update mechanisms (European Commission, 2015; European Commission, 2020).

A shared quality label also strengthens trust, transparency and recognition across the education and labour markets, enabling learners to build coherent pathways between VET, Higher Education and industry, while facilitating mobility and transferability of learning outcomes.

## 1.5 Alignment with ESG and EQAVET standards

To ensure a robust and comparable approach across Europe, the Digital4Sustainability quality framework is aligned with two well-established reference systems for quality assurance:

- ESG – Standards and Guidelines for Quality Assurance in the European Higher Education Area, widely used in Higher Education" (European Commission, 2015);
- EQAVET – European Quality Assurance Reference Framework for VET, supporting continuous improvement in vocational education (European Commission, 2020).

The detailed mapping of ESG and EQAVET principles to the Digital4Sustainability quality criteria is provided in Annex 5.3.

Drawing on these standards, the Digital4Sustainability framework emphasises:

- Learner-centred programme design (European Commission, 2015; European Commission, 2020);
- Constructive alignment between competences, learning outcomes, and assessment (European Commission, 2015);
- Transparent and fair assessment methods (European Commission, 2015; European Commission, 2020);



- Institutional capacity and quality assurance mechanisms (European Commission, 2015; European Commission, 2020);
- Mechanisms for feedback and regular programme updates (European Commission, 2015; European Commission, 2020);
- Recognition and portability of learning outcomes across sectors and countries (European Commission, 2020).

Integrating insights from D2.1 ensures that the quality criteria reflect not only general quality assurance principles such as ESG and EQAVET, but also the specific competence requirements, learning formats, and skills gaps that define the emerging field of digital sustainability education (Digital4Sustainability Consortium, 2024).



## 2. Framework Overview

### 2.1 Concept and scope

The Digital4Sustainability quality framework, which underpins the Digital4Sustainability quality label, provides a unified and coherent set of principles, criteria and procedures to support and promote the quality, relevance and consistency of Digital4Sustainability Learning Programmes across Europe. Its purpose is to support VET and Higher Education institutions – as well as private training providers, companies and other organisations – in designing, delivering and continuously improving digital sustainability learning programmes aligned with the role profiles and competence needs identified in *D2.1 – Roles and Skills Needs Analysis Report*, which are translated in educational profiles and curricula in D3.1 (Digital4Sustainability Consortium, 2024).

The Digital4Sustainability quality label adopts a provider-level approach which includes criteria for learning programmes. This means the label evaluates whether a provider has the organisational capacity, quality assurance mechanisms, competence alignment and curriculum design processes needed to deliver high-quality digital sustainability learning programmes in

different formats and at different levels, rather than accrediting each programme individually (European Commission, 2015; European Commission, 2020).



**Figure 1: Core dimensions of the Digital4Sustainability provider-level quality label**

This approach directly reflects the findings of D2.1 (Digital4Sustainability Consortium, 2024), which highlight the emerging, dynamic and fast-evolving nature of digital sustainability roles. Because competence requirements are still developing, the Digital4Sustainability quality label does not prescribe a fixed curriculum. Instead, it provides a flexible and transparent quality framework that providers can apply to a wide range of learning offers, including:

- Initial VET and Higher Education programmes;
- Upskilling and reskilling initiatives;
- Short programmes and work-based learning formats;
- Blended, flexible or hybrid delivery models.

The scope of the quality label also includes a differentiated and proportionate approach, recognising that some institutions already operate under formal national or European quality assurance regimes. Providers with existing such "formal" accreditation will follow a "lighter" version of the procedure, avoiding unnecessary duplication (European Commission, 2015; European Commission, 2020). While the lighter route allows providers to avoid duplication of existing quality assurance documentation, it does not waive the need to demonstrate compliance with the core provider-level quality criteria defined in Section 3.2. New providers or providers that are not operate under formal quality assurance regimes will follow the full set of steps defined in this framework.

Finally, this deliverable focuses on the design of the quality label and its reference procedures, not on its implementation or awarding. Considerations related to piloting, governance and potential post-project endorsement are explored in the annexes for illustrative purposes only, without implying binding commitments or the establishment of permanent structures within the project. Building on this scope and approach, the following section outlines the core principles of quality and sustainability that underpin the Digital4Sustainability quality label and guide the definition of its criteria and procedures.

## 2.2 Principles of quality and sustainability

Building on the scope and provider-level approach described in Section 2.1 and illustrated in Figure 1, the Digital4Sustainability quality label is built on four key principles that guide all criteria and procedures defined in this framework. These principles ensure that the framework is clear, flexible, and applicable to different types of learning providers, including HEIs, VET centres, private training organisations and providers of modular upskilling programmes (European Commission, 2015; European Commission, 2020).

While the Digital4Sustainability quality label is awarded at provider level, the principles illustrated in Figure 2 relate to how Digital Sustainability Learning Programmes are designed, delivered and quality-assured within the provider's organisational framework. In practice, this means that provider-level capacity and systems are assessed through documented evidence linked to specific learning programmes and offers (European Commission, 2015).



**Figure 2 Core quality and sustainability principles guiding the Digital4Sustainability quality label**

In line with the Grant Agreement, these principles address core quality aspects relevant to Digital4Sustainability learning programmes. They are applied through provider-level requirements that focus on the capacity, processes and internal quality systems enabling providers to design and deliver such programmes consistently in line with the Digital4Sustainability quality criteria.

This approach avoids the need to establish a separate formal procedure for each individual programme, while ensuring that programme-level quality is supported through robust provider-level systems. It balances quality assurance with proportionality and feasibility, particularly in contexts where providers deliver multiple, short or rapidly evolving learning offers (European Commission, 2015; European Commission, 2020).

The four principles presented in Figure 2 operationalise the provider-level focus of the Digital4Sustainability quality label illustrated in Figure 1 (Section 2.1). While Figure 1 identifies the four core areas assessed at provider level – organisational capacity, quality assurance mechanisms, competence alignment and curriculum design processes – the principles described in this section explain how these areas are translated into quality expectations for the design, delivery and quality assurance of Digital4Sustainability learning programmes.

In other words, the principles provide the conceptual logic that links provider-level capacity to programme-level implementation, and they form the basis for the concrete, assessable quality criteria defined in Section 3.2. Together, these principles ensure that the four core provider-level areas identified in Figure 1 are applied in a coherent, proportionate and programme-relevant manner. Each principle corresponds to one or more of the provider-level areas illustrated in Figures 1 and 2, ensuring conceptual continuity between visual representations and the quality criteria framework.

### 2.2.1 Competence Alignment

All Digital4Sustainability learning programmes covered by the Digital4Sustainability quality label should demonstrate alignment with relevant digital, sustainability and sector-specific competences, reflecting the interdisciplinary nature of digital sustainability learning (European Commission, Joint Research Centre, 2018; European Commission, Joint Research Centre, 2022).

This includes the intentional integration of digital and sustainability competences, complemented by contextual or sector-specific knowledge, to support the development of

professionals capable of applying digital tools and solutions to sustainability challenges in real-world settings. Such integration underpins the development of so-called “M-shaped professionals”, combining depth in multiple competence areas with the ability to work across domains (Digital4Sustainability Consortium, 2024).

At provider level, this principle requires learning providers to demonstrate that they have the capacity, processes and internal mechanisms in place to ensure systematic competence alignment across their digital sustainability learning offers. Where relevant, providers may reference the competence needs and role profiles identified in *D2.1 – Roles and Skills Needs Analysis Report* (Digital4Sustainability Consortium, 2024) as an evidence base to substantiate this alignment. This principle operationalises the provider-level requirement on competence alignment illustrated in Figure 1.

### **2.2.2 Constructive Alignment and Coherence**

Providers must demonstrate coherence within and across their digital sustainability programmes between their intended learning outcomes, teaching methods and assessment strategies. This ensures that competence development is intentional, transparent, measurable, and traceable across different formats (short learning programmes, modular programmes, VET/HE pathways) (European Commission, 2015). It translates the provider-level focus on curriculum design processes into assessable programme-level practices.

### **2.2.3 Responsiveness and Adaptability**

Given the fast-evolving nature of digital sustainability, providers are expected to have mechanisms to regularly update their programmes and learning units, integrate new technologies, and incorporate feedback from learners, employers and stakeholders (European Commission, 2020). This principle supports the inclusion of short, flexible and modular learning pathways that can be adapted quickly while maintaining quality. This principle is closely linked to the provider’s internal quality assurance mechanisms and capacity for continuous improvement (European Commission, 2015; European Commission, 2020).

## 2.2.4 Proportionality and European Quality Assurance Standards

The quality label follows recognised European Quality Assurance principles (ESG and EQAVET) while maintaining proportionality and avoiding duplication (European Commission, 2015; European Commission, 2020). Providers already accredited through national or European QA systems may follow a lighter version of the process. New or non-traditional providers follow the full procedure, ensuring consistency without unnecessary administrative burden. Additionally, this principle ensures that organisational capacity and QA mechanisms are assessed in a proportionate manner, aligned with ESG and EQAVET.

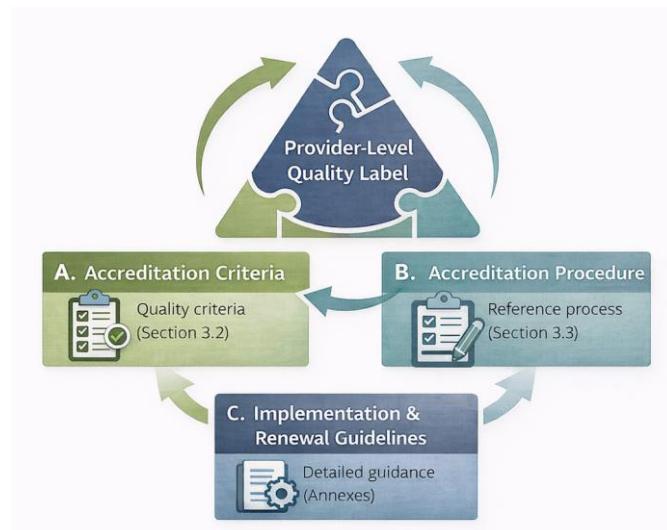
Together, these principles provide the conceptual foundation for the Digital4Sustainability quality label. They are translated into a set of concrete, assessable quality criteria (Section 3.2) and a proportionate evaluation process (Section 3.3), which together operationalise the framework.

Before detailing the criteria and process, Section 3.1 clarifies which types of learning providers may apply the framework, ensuring that eligibility is defined in a transparent and non-discriminatory manner, based on demonstrated quality capacity rather than institutional type.

## 2.3 Structure of the framework

As illustrated in Figure 3, the Digital4Sustainability quality label is structured around three interconnected components that together ensure clarity, coherence and usability for different types of learning providers. These components reflect the logical flow of the framework – from defining *what quality means*, to *how it is assessed*, and finally to *how it may be applied in practice* – while remaining fully aligned with the scope and mandate of this deliverable (European Commission, 2015; European Commission, 2020).

The three components are described in the core sections of this deliverable and are further supported by indicative guidance provided in the annexes.



**Figure 3 Structure of the Digital4Sustainability provider-level quality label framework**

### 2.3.1 Quality Criteria

For clarity, within this deliverable these criteria are referred to as “quality criteria”, as they relate to the provider-level quality label developed in Digital4Sustainability and do not constitute formal academic accreditation criteria.

This component defines a structured set of qualitative and, where appropriate, qualitative-quantitative criteria that assess whether a learning provider has the capacity, internal processes and quality assurance systems required to design and deliver high-quality Digital4Sustainability learning programmes aligned with the competence needs identified in D2.1 and with European QA standards (ESG/EQAVET) (European Commission, 2015; European Commission, 2020).

The criteria are structured around the following core dimensions:

- institutional capacity and internal QA mechanisms;
- competence alignment based on D2.1;
- curriculum design and constructive alignment;
- assessment and learner support;
- stakeholder engagement;
- mechanisms for continuous updating and relevance;
- proportionality for providers already accredited through national systems.

These criteria are applicable to different learning formats, including short learning programmes, modular programmes and VET/HE pathways.

### 2.3.2 Quality Assurance Procedure

This component describes a clear, transparent and proportionate evaluation procedure that learning providers follow to demonstrate compliance with the Digital4Sustainability quality criteria (European Commission, 2015; European Commission, 2020).

The process is designed to be supportive of continuous quality enhancement rather than to establish a formal accreditation process (European Commission, 2015).

The procedure typically includes:

- a structured self-assessment;
- submission of documentation;
- review by an evaluation panel;
- a proportional process for nationally accredited providers;
- a decision and guidance for improvement;
- conditions for the conceptual use of the label.

This deliverable focuses on designing the procedure, not on implementing or awarding the label. Any future operationalisation of the quality label would depend on governance and funding decisions outside the scope of this deliverable and beyond the project lifetime.

### 2.3.3 Implementation and Renewal Guidelines

The third component consists of indicative implementation and renewal guidance, provided in the annexes, which illustrates how the framework may be applied during the project and how it could be adopted by new learning providers after the project ends (European Commission, 2015; European Commission, 2020). This component includes:

- procedures for pilot providers within the consortium;
- guidance for new providers after the project;
- mechanisms for monitoring, periodic review and renewal;
- alignment with the long-term sustainability strategy developed under WP6;
- connections with the governance model described in Section 5, including options for a future endorsing authority.

These guidelines are illustrative and exploratory and do not form part of the formal task requirements. They are included to provide a complete and future-oriented view of the framework.

Together, these three components form a coherent, flexible and future-proof provider-level quality approach that supports the uptake and recognition of digital sustainability education across Europe, while remaining fully aligned with the scope and mandate of the project (European Commission, 2015; European Commission, 2020).



## 3. Quality assurance process

### 3.1 Eligible providers

The Digital4Sustainability quality label is designed to be applicable to a wide range of learning providers, reflecting the diversity of organisations involved in digital sustainability education across Europe. Eligibility is therefore defined not by provider type but by the provider's demonstrated capacity to design, deliver and continuously improve Digital Sustainability Learning Programmes in line with the quality criteria outlined in this framework (European Commission, 2015; European Commission, 2020).

Eligible providers include:

- Higher Education Institutions (HEIs);
- Vocational Education and Training (VET) centres;
- private training organisations and professional learning providers;
- non-formal education providers, such as specialised academies, chambers of commerce or training centres;
- consortia or partnerships that jointly deliver Digital4Sustainability learning programmes;

- companies offering structured internal training that meets the Digital4Sustainability quality criteria and operates under documented internal quality assurance mechanisms (Council of the European Union, 2022)

To be eligible, providers must demonstrate the presence of basic internal quality assurance mechanisms, such as:

- systematic feedback collection from learners and stakeholders;
- documented processes for reviewing and updating learning content;
- transparent communication of learning outcomes and assessment practices;
- measures to ensure learner support, accessibility and inclusiveness (European Commission, 2015; European Commission, 2020).

Eligibility is assessed through the self-assessment and documentation review process described in Section 3.3, based exclusively on the quality criteria defined in Section 3.2 of this deliverable. No additional external standards or procedures are required (European Commission, 2015).

To ensure proportionality and avoid unnecessary administrative burden:

- providers already accredited through national or European QA systems may follow a lighter version of the procedure, drawing on their existing QA structures and documentation, while still being required to demonstrate compliance with the core provider-level quality criteria defined in Section 3.2 of this framework, in particular those related to competence alignment, internal quality assurance mechanisms and transparency towards learners;
- new or non-traditional providers may be requested, within the D4s procedure, to provide additional documentation to demonstrate the robustness of their internal QA practices, using the self-assessment template provided in Annex 5.1.

Providers offering short learning programmes, modular upskilling units or full programme pathways are eligible, as long as they can show that their learning offer aligns with the competence needs identified in D2.1 and that they meet the provider-level quality criteria defined in Section 3.2 (Council of the European Union, 2022; European Commission, 2020).

### 3.2 Quality criteria

The Digital4Sustainability quality criteria – referred to in this deliverable as quality criteria – define the requirements that learning providers must fulfil in order to offer Digital4Sustainability Learning Programmes in a consistent, transparent and quality-assured manner (European Commission, 2015; European Commission, 2020).

In line with the Grant Agreement, the criteria address key quality aspects relevant to Digital4Sustainability learning programmes, including competence alignment, curriculum design, assessment approaches and quality assurance mechanisms (European Commission, 2015).

Rather than introducing a separate procedure for each individual learning programme, the Digital4Sustainability approach applies these criteria at provider level. This ensures that providers have the institutional capacity, processes and safeguards needed to design, deliver and update Digital4Sustainability learning programmes across different formats, including short learning programmes and modular programmes (European Commission, 2015; Council of the European Union, 2022).

This approach avoids unnecessary administrative burden and supports flexibility and rapid uptake of new learning opportunities, while still ensuring that all Digital4Sustainability learning programmes are delivered in line with the quality criteria defined in this framework (European Commission, 2020).

These criteria offer a structured and proportionate way to assess whether a provider has the organisational capacity, competence alignment and internal quality assurance systems needed to design, deliver and update Digital4Sustainability learning programmes across different formats (European Commission, 2015; European Commission, 2020). They apply to Higher Education Institutions, VET centres, private training organisations and providers offering short learning programmes or modular upskilling programmes (Council of the European Union, 2022).

The criteria are grouped into six dimensions. Each dimension is grounded in the competence needs identified in *D2.1 – Roles and Skills Needs Analysis Report* and aligned with European QA standards (ESG/EQAVET) (European Commission, 2015; European Commission, 2020). The full procedure is proportionate: providers already accredited through national QA systems may follow a lighter version of the process, while new or non-traditional providers complete the full set of requirements (European Commission, 2020).

Learning units, curriculum architecture and educational profiles for digital sustainability programmes are defined in Deliverable D3.1 (Digital4Sustainability Consortium, 2024). The role of Deliverable D3.2 is not to redefine these elements, but to assess whether learning providers have the institutional capacity, quality assurance systems and internal processes required to implement them consistently and in line with the competence needs identified in D2.1.

### **3.2.1 Institutional Capacity and Internal QA Systems**

Providers must demonstrate that they have the organisational structures, governance arrangements and internal quality assurance (QA) mechanisms required to deliver digital sustainability learning in a consistent, transparent and reliable manner (European Commission, 2015; European Commission, 2020). Evidence may include:

- documented internal QA procedures aligned with ESG/EQAVET;
- a governance and management structure for DSPL design and delivery;
- staffing and resources adequate for the scope and scale of provision;
- documented policies for learner support, inclusiveness, transparency and data protection;
- (lighter process) evidence of national or European accreditation to avoid unnecessary duplication of QA documentation.

Evidence may also include mechanisms supporting continuous professional development of teaching and facilitation staff involved in Digital4Sustainability learning programmes, including peer learning, reflective practice or upskilling activities linked to programme evolution.

### **3.2.2 Competence Alignment**

Providers must show a clear alignment between their learning offer and the competence areas identified in D2.1 (CEDEFOP, 2024; Digital4Sustainability Consortium, 2024), covering:

- digital competences (e.g., data, AI, automation, digital tools for sustainability);
- sustainability competences (e.g., environmental impact, circularity, resource efficiency);
- sector-specific knowledge relevant to the learners' context;
- the integration of these areas to support the development of "M-shaped professionals".

Documentation must show how intended learning outcomes reflect and operationalise these competence needs, regardless of programme length (short learning programmes, modular

programmes, VET/HE pathways), in a proportionate manner (Council of the European Union, 2022).

Where relevant, providers may reference EU occupational taxonomies such as the e-Competence Framework (CEN TC428, 2019) or ESCO (European Commission, 2025) to demonstrate alignment between the competences addressed in their programmes and emerging digital sustainability roles (European Commission, n.d.).

### **3.2.3 Curriculum Design and Constructive Alignment**

Providers must ensure coherence between intended learning outcomes, teaching and learning approaches, and assessment strategies (European Commission, 2015). Providers should demonstrate:

- clear, transparent and measurable learning outcomes aligned with D2.1;
- assessment methods that adequately capture competence acquisition and application;
- appropriate workload, sequencing and scaffolding of learning;
- recognition of prior learning where appropriate.

### **3.2.4 Relevance, Stakeholder Engagement and Industry Involvement**

Providers must demonstrate that their training offer is informed by relevant stakeholders and remains aligned with labour market and societal needs (European Commission, 2020; European Commission, 2015). Evidence may include:

- consultation with employers, industry bodies, NGOs or sectoral organisations;
- integration of real-world problems, challenges or project-based learning;
- mechanisms for capturing emerging trends in digital and green technologies;
- continuous engagement with external partners to validate relevance.

### **3.2.5 Responsiveness and Continuous Updating**

Given the pace of the digital and green transitions, providers must show that they can regularly update their training content and delivery (European Commission, 2020; CEDEFOP, 2024). This includes:

- systematic review cycles for curricula and learning units;
- integration of new technologies or sustainability requirements;



- incorporation of feedback from learners and employers/industry;
- agility to update short learning programmes quickly while maintaining quality.

This dimension is critical due to the fast pace of the digital and green transitions.

### **3.2.6 Learner Experience, Support and Transparency**

Providers must ensure that learners have access to accurate information, appropriate support and a transparent understanding of the value and recognition of their training (European Commission, 2015; European Commission, 2020). This includes:

- clear information for learners on learning outcomes, workload, level and progression options, and recognition;
- accessible and inclusive learning environments;
- appropriate guidance, mentoring or tutoring where relevant;
- transparent communication on the status and meaning of the Digital4Sustainability quality label.

Together, these six dimensions form the foundation of the Digital4Sustainability quality label. While the criteria focus on provider-level capacity and quality systems, each dimension is assessed through documented evidence related to the design, delivery and quality assurance of specific Digital4Sustainability learning programmes (European Commission, 2015). This ensures that the criteria are operational, verifiable and applicable in practice, while remaining proportionate and flexible across different provider types, programme formats and national contexts (European Commission, 2020).

Finally, to support consistent and assessable interpretation of the provider-level quality criteria, Annex 5.3 provides an indicative mapping between each criterion and typical sources of evidence, aligned with ESG and EQAVET principles (European Commission, 2015; European Commission, 2020).

## **3.3 Evaluation and decision process**

The evaluation and decision process provides a clear, transparent and proportionate pathway for learning providers wishing to obtain the Digital4Sustainability quality label. The process is designed to minimise administrative burden while ensuring consistency, reliability and alignment with European QA principles (European Commission, 2015; European Commission, 2020).



The process described in this section defines a reference procedure for assessing compliance with the Digital4Sustainability quality criteria. It does not establish a formal accreditation or awarding mechanism, nor does it require the creation of permanent governance or decision-making structures within the project (European Commission, 2015). Considerations related to potential governance and endorsement arrangements beyond the project lifetime are outlined separately in Section 5 (Annexes) for illustrative and exploratory purposes only.

Providers already accredited through national or European quality assurance systems may follow a lighter version of the procedure, drawing on existing documentation, while new or non-traditional providers complete the full process (European Commission, 2020).

For clarity and usability, the main steps of the Digital4Sustainability evaluation and decision process are summarised in Figure 4 below. The figure provides a simplified, high-level visual overview of the procedure described in this section and is intended as an indicative support tool for learning providers (European Commission, 2015). A more detailed, step-by-step representation of the evaluation process is provided in Annex 5.2, which visually illustrates the sequence of stages described below and supports understanding and application during piloting activities.



**Figure 4 Overview of the Process Flowchart**

The Digital4Sustainability evaluation process consists of five main stages, as illustrated in Figure 4 and detailed below.

### 3.3.1 Self-Assessment

Providers begin by completing a structured self-assessment template (Annex 5.1), documenting how they meet the Digital4Sustainability quality criteria described in Section 3.2 (European Commission, 2015; European Commission, 2020). The self-assessment focuses on the provider's capacity and internal processes to deliver Digital4Sustainability learning programmes and may include:

- evidence of internal QA systems,
- mapping of learning outcomes to competences identified in D2.1,
- examples of teaching, learning and assessment practices,
- mechanisms for updating programmes,

- stakeholder engagement and learner support practices.

Providers with existing national accreditation may cross-reference their current QA documentation, following a proportional and non-duplicative approach (European Commission, 2020).

### **3.3.2 Submission of Documentation**

The provider submits the self-assessment together with supporting evidence, such as:

- internal QA policies and procedures;
- curriculum or module descriptors;
- examples of learner assessments;
- records of stakeholder engagement;
- mechanisms for feedback and revision cycles;
- transparency statements for learners (learning outcomes, workload, recognition).

The framework accommodates different formats (short learning programmes, modular programmes, VET/HE pathways) (Council of the European Union, 2022).

### **3.3.3 Review of Evidence**

The submitted documentation is reviewed against the Digital4Sustainability quality criteria (European Commission, 2015). The review may involve one or more reviewers with expertise in digital sustainability, pedagogy and quality assurance. At least one reviewer should be external to the provider (European Commission, 2015).

The review focuses on:

- the provider's alignment with Digital4Sustainability quality criteria;
- the coherence of the learning offer;
- evidence of responsiveness and updating mechanisms;
- appropriateness of internal QA processes;
- proportionality in documentation (lighter for nationally accredited providers).

Reviewers may request clarifications or additional evidence where necessary (European Commission, 2015).



### 3.3.4 Decision and Feedback

Based on the panel's review, an outcome is formulated (European Commission, 2015; European Commission, 2020).

Possible outcomes include:

- **Award of the Digital4Sustainability quality label** (valid for a defined period);
- **Award with recommendations**, requiring the provider to address specific improvements;
- **Deferred decision**, pending submission of additional evidence;
- **Non-award**, with detailed feedback explaining the reasons.

In all cases, providers receive constructive feedback to support continuous improvement (European Commission, 2020).

### 3.3.5 Guidance for Improvement and Renewal Pathways

Providers that receive the label also receive guidance on:

- how to address improvement areas;
- how to maintain alignment with D2.1 competences as roles evolve;
- how to update programmes in response to technological and sustainability developments;
- how to prepare for the renewal procedure.

Considerations related to renewal cycles, governance arrangements and long-term endorsement pathways are outlined in Section 5 (Annexes) (European Commission, 2020). This evaluation and decision process ensures transparency, proportionality and continuous improvement, while maintaining a flexible and applicable approach suitable for diverse provider types and learning formats (European Commission, 2015; European Commission, 2020).

## 3.4 Use of the Digital4Sustainability Quality Label

The Digital4Sustainability quality label recognises that a learning provider has demonstrated the capacity, internal quality assurance systems and competence alignment mechanisms necessary to deliver high-quality Digital4Sustainability Learning Programmes (European Commission, 2015; European Commission, 2020). Once awarded, the label may be used by providers as a communication and transparency tool to signal the quality and reliability of their digital sustainability learning offer to learners, employers, partners and other stakeholders.

The label does not constitute formal academic accreditation and does not have legal or regulatory equivalence to national quality assurance decisions (European Commission, 2015).

The use of the label is governed by the following principles:

### **3.4.1 Provider-Level Use**

The Digital4Sustainability quality label is awarded at provider level, not programme level, and therefore does not certify or validate individual learning programmes in isolation (European Commission, 2015).

This means the label:

- recognises the provider's overall capacity to deliver digital sustainability learning;
- may be applied across multiple learning offers, including short learning programmes, modular pathways and full VET/HE programmes;
- does not certify any individual programme independently of the provider;
- does not replace or duplicate national or European programme-level accreditation systems.

This distinction ensures flexibility while maintaining clarity on the scope, meaning and limits of the label.

### **3.4.2 Communication and Visibility**

Providers awarded the label may use it in their:

- websites, catalogues and promotional materials;
- course descriptions for Digital4Sustainability learning programmes;
- learner-facing documents (e.g., course handbooks);
- micro-credential descriptions or digital badges;
- communication with employers and partners.

To ensure consistency and transparency, all providers must follow the Digital4Sustainability communication guidelines, which specify:

- authorised versions of the label's visual identity;
- required explanatory statements about what the label represents;

- disclaimers clarifying that the label is not formal academic accreditation (European Commission, 2015).

### 3.4.3 Integrity and Transparency

When using the Digital4Sustainability quality label, providers must clearly communicate:

- its meaning as a provider-level quality assurance recognition;
- its validity period;
- that it does not replace national or European programme-level accreditation;
- that it refers to the provider's internal capacity and quality systems (European Commission, 2015; European Commission, 2020).

This safeguards the integrity of the label and avoids confusion with formal accreditation procedures.

### 3.4.4 Responsibilities of the Provider

Providers awarded the label are expected to:

- maintain alignment with the Digital4Sustainability quality criteria (Section 3.2);
- ensure that all Digital4Sustainability learning programmes remain consistent with the principles of competence alignment, constructive coherence and continuous updating;
- notify the Digital4Sustainability governance body (Section 5) of any major structural or organisational changes relevant to the label;
- respond to improvement recommendations issued during the evaluation (European Commission, 2020).

These responsibilities ensure that the label remains credible, meaningful and up to date.

### 3.4.5 Validity and Conditions for Continued Use

The Digital4Sustainability quality label is valid for a defined period, to be further specified within the project's governance discussions (see Section 5 – Annexes) and informed by piloting activities in WP4 (European Commission, 2020). Continued use of the label depends on:

- maintaining compliance with the Digital4Sustainability quality criteria;
- participating in renewal or review processes where applicable;
- using the label accurately and responsibly.



Failure to comply may result in suspension or withdrawal of the label (European Commission, 2015).

The Digital4Sustainability quality label aims to support providers in strengthening the visibility, credibility and recognition of their digital sustainability learning offers, while ensuring that learners and stakeholders can trust the quality of the education they receive (European Commission, 2015; European Commission, 2020).

Sections 1 to 3 of this deliverable define the core elements of the Digital4Sustainability quality label, including its scope, principles, quality criteria and reference evaluation process, in line with the requirements of Task 3.3 of the Grant Agreement.

To complement this core framework and to provide a more complete and forward-looking perspective, the deliverable is accompanied by a set of annexed sections presented in Section 5. These annexes outline possible and non-binding approaches to implementation, governance and long-term endorsement of the Digital4Sustainability quality label.

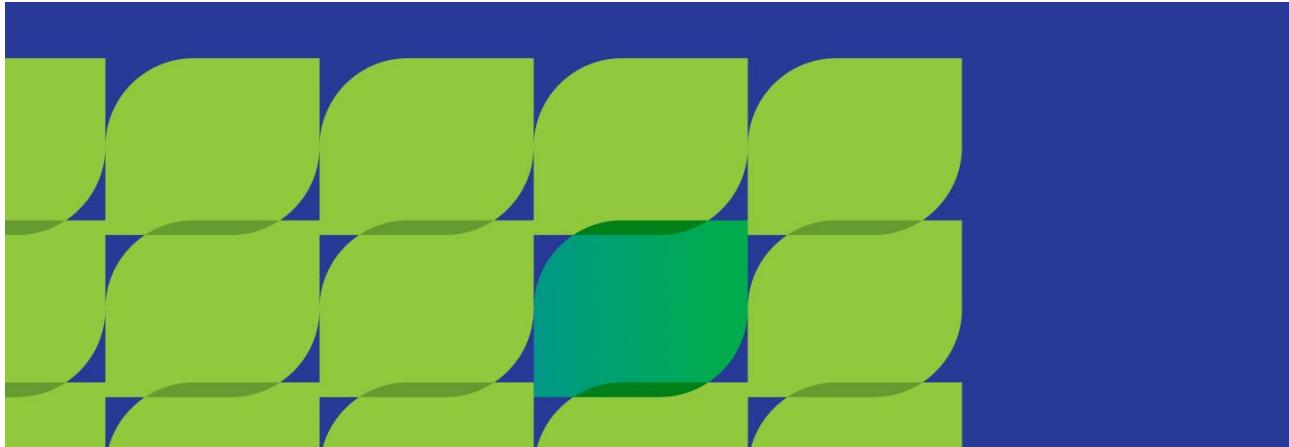
The annexed content is provided for illustrative and exploratory purposes only. It does not form part of the formal task outputs, does not establish any implementation or awarding mechanism, and does not imply the creation of permanent governance structures or post-project commitments within Digital4Sustainability (European Commission, 2015).



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## 5. Annexes

The annexes included in this section are intended to complement the core framework defined in Sections 1 to 3 by providing illustrative examples and exploratory reflections on possible implementation, governance and sustainability pathways for the Digital4Sustainability quality label.

They are not required by Task 3.3 and do not constitute formal project outputs. Their inclusion responds to partner feedback and aims to support understanding, discussion and future uptake, without creating obligations, formal procedures or post-project commitments.

Any implementation, endorsement or governance arrangements described in these annexes would require separate decisions, resources and agreements beyond the scope of the Digital4Sustainability project.

### 5.1 Template for provider self-assessment

#### 5.1.1 Purpose and scope

This self-assessment template supports learning providers in reflecting on their capacity to design, deliver and continuously improve Digital4Sustainability Learning Programmes in line with the Digital4Sustainability quality criteria defined in Section 3.2.

The template is designed to be:

- accessible and proportionate,
- applicable to different provider types and learning formats, and



- usable both during WP4 piloting activities and in possible post-project applications.

It does not constitute a formal accreditation tool and does not lead to the automatic award of the Digital4Sustainability quality label. Its primary function is to:

- structure provider self-reflection,
- support evidence-based review,
- test the clarity and feasibility of the quality criteria.

This template does not redefine learning unit design or curriculum architecture or certification processes, which are addressed in Deliverables D3.1 and D3.3 respectively. It focuses solely on assessing provider-level capacity and quality systems that support their implementation.

### 5.1.2 How to use this template

Providers are invited to:

- Self-assess their alignment with each quality criterion using the rating scale below;
- Briefly justify the selected rating;
- Indicate the type of evidence available to support the assessment.

The level of detail and documentation provided should be proportionate to the scale and nature of the provider's digital sustainability learning offer (e.g. short learning programmes, modular programmes, VET/HE pathways).

Providers that are already subject to recognised national or European QA arrangements may follow a lighter documentation route by cross-referencing existing QA evidence and policies, avoiding duplication. New providers or providers not subject to formal QA arrangements are encouraged to provide fuller evidence to demonstrate robustness of internal QA practices.

The self-assessment focuses on provider-level capacity and systems, while drawing on programme-level evidence solely to demonstrate how these systems are applied in practice.

### 5.1.3 Rating scale (indicative)

For each criterion, providers should select one of the following levels:

- 0 – Not in place: The element is not currently addressed or documented.
- 1 – Partially in place: The element exists in an informal or ad-hoc manner, with limited documentation.



- 2 – Largely in place: The element is implemented and documented but may require further consolidation or consistency.
- 3 – Fully in place: The element is systematically implemented, documented and regularly reviewed.

The rating scale is indicative and intended to support structured reflection and dialogue. It does not represent a pass/fail threshold.

### 5.1.4 Self-assessment template

#### A) PROVIDER IDENTIFICATION

A1. Provider name:

A2. Country / main operating location:

A3. Provider type (tick all that apply):

HEI  VET provider  Private training organisation  Non-formal provider  
 Company internal training  Consortium/partnership

A4. Primary contact person (name, role, email):

A5. Short description of digital sustainability learning offer(s) (max 10 lines):

A6. Learning formats covered (tick):

Degree programme(s)  VET programme(s)  Modular pathways  Short programmes  
 Work-based learning  Blended/online

A7. Existing external QA / accreditation status (if applicable):

Yes (briefly specify and provide reference link/document):  
 No

#### B) SELF-ASSESSMENT DETAILED CRITERIA TABLE

Please indicate your self-assessed level for each criterion and list the key evidence included in the submission documents.

#### Criterion 1 – Institutional Capacity and Internal QA Systems (Section 3.2.1)

- Guiding questions (please describe shortly):
  - 1) What internal QA mechanisms are in place to assure consistent delivery of Digital4Sustainability learning programmes?
  - 2) Who is responsible for QA and programme oversight (roles, governance, decision-making)?



3) How do you ensure compliance with learner support, inclusiveness, transparency and data protection requirements?

4) If you have existing national/European QA arrangements, which elements can you cross-reference?

- Evidence (tick and reference):
  - Internal QA policy / handbook
  - Governance structure and roles (organigram or equivalent)
  - Procedures for programme approval, review and updating
  - Learner support and inclusiveness policy
  - Transparency policy (information for learners)
  - Data protection / GDPR policy (as relevant)
  - External QA/accreditation evidence (optional – for lighter route)
- Other evidence (specify and add related evidence):
- The information above may be summarized in the following indicative table:

Element	Rating (0-3)	Brief justification	Type of evidence (examples)
Internal QA policies aligned with ESG/EQAVET principles			QA handbook, internal procedures
Clear governance for DSLP design and delivery			Organisational charts, role descriptions
Adequate staffing and resources for Digital4Sustainability learning programmes			Staff profiles, resource planning
Learner support, inclusiveness and transparency policies			Learner guides, support procedures

### **Criterion 2 – Competence Alignment (derived from D2.1) (Section 3.2.2)**

- Guiding questions (please describe shortly):

- 1) Which D2.1 competence areas are addressed in your Digital4Sustainability learning programmes (digital, sustainability, sector-specific)?
- 2) How are intended learning outcomes mapped to these competence needs?
- 3) How do you ensure the integration of digital + sustainability competences (e.g., "M-shaped" profiles)?

4) Where relevant, do you reference e-CF, ESCO or other EU taxonomies to link competences to occupational roles?

- Evidence (tick and reference):

- Mapping of learning outcomes to D2.1 competence areas
- Curriculum/module descriptors showing competence integration
- Examples of learning outcomes (short extract)
- e-Cf/ ESCO / occupational mapping (optional)

- Other evidence (specify and add related evidence):

- The information above may be summarized in the following indicative table:

Element	Rating (0-3)	Brief justification	Type of evidence*
Alignment with digital competences			Learning outcomes, curricula
Alignment with sustainability competences			Module descriptors
Integration of sector-specific competences			Programme profiles
Coherent integration supporting "M-shaped" profiles			Competence mapping

\*Where relevant, providers may reference EU occupational taxonomies (e.g. e-CF, ESCO).

### **Criterion 3 – Curriculum Design and Constructive Alignment (Section 3.2.3)**

- Guiding questions (please describe shortly):

1) How do you ensure constructive alignment between learning outcomes, learning activities and assessment?

2) How is progression/scaffolding ensured (especially for modular offers)?

3) What assessment methods are used to capture competence acquisition and application?

4) Do you recognise prior learning (where applicable), and how?

- Evidence (tick and reference):

- Curriculum design methodology / template

- Module/unit descriptor template (outcomes, content, workload, assessment)

- Assessment examples (rubrics, tasks, grading criteria)



RPL policy / procedure (optional)

- Other evidence (specify and add related evidence):
- The information above may be summarized in the following indicative table:

Element	Rating (0–3)	Brief justification	Type of evidence
Clear and measurable learning outcomes			Learning outcome statements
Alignment between outcomes, teaching and assessment			Assessment plans
Appropriate workload and sequencing			ECTS / workload descriptions
Recognition of prior learning (where applicable)			RPL policies

#### **Criterion 4 – Relevance, Stakeholder Engagement and Industry Involvement (Section 3.2.4)**

- Guiding questions (please describe shortly):

1) Which stakeholders inform your programme design and updating (industry, NGOs, sector bodies, etc.)?

2) How do you validate labour market relevance?

3) How are real-world challenges or project-based learning integrated?

- Evidence (tick and reference):

Stakeholder consultation records (minutes, surveys, advisory boards)

Employer/industry input examples (letters, feedback summaries)

Examples of real-world projects/case studies used in learning

- Other evidence (specify and add related evidence):

- The information above may be summarized in the following indicative table:

Element	Rating (0–3)	Brief justification	Type of evidence
Engagement with employers / industry / stakeholders			Consultation records
Use of real-world challenges or applied learning			Project briefs
Monitoring of labour market and technology trends			Advisory input, reports



### **Criterion 5 – Responsiveness and Continuous Updating (Section 3.2.5)**

- Guiding questions (please describe shortly):

1) What review cycle is in place for updating Digital4Sustainability learning programmes?

2) How do you capture and integrate learner/employer feedback?

3) How do you ensure agile updates for short programmes without quality loss (where applicable)?

- Evidence (tick and reference):

Review cycle procedure (frequency, responsibilities)

Feedback instruments and summary reports

Examples of updates implemented (change log / versioning evidence)

- Other evidence (specify and add related evidence):

- The information above may be summarized in the following indicative table:

Element	Rating (0–3)	Brief justification	Type of evidence
Regular review cycles for Digital4Sustainability learning programmes			Review schedules
Integration of new technologies / sustainability topics			Updated syllabi
Use of learner and employer feedback			Feedback summaries
Agility for short programmes (where applicable)			Update logs

### **Criterion 6 – Learner Experience, Support and Transparency (Section 3.2.6)**

- Guiding questions (please describe shortly):

1) How do you communicate learning outcomes, workload, level and recognition to learners?

2) What learner support mechanisms exist (tutoring, mentoring, accessibility measures)?

3) How do you communicate the meaning and limitations of the Digital4Sustainability quality label?

- Evidence (tick and reference):

Learner-facing information (handbooks, webpages, course descriptions)

Support services description (guidance, tutoring, accessibility)



Template disclaimer/explanatory text for the Digital4Sustainability label (if available)

- Other evidence (specify and add related evidence):
- The information above may be summarized in the following indicative table:

Element	Rating (0–3)	Brief justification	Type of evidence
Clear information on learning outcomes and recognition			Course descriptions
Accessible and inclusive learning environment			Accessibility statements
Guidance, mentoring or tutoring (where relevant)			Support arrangements
Transparent communication on Digital4Sustainability quality label			Website statements

### C) SELF-ASSESSMENT SUMMARY

Please indicate your self-assessed level for each criterion and list the key evidence included in the submission documents, specifying a rate per criterion and the related key evidence reference(s) for each of them.

Scale:

- 0 = Not in place / not evidenced
- 1 = Partially in place / limited evidence
- 2 = In place / adequate evidence
- 3 = Strong practice / comprehensive evidence

1. Institutional Capacity and Internal QA Systems:
  - a. Self-rating (0–3):
  - b. Key evidence reference(s):
2. Competence Alignment:
  - a. Self-rating (0–3):
  - b. Key evidence reference(s):
3. Curriculum Design and Constructive Alignment:
  - a. Self-rating (0–3):
  - b. Key evidence reference(s):
4. Relevance, Stakeholder Engagement and Industry Involvement:
  - a. Self-rating (0–3):
  - b. Key evidence reference(s):
5. Responsiveness and Continuous Updating:
  - a. Self-rating (0–3):



- b. Key evidence reference(s):
- 6. Learner Experience, Support and Transparency:
  - a. Self-rating (0-3):
  - b. Key evidence reference(s):

#### **D) EVIDENCE PACK CHECKLIST (recommended)**

Please submit the self-assessment together with an evidence pack organised using the references indicated above. Providers following a lighter route may submit a reduced pack by cross-referencing existing QA documentation.

Suggested maximum size: there is no fixed page limit. The evidence pack should be proportionate to the scale and complexity of the provider's digital sustainability learning offer. Providers offering short learning programmes are encouraged to submit a concise evidence pack, while larger institutions may rely on cross-referenced QA documentation.

#### **E) DECLARATION**

I confirm that the information provided in this self-assessment is accurate to the best of my knowledge and is supported by the evidence referenced above.

- Name:
- Role:
- Date:
- Signature (optional):

#### **F) OVERALL REFLECTION (optional)\*:**

\*Note: Providers may use this space to reflect on:

- strengths identified through the self-assessment,
- areas requiring improvement,
- support or clarification needed to apply the Digital4Sustainability framework effectively.

#### **G) ADDITIONAL REMARKS:**

##### **Notes on use during WP4**

During WP4 piloting activities, this template:

- supports testing the clarity and proportionality of the criteria,
- helps identify where additional guidance or examples are needed,
- does not result in formal awarding of the Digital4Sustainability quality label.

##### **Concluding note**



This self-assessment template is intentionally light-touch and modular. It focuses on clearly defined criteria, simple process steps, and practical templates, in line with the objectives of Deliverable D3.2 and the needs of WP4 implementation.

## 5.2 Accreditation process flowchart (indicative)

This annex provides a visual representation of the evaluation and decision process described in Section 3.3 of this deliverable. The flowchart illustrates the main stages of the Digital4Sustainability evaluation process, following the same sequence, terminology and scope as the reference procedure set out in Section 3.3.

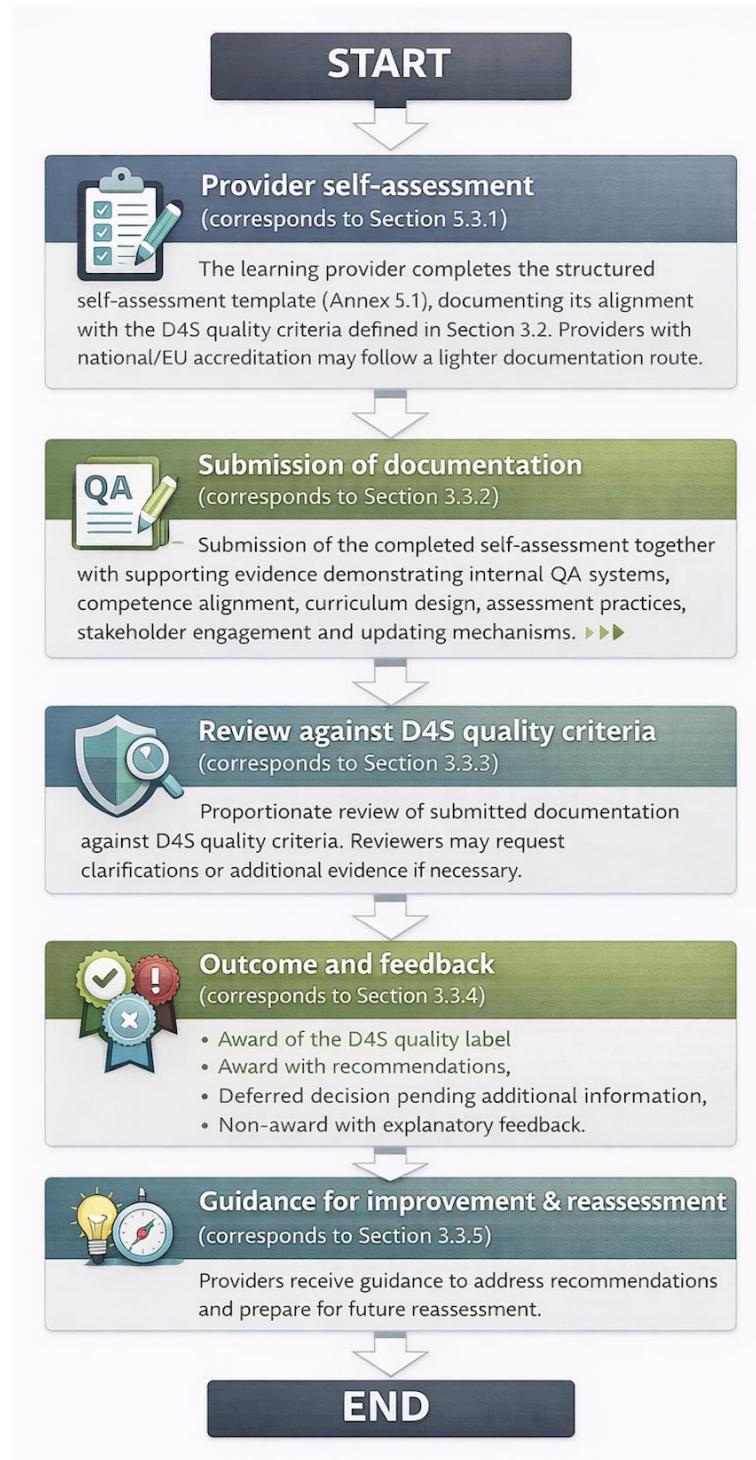
The flowchart is intended as a supporting and explanatory tool for learning providers and reviewers. It does not introduce additional requirements, decision rules or governance mechanisms beyond those described in the main text. The diagram reflects a provider-level quality label approach, applied proportionately and without establishing a formal accreditation or awarding system within the project.

The process visualised in the flowchart applies to both:

- providers participating in piloting activities during the project (WP4), and
- potential post-project applications, subject to future governance arrangements.

## Overview of the process steps

The flowchart (Figure 5) represents the following stages, aligned with Section 3.3:



**Figure 5 Overview of the Process Flowchart (extended version)**

### Indicative nature of the flowchart

The flowchart presents a simplified and linear representation of the evaluation process. In practice:

- steps may involve iteration (e.g. clarification requests),
- proportionality may lead to lighter or more detailed documentation routes, and
- implementation arrangements may vary depending on governance decisions taken after the project.

The flowchart does not imply the existence of a permanent evaluation body, decision-making authority or automatic awarding mechanism during the project. Its sole purpose is to enhance clarity, transparency and usability of the reference procedure defined in Deliverable D3.2.

## 5.3 Mapping of Digital4Sustainability Criteria to ESG and EQAVET indicators

This annex provides an operational mapping between the Digital4Sustainability provider-level quality criteria (Section 3.2) and the relevant principles of the European Standards and Guidelines for Quality Assurance (ESG) and the European Quality Assurance Reference Framework for VET (EQAVET).

The purpose of this mapping is to:

- support consistent interpretation of the Digital4Sustainability quality criteria,
- clarify how provider-level capacity and processes can be assessed through documented and verifiable evidence, and
- demonstrate alignment with recognised European QA frameworks without introducing formal programme-level accreditation requirements.

The table below identifies typical types of assessable evidence that may be used during evaluation, in line with the reference procedure described in Section 3.3.

This annex does not define mandatory indicators, thresholds or scoring rules, nor does it prescribe programme-specific accreditation requirements.



## Mapping of Digital4Sustainability Quality Criteria to Evidence Types\*

<b>Digital4Sustainability Quality Dimension (Section 3.2)</b>	<b>What is being assessed (provider-level)</b>	<b>Examples of assessable evidence</b>	<b>Relevant ESG / EQAVET logic</b>
1. Institutional Capacity & Internal QA Systems	Existence and functioning of structured internal QA mechanisms supporting Digital4Sustainability learning programmes	QA policies, internal review procedures, governance structures, accreditation	ESG 1.1 / EQAVET Planning
2. Competence Alignment	Ability to align learning outcomes with identified competence needs	Learning outcomes mapped to D2.1 roles, competence matrices, ESCO references	ESG 1.2 / EQAVET Design e-CF
3. Curriculum Design & Constructive Alignment	Coherence between outcomes, teaching methods and assessment	Module descriptors, assessment plans, curriculum maps	ESG 1.3 / EQAVET Implementation
4. Relevance & Stakeholder Engagement	Systematic engagement with labour market and societal needs	Advisory board input, employer consultation records, project-based learning examples	ESG 1.4 / EQAVET Stakeholder involvement
5. Responsiveness & Continuous Updating	Capacity to update Digital4Sustainability learning programmes in response to technological and societal change	Revision cycles, update logs, learner/employer feedback summaries	ESG 1.9 / EQAVET Evaluation & review
6. Learner Experience, Support & Transparency	Transparency, learner support and accessibility mechanisms	Learner information pages, guidance services, accessibility statements	ESG 1.6 / EQAVET Learner-centred approach

### Interpretative notes:

- Evidence may refer to one or more specific Digital4Sustainability learning programmes; however, assessment always concerns the provider's capacity, processes and quality assurance systems, not the quality of individual learning programmes.
- The type and volume of evidence should be proportionate to the provider's size, role and learning offer (e.g. short programmes, modular pathways, full VET/HE programmes).

- Providers with existing national or European QA accreditation may cross-reference established documentation, avoiding unnecessary duplication.
- This mapping supports verifiable, evidence-based assessment while preserving the flexibility required for rapidly evolving digital sustainability learning offers.
- The table is illustrative, not prescriptive, and is intended to guide evaluators and providers in applying the Digital4Sustainability quality criteria consistently and transparently.

## 5.4 Implementation Guidelines (indicative)

The quality criteria, evaluation procedure and rules for using the Digital4Sustainability quality label establish the core provider-level quality assurance framework developed in this deliverable.

This annex outlines indicative and non-binding implementation perspectives, illustrating how the framework could be applied in practice during the project and could potentially be adopted by learning providers beyond the project's lifetime.

The content presented below is provided for exploratory purposes only. It does not form part of the formal requirements of Task 3.3, does not establish an operational system, and does not imply the creation of mandatory procedures, awarding mechanisms or governance structures.

### 5.4.1 For project partners (during project lifetime)

During the project, selected consortium partners may voluntarily use the Digital4Sustainability framework as part of a piloting and learning exercise aimed at testing the clarity, feasibility and proportionality of the proposed criteria and procedures. The purpose of this pilot is to verify the usability, clarity and proportionality of the framework, and to ensure that the criteria and procedures can be applied consistently across different types of providers and learning formats. This piloting does not constitute a formal accreditation procedure, nor does it result in the official awarding of a quality label.

The focus of the piloting phase would be to support learning providers in reflecting on their readiness to deliver digital sustainability programmes and to generate evidence on whether the criteria are workable and proportionate for different provider types.

The process for project partners includes the following components:



#### **5.4.1.1 Pilot Self-Assessment**

Pilot providers would complete the Digital4Sustainability self-assessment template (Annex 5.1) to document how they meet the quality criteria defined in Section 3.2.

This exercise aims to:

- test the clarity and feasibility of the criteria;
- verify whether the documentation requirements are proportionate;
- identify areas where providers may need additional guidance;
- collect feedback for improving the framework before wider deployment.

Where applicable, partners with existing national or institutional QA accreditation may follow a lighter version of the self-assessment, avoiding duplication of evidence while still demonstrating alignment with the Digital4Sustainability criteria.

#### **5.4.1.2 Submission and Internal Review**

Pilot partners would submit the self-assessment and supporting documentation for review by a Digital4Sustainability internal evaluation panel, consisting of project experts in digital sustainability, pedagogy and QA.

The purpose of this internal review is:

- to validate the logic and consistency of the criteria;
- to test the review procedure outlined in Section 3.3;
- to ensure the process is realistic for diverse provider types;
- to confirm that the process is transparent, workable and balanced.

This review is non-binding and does not constitute a formal award decision.

#### **5.4.1.3 Feedback and Refinement**

Each pilot provider would receive structured feedback on:

- the clarity and completeness of their documentation;
- alignment with the Digital4Sustainability quality criteria;
- areas that require clarification or improvement;
- suggestions for strengthening their QA mechanisms in relation to Digital4Sustainability learning programmes.



This feedback would be used to refine:

- the wording of the quality criteria,
- the self-assessment template,
- the proportionality guidelines, and
- the review process.

#### **5.4.1.4 No Awarding of the Label During the Project**

In line with the project's scope and resources, the Digital4Sustainability quality label would not be formally awarded during the project.

However, pilot participation may be acknowledged in a non-certifying manner (e.g. as "pilot participation" or "framework testing participation"), strictly for transparency purposes and without implying eligibility, endorsement or award of the Digital4Sustainability quality label.

#### **5.4.1.5 Contribution to the Final Framework**

The outcomes of the pilot would directly inform the final version of:

- the quality criteria (Section 3.2),
- the evaluation procedure (Section 3.3),
- the rules for the use of the label (Section 3.4),
- the implementation guidelines (Section 4.2), and
- the governance model (Section 5).

This ensures that the Digital4Sustainability quality label is grounded in documented evidence generated during WP4 piloting activities (including self-assessments, reviewer feedback and cross-provider comparison), partner experience and cross-provider validation.

The pilot phase enables project partners to shape, test and validate the Digital4Sustainability quality label, ensuring that the framework is practical, proportionate and applicable to the diversity of digital sustainability learning providers across Europe.

To support usability during WP4, the framework is intentionally structured around three core elements: clearly defined quality criteria, a simple and transparent process, and practical templates provided in the Annexes.



## 5.4.2 For new learning providers (post-project)

This section is included to illustrate how the Digital4Sustainability framework could remain usable beyond the project if stakeholders choose to build upon it. It does not imply that such a pathway will be implemented, nor that any post-project mechanism is guaranteed.

The following post-project pathway is illustrative only and does not define governance arrangements, funding models, legal responsibility or liability. It is included to demonstrate a plausible continuation scenario based on the procedures piloted during WP4.

After the project ends, the Digital4Sustainability quality label could be available for new learning providers wishing to demonstrate the quality, relevance and transparency of their digital sustainability learning offers. The post-project process builds on the procedures tested during the pilot phase (Section 5.4.1) and follows the evaluation and decision steps described in Section 3.3. Its aim is to ensure that the Digital4Sustainability quality label remains accessible, credible and adaptable to different provider types.

The post-project pathway includes the following components:

### 5.4.2.1 Expression of Interest and Initial Eligibility Check

Interested providers submit a short Expression of Interest (EOI) summarising:

- their organisation type and training remit;
- the nature of their digital sustainability learning offers;
- their internal quality assurance mechanisms;
- their ability to align with the competence areas identified in D2.1.

This step ensures proportionality and confirms basic eligibility before the full process begins.

Providers already accredited through national or European QA systems may be directed towards a lighter documentation route.

### 5.4.2.2 Completion of the Digital4Sustainability Self-Assessment

Eligible providers complete the Digital4Sustainability self-assessment (Annex 5.1), documenting:

- their alignment with the quality criteria in Section 3.2;
- evidence of internal QA processes;
- examples of curricula, teaching methods and assessments;



- mechanisms for continuous updating;
- stakeholder and industry engagement.

Providers offering short programmes or modular pathways may provide documentation adapted to the scale of their provision.

#### 5.4.2.3 Submission and External Review

Providers submit the self-assessment and evidence for external review.

In the post-project phase, the review body will operate under the governance arrangements described in Section 5, and may involve:

- independent experts in digital sustainability;
- representatives of professional bodies;
- QA specialists;
- employer or industry representatives, where relevant.

The review focuses on the provider's ability to meet the Digital4Sustainability quality criteria proportionately and consistently.

#### 5.4.2.4 Decision and Communication

Following the panel's evaluation, providers receive a documented outcome of the reference evaluation procedure:

- **Award** of the Digital4Sustainability quality label;
- **Award with recommendations**;
- **Deferred decision**, pending further evidence;
- **Non-award**, with detailed feedback.

Successful providers receive guidance on the correct and transparent use of the label (Section 3.4), including:

- authorised versions of the visual identity;
- required explanatory statements;
- communication rules;
- duration and renewal conditions.

#### **5.4.2.5 Duration and Renewal**

The Digital4Sustainability quality label will be valid for a defined period, to be confirmed under the governance model outlined in Section 5. Renewal requires:

- updated documentation demonstrating continued alignment with Digital4Sustainability criteria;
- evidence of programme updating, stakeholder feedback and QA cycles;
- a review proportional to the scale and type of provision.

This ensures that the label remains credible and reflective of evolving competence needs.

#### **5.4.2.6 Support and Guidance for New Providers**

To facilitate adoption beyond the consortium, the Digital4Sustainability framework may be accompanied by:

- guidance materials and examples derived from the pilot phase;
- a FAQ or helpdesk function (where feasible under the governance model);
- templates, checklists and communication guidelines.

These tools support new providers in applying the framework efficiently and consistently.

This post-project pathway ensures that the Digital4Sustainability quality label remains scalable, transparent and usable by a wide range of learning providers, while maintaining the integrity and coherence of the framework beyond the project's lifetime.

### **5.4.3 Periodic review and renewal of the label**

The elements described in this section represent one possible approach to maintaining the credibility of a provider-level quality label over time. They are illustrative only and do not form part of the core framework defined under Task 3.3.

The Digital4Sustainability quality label is designed as a dynamic and improvement-oriented quality assurance instrument. To maintain its credibility, transparency and alignment with emerging competence needs, the label is subject to periodic review and renewal. These review mechanisms ensure that providers continue to demonstrate the capacity, relevance and quality required to deliver Digital4Sustainability Learning Programmes over time.

The renewal process follows the principles of proportionality, transparency and continuous improvement embedded in ESG and EQAVET, and is organised around the following components:

#### **5.4.3.1 Defined Validity Period**

The Digital4Sustainability quality label would be valid for a defined period, to be confirmed under the governance arrangements described in Section 5.

In comparable European provider-level quality assurance and quality label schemes, validity periods often range between three and five years, allowing providers sufficient time to implement improvements while maintaining quality and relevance (European Commission, 2015; European Commission, 2020).

The precise duration will depend on the post-project endorsing authority and sustainability strategy.

#### **5.4.3.2 Renewal Self-Assessment**

Providers wishing to renew the label complete a renewal version of the Digital4Sustainability self-assessment, demonstrating:

- continued alignment with the quality criteria in Section 3.2;
- evidence of updates to curricula, learning outcomes and assessment practices;
- mechanisms that incorporate feedback from learners, employers and stakeholders;
- documentation of internal QA cycles and organisational changes;
- responsiveness to new technological and sustainability developments.

Providers with existing national QA accreditation may again follow a proportionate renewal pathway, cross-referencing their institutional QA documentation.

#### **5.4.3.3 Submission and Proportionate Review**

The renewal submission would be reviewed by the designated Digital4Sustainability governance body (Annex 5.5).

The review focuses on:

- whether the provider has maintained the standards required for the label;
- whether QA mechanisms remain active and effective;
- whether Digital4Sustainability learning programmes remain aligned with the evolving competence needs identified in D2.1;



- whether constructive alignment, learner support and updating mechanisms are sustained.

The proportionality principle applies: renewal reviews may be less extensive than initial evaluations, particularly for providers with strong QA records.

#### **5.4.3.4 Decision on Renewal**

Following review, a renewal decision would be issued. Possible outcomes include:

- **Renewal of the label** for a new validity period;
- **Renewal with recommendations**, requiring targeted improvements;
- **Conditional renewal**, pending submission of additional evidence;
- **Non-renewal**, with an explanation of gaps or quality concerns.

In all cases, providers receive constructive guidance to support ongoing improvement.

#### **5.4.3.5 Continuous Quality Enhancement**

Between renewal cycles, providers would be encouraged to:

- monitor changes in the digital and green transitions;
- update Digital4Sustainability learning programmes to reflect new competence needs and technological developments;
- engage regularly with employers, alumni and stakeholders;
- track learner outcomes and satisfaction;
- document QA cycle outputs for future renewals.

This supports the long-term integrity and usefulness of the label.



#### 5.4.3.6 Conditions for Withdrawal

To protect the credibility of the label, the governance body may suspend or withdraw the label if:

- major quality issues arise;
- the provider no longer meets minimum eligibility requirements;
- the label is misused or communicated inaccurately;
- significant structural changes occur that compromise the provider's capacity.

Any withdrawal procedure would follow transparent and proportionate steps, aligned with the governance rules in Section 5.

Periodic review and renewal would safeguard the reliability and long-term sustainability of the Digital4Sustainability quality label, ensuring that providers continue to deliver digital sustainability learning that meets evolving European competence needs and quality standards.

These elements are presented as optional good practice examples, drawing inspiration from existing European quality assurance approaches, without creating binding requirements.

### 5.5 Governance and Quality Assurance (indicative)

#### 5.5.1 Governance Structure

The governance considerations outlined in this section distinguish between the **project phase**, during which the framework is designed and tested, and the **post-project phase**, during which the label may be adopted by an external endorsing authority. This ensures clarity, transparency and continuity without committing the consortium to roles or responsibilities that go beyond the scope of the project.

##### 5.5.1.1 Governance During the Project

During the project, the governance of the Digital4Sustainability quality label may focus exclusively on designing, testing and refining the framework. These roles relate exclusively to framework design, testing and methodological validation, and do not imply decision-making authority regarding the awarding or recognition of the Digital4Sustainability quality label.

Oversight could involve three main bodies:



### 5.5.1.1.1 Task 3.3 Lead (Eduserpro)

Responsible for coordinating the development of:

- the accreditation (quality) criteria (Section 3.2),
- the evaluation procedure (Section 3.3),
- draft guidelines for potential use and renewal (Section 3.4),
- the overall coherence and methodological underpinning.

### 5.5.1.1.2 DIGITALEUROPE (DE)

Responsible for:

- leading the drafting of Deliverable D3.2 – *Design of accreditation criteria & process for digital sustainability learning programmes*,
- ensuring alignment with D2.1 and with project-wide priorities,
- contributing to the validation and review of the framework,
- supporting communication and stakeholder liaison where relevant.

### 5.5.1.1.3 Internal Evaluation Panel (Pilot Phase)

During the pilot, an internal panel may review test submissions from partners. The internal evaluation panel has no formal role in awarding, certifying or endorsing providers and operates solely as a testing and learning mechanism within the project. This panel may be composed of project experts in:

- digital sustainability,
- pedagogical design, and
- quality assurance,

This review is non-binding and solely intended to validate the usability and proportionality of the framework. No formal awarding of the label will take place during the project.

### 5.5.1.2 Governance After the Project

After the project ends, the Digital4Sustainability quality label will require a stable governance structure to ensure its credibility and sustainability.

The post-project governance model will be defined in coordination with the sustainability strategy outlined in WP6 and may involve:



### 5.5.1.2.1 An independent endorsing authority

Any post-project governance or endorsement model would need to fully respect the intellectual property rights of the project partners, as defined in the Consortium Agreement, and would require explicit agreement beyond the scope of this deliverable.

An independent endorsing authority (as detailed in Section 5.5.4), such as:

- a professional body or association,
- a consortium of recognised training organisations and digital sustainability experts,
- an independent QA entity with expertise in digital sustainability.

Such an authority could, depending on the chosen model and available resources, take on functions such as:

- managing applications from new providers,
- overseeing external reviews,
- issuing decisions on the award or renewal of the label,
- maintaining communication and transparency guidelines.

### 5.5.1.2.2 Advisory or technical bodies

A supporting advisory group may contribute expertise on:

- digital sustainability competences,
- industry needs,
- European QA principles (ESG/EQAVET),
- up- & reskilling programmes ecosystems.

### 5.5.1.2.3 Secretariat or coordination function

Depending on the endorsing authority, a small coordination function may be required to:

- manage submissions,
- liaise with providers,
- coordinate reviewers,
- maintain records and documentation,
- support periodic review cycles.

This function does not need to mirror a formal QA agency and can be light-touch.

### 5.5.1.3 Principles Guiding Future Governance

Any future governance structure could be guided by the following principles:

- **Independence** – decision-making should be free from conflicts of interest.
- **Transparency** – criteria, decisions and processes must be public and understandable.
- **Proportionality** – requirements and reviews must remain feasible for different provider types.
- **Consistency** – procedures must ensure comparability and trust across countries and sectors.
- **Sustainability** – governance should be viable beyond the lifespan of the project.

These principles are intended to support the maintenance of quality and credibility while remaining accessible and practical.

The governance model outlined in this section provides a clear division between the project phase and the post-project phase, with the intention that the Digital4Sustainability quality label is developed responsibly during the project and positioned for long-term sustainability through an independent endorsing authority.

These principles are presented as guiding considerations for any future discussion on governance and do not prescribe a specific organisational or operational model.

### 5.5.2 Continuous improvement mechanisms

Continuous improvement is a core component of the Digital4Sustainability quality label. Given the rapid evolution of digital sustainability as a field, the framework must remain responsive to new competence needs, technological developments and emerging educational practices. To ensure this, the governance model may incorporate several mechanisms that support continuous enhancement at both provider level and system level.

### 5.5.2.1 Provider-Level Improvement Cycles

Learning providers awarded the Digital4Sustainability quality label would be encouraged to maintain active internal quality assurance processes. These include:

- regular programme reviews, incorporating learner and employer feedback;
- updating of learning outcomes, assessment practices and teaching methods;
- monitoring of labour market developments, especially in digital and green skills;
- documentation of changes, feeding into renewal procedures (Section 4.3).

These cycles ensure that Digital4Sustainability Learning Programmes remain aligned with industry needs and with the competence profiles identified in D2.1.

### 5.5.2.2 System-Level Monitoring and Periodic Revision

The governance body (Section 5.5) will periodically review the quality criteria, processes and guidance materials to ensure continued relevance. This may include:

- analysing trends in digital sustainability competences and labour market needs;
- consulting experts, employers and professional bodies;
- monitoring feedback from both providers and reviewers;
- updating templates, examples and guidance materials accordingly.

This ensures the framework remains future-proof, evidence-based and coherent across countries and provider types.

### 5.5.2.3 Feedback Loops Between Providers, Reviewers and the Endorsing Authority

Continuous improvement is supported by structured feedback loops involving:

- providers, who report challenges and good practices;
- reviewers, who identify common gaps or areas of confusion;
- the endorsing authority, which uses this feedback to refine procedures and criteria.

These loops help identify where additional clarification, examples or proportional adaptations may be needed.

#### 5.5.2.4 Alignment With European Quality Assurance Principles

The continuous improvement approach is fully aligned with the principles of ESG and EQAVET, particularly:

- evidence-based decision-making,
- learner-centred review,
- transparency,
- regular monitoring of quality,
- structured improvement cycles.

This alignment reinforces the credibility of the Digital4Sustainability framework within existing European QA ecosystems.

#### 5.5.2.5 Opportunities for Collective Learning

Where feasible, and subject to future governance arrangements, a potential governance body could promote collective learning across the community of Digital4Sustainability-labelled providers. This could include, for example:

- sharing anonymised reviewer findings;
- publishing examples of good practice;
- organising webinars or peer-learning activities;
- issuing periodic thematic updates (e.g., on new tools, methods or competence developments).

Such activities could support stronger convergence across DSPL providers and contribute to more consistent quality standards.

Together, these illustrative mechanisms reflect how the Digital4Sustainability quality label could, under appropriate future governance conditions, evolve as a living and adaptive framework.

#### 5.5.3 Link with the Pact for Skills and EU-level frameworks

The Digital4Sustainability quality label has been designed to align with broader European initiatives that support transparency, comparability and trust in skills development. This ensures that the framework is not an isolated instrument but fits within the evolving ecosystem of EU-level skills and quality assurance policies. The following connections are particularly relevant.

### 5.5.3.1 Alignment with the Pact for Skills

The Pact for Skills calls for stronger cooperation between industry, education and training providers to accelerate upskilling and reskilling in key industrial ecosystems (European Commission, 2020).

The Digital4Sustainability quality label can contribute to this goal by:

- promoting shared quality criteria for digital sustainability learning;
- supporting consistent competence development across VET, Higher Education and professional learning providers;
- encouraging stronger collaboration with industry, particularly around skills needs identified in D2.1;
- offering a transparent and non-formal reference mechanism for the consistent use of the Digital4Sustainability quality label by providers delivering high-quality digital sustainability learning programmes.

This would make the quality label a practical tool for supporting Pact for Skills commitments within the digital and green transitions.

### 5.5.3.2 Connection with European Quality Assurance Frameworks (ESG and EQAVET)

The Digital4Sustainability quality criteria (Section 3.2) draw on key principles from the ESG and EQAVET frameworks, including:

- evidence-based evaluation,
- learner-centred design,
- transparency of procedures,
- continuous improvement,
- stakeholder involvement.

This alignment improves coherence across different provider types and strengthens trust in the Digital4Sustainability label across national systems.

### 5.5.3.3 Complementarity with Micro-Credentials and EU Transparency Instruments

The framework supports and complements existing EU transparency tools, particularly:

- the European approach to micro-credentials (Council of the European Union, 2022).
- learning outcomes-based design,
- recognition and portability of short learning programmes,
- competence-based representation of skills.

Although the Digital4Sustainability label is not a formal accreditation of micro-credentials, it reinforces the quality and trustworthiness of the providers that issue them.

This makes it easier for learners and employers to interpret the value of short learning programmes and modular learning units in digital sustainability.

### 5.5.3.4 Coherence with European Skills and Competence Frameworks

The quality criteria incorporate the logic of several EU-wide competence frameworks, including:

- **E-CF** – E-Competence framework which is the EU standard for digital professionals. Besides the competence framework itself, it also includes a role profiles framework, a BoK, curriculum design guidelines and other supporting parts. (European Committee for Standardization (CEN)/ TC428, 2019)
- **ESCO** – European Skills, Competences, Qualifications and Occupations, as a reference for linking Digital Sustainability roles to EU-recognised occupational profiles. (European Commission, n.d.)
- **DigComp** – The European Digital Competence Framework (the official EU reference framework for citizens describing the knowledge, skills and attitudes needed for digital competence) (DigComp – The European Digital Competence Framework. European Commission, Joint Research Centre, 2018);
- **GreenComp** – The European Sustainability Competence Framework (the European Commission's official framework outlining the competences required for sustainability learning and action) (GreenComp – The European Sustainability Competence Framework. European Commission, Joint Research Centre, 2022);

- **EntreComp** – The European Entrepreneurship Competence Framework, when applicable to innovation, leadership and entrepreneurial dimensions of Digital Sustainability programmes (EntreComp – The European Entrepreneurship Competence Framework. European Commission, Joint Research Centre, 2016).

#### 5.5.3.5 Supporting EU-Wide Transparency and Mobility

By adopting a provider-level approach, the Digital4Sustainability framework:

- supports transparency across diverse learning providers;
- enables learners to understand the quality of Digital4Sustainability learning programmes regardless of national context;
- helps employers interpret skills acquired across different types of institutions;
- fosters mobility and progression between VET, HE and professional learning.

This strengthens the position of Digital Sustainability learning within the broader European skills landscape.

Through these connections, the Digital4Sustainability quality label contributes to a coherent European approach to digital sustainability skills, aligning with the Pact for Skills and reinforcing the transparency, comparability and recognition of learning opportunities across Europe.

#### 5.5.4 Endorsing authority and recognition pathways

This section outlines possible governance and endorsement models that could support the use of the Digital4Sustainability quality label beyond the project lifetime. It does not establish a permanent awarding body, nor does it define binding governance structures, financial models or operational responsibilities for project partners. Any references to post-project endorsement are provided for illustrative and exploratory purposes only, with the aim of supporting future sustainability discussions. Any decisions on long-term implementation would require a separate mandate, dedicated resources and formal agreement, and fall outside the scope of this deliverable.

The long-term credibility and sustainability of the Digital4Sustainability quality label *would depend* on the existence of an appropriate endorsing authority after the end of the project. While the Digital4Sustainability consortium is responsible for designing and piloting the framework, it *would not* act as a permanent certification or awarding body. Therefore, a future governance model must ensure independence, transparency and proportionality, while remaining realistic and feasible for a provider-level quality label.

It is important to clarify that no formal awarding of the Digital4Sustainability quality label takes place during the project. The consortium will only design, test and validate the framework. Decisions on awarding, recognition and long-term implementation are strictly part of the post-project governance model described in this section.

This section therefore outlines *illustrative options* for a potential endorsing authority and recognition pathways that *could* support the long-term use of the label, subject to future governance decisions.

#### **5.5.4.1 The need for an independent endorsing authority**

Any future endorsing authority would need to be established outside the project and is not foreseen or mandated within the current grant. To ensure trust and avoid any confusion with national or European academic accreditation systems, the Digital4Sustainability quality label could be endorsed by a body that:

- is independent from any individual training provider;
- has expertise in digital sustainability, pedagogy, and quality assurance;
- can ensure transparent, proportionate and impartial decision-making;
- can manage the administrative and procedural aspects of the label;
- is recognised by stakeholders across education, industry and the sustainability community.

An independent authority would strengthen clarity, credibility and acceptance across borders and provider types.

#### **5.5.4.2 Possible options for an endorsing authority**

The exact endorsing authority will be determined after the project as part of the sustainability strategy developed under WP6. Several viable models exist, including:



#### **5.5.4.2.1 A professional association or sectoral organisation**

An established body in digital sustainability, digital skills, green skills or vocational excellence could host the label.

This option offers:

- community legitimacy,
- independence from the project partners,
- strong links with industry and labour market needs.

#### **5.5.4.2.2 A consortium of recognised training organisations**

A coalition of HEIs, VET providers and professional training bodies could jointly steward the label.

This ensures:

- balanced decision-making,
- shared expertise,
- strong credibility across provider types.

#### **5.5.4.2.3 A specialised QA or certification body**

An external quality assurance organisation (not necessarily an EQAR-listed agency) could assume the role.

This option provides:

- methodological rigour,
- established review processes,
- clear separation from project activities.

#### **5.5.4.2.4 A hybrid model**

A steering committee retains oversight, supported by a small coordination unit and external QA experts.

This allows:

- flexibility,
- gradual scaling,
- continuity with project experience.

These models are not mutually exclusive; the final choice may combine elements.



#### 5.5.4.3 Recognition pathways

While the Digital4Sustainability quality label is not a formal academic accreditation and does not imply official European recognition, it may *informally* support transparency, comparability and trust in digital sustainability learning offers by aligning with existing market-driven and stakeholder-led recognition practices across Europe.

Potential recognition pathways (illustrative and non-binding) include:

**a. Voluntary recognition by employers and industry bodies**, as a market-driven signal of quality, without implying public or regulatory endorsement.

Positioning the label as a trusted signal of quality for Digital4Sustainability learning programmes.

**b. Alignment with European quality frameworks (ESG, EQAVET)**

Already embedded in the criteria (Section 3.2), reinforcing legitimacy.

**c. Optional linkage to micro-credentials ecosystems**

In contexts where providers award micro-credentials, the label can support trust in:

- learning outcomes,
- assessment practices,
- competence alignment.

**d. Compatibility with national QA systems**

Providers already accredited nationally can follow a lighter Digital4Sustainability process, making the label a complementary quality mark.

**e. Optional future registration in European catalogues or platforms**

If a future endorsing authority pursues wider visibility, the label *could* be referenced in relevant European skills or learning platforms (e.g. Pact for Skills initiatives, sectoral skills platforms or EU-supported knowledge hubs), strictly for transparency and information purposes.

(This is not equivalent to EQAR registration and should not be interpreted as academic accreditation.)

#### 5.5.4.4 Principles for selecting the endorsing authority

Regardless of the final governance model, the endorsing authority should adhere to the five core principles outlined in Section 5.1: independence (decision-making free from provider interests), transparency (public, clear and understandable procedures), proportionality (requirements adapted to different provider types, avoiding unnecessary burden), consistency (coherent judgements across sectors and countries), and sustainability (realistic operational capacity beyond the project lifespan).

Applying these principles is intended to support the credibility, fairness and trustworthiness of the Digital4Sustainability quality label across diverse national, institutional and professional contexts. These principles are formulated as high-level governance orientations and do not prescribe specific operational measures, which would depend on the mandate, structure and legal context of any future endorsing authority.

This section outlines options and principles for a future endorsing authority without committing the project to any single model. The final decision will be taken as part of the sustainability strategy (WP6), ensuring that the Digital4Sustainability quality label is governed in a credible, independent and realistic way after the project's completion.

### 5.6 Reference Table: Alignment of D2.1 Findings with Digital4Sustainability Quality Criteria

The following table maps the key findings of D2.1 – *Roles and Skills Needs Analysis* – to the corresponding Digital4Sustainability quality criteria (Section 3.2). This mapping demonstrates how the quality framework is grounded in evidence and responds directly to the competence needs, skills gaps and programme expectations identified in WP2.

This mapping illustrates how the Digital4Sustainability quality criteria are directly derived from the competence needs and skills evidence identified in D2.1, ensuring methodological coherence between WP2 and WP3 and reinforcing the relevance and credibility of the Digital4Sustainability quality label.

Table 1 – Alignment of D2.1 Findings With Digital4Sustainability Quality Criteria

Key Findings in D2.1	How This Translates Into a Digital4Sustainability Quality Criterion (Section 3.2)
1. Emerging digital sustainability roles; lack of consolidated profiles	<b>Criterion 3.2.2 – Competence Alignment:</b> Providers must show alignment with emerging digital sustainability roles and competence areas identified in D2.1, including digital, sustainability and sector-specific components.
2. Need for "M-shaped professionals" combining digital + green + domain competences	<b>Criterion 3.2.2 – Competence Alignment:</b> Programmes must integrate the three competence dimensions to support the development of "M-shaped professionals" capable of applying digital tools to sustainability challenges.
3. Strong demand for modular training and short learning programmes	<b>Criterion 3.2.3 – Curriculum Design and Constructive Alignment:</b> Providers must be able to design modular, flexible and outcomes-based learning pathways.
4. Limited awareness among organisations of how digital tools support sustainability goals	<b>Criterion 3.2.3 – Curriculum Design and Constructive Alignment</b> and <b>3.2.4 – Relevance, Stakeholder Engagement and Industry Involvement:</b> Learning programmes must include explicit learning outcomes related to awareness and understanding of digital tools for sustainability and ensure that content reflects real organisational needs.
5. Competence gap between digital fields and sustainability fields	<b>Criterion 3.2.2 – Competence Alignment:</b> Providers must integrate digital competence frameworks (e.g. DigComp) and sustainability competence frameworks (e.g. GreenComp) in learning outcomes and curriculum design.
6. Need for continuous updating due to rapid evolution of the field	<b>Criterion 3.2.5 – Responsiveness and Continuous Updating:</b> Providers must demonstrate mechanisms for programme updating, integration of industry feedback and continuous improvement cycles.
7. Sustainability insufficiently integrated in VET/HE programmes	<b>Criterion 3.2.3 – Curriculum Design and Constructive Alignment:</b> Providers must show how sustainability is integrated as a transversal dimension across the curriculum.

8. Demand for strong industry relevance and work-based approaches

9. Need for clarity and transparency for learners and employers

**Criterion 3.2.4 – Relevance, Stakeholder Engagement and Industry**

**Involvement:** Providers must demonstrate structured mechanisms for collaborating with employers, sector experts and other stakeholders, including work-based learning opportunities where relevant.

**Criterion 3.2.6 – Learner Experience, Support and Transparency:**

Providers must ensure clear, accessible and accurate information on programme structure, learning outcomes, assessment and progression routes, as well as appropriate learner support.



## 5.7 Glossary

This glossary defines key terms as used throughout Deliverable D3.2. All definitions are provided for interpretative clarity within the scope of the Digital4Sustainability (Digital4Sustainability) project only and do not create legal obligations, formal accreditation rights, or binding governance structures. The content developed in this deliverable does not prejudice national or European quality assurance systems.

### **Accreditation**

In its general and official usage, accreditation refers to a process of quality assurance through which an education or training provider or programme is formally recognised following assessment against predetermined standards, typically by competent public or professional authorities (CEDEFOP, 2024).

It is often used though in the restrictive interpretation of academic or VET official (national) recognition of programmes leading to qualifications. The Digital4Sustainability framework does not establish or replicate this kind of accreditation scheme, nor does it involve legal recognition, regulatory authority or statutory approval.

### **Competence Alignment**

The structured alignment of learning outcomes, curricula and assessment approaches with the digital sustainability competence needs identified in Deliverable D2.1. This alignment supports transparency and coherence but does not prescribe curricula, learning content or delivery models.

### **Constructive Alignment**

A pedagogical principle referring to coherence between learning outcomes, teaching and learning activities, and assessment methods. Its use in this deliverable is conceptual and referential, supporting quality reflection rather than imposing pedagogical prescriptions.

### **Digital Sustainability**

An interdisciplinary domain combining digital technologies and sustainability objectives, as operationalised in Deliverable D2.1. The definition is used for project purposes only and does not establish a legally binding or standardised occupational field.

## **Digital Sustainability Learning Programme**

Any learning offer addressing digital sustainability competences, including degree programmes, VET pathways, modular programmes and short learning programmes.

## **Digital4Sustainability Quality Label**

A quality reference label indicating that a learning provider has demonstrated alignment with the Digital4Sustainability quality criteria during an evaluation process described in this deliverable. The label:

- is non-regulatory and non-statutory,
- does not accredit individual learning programmes and
- has no legal equivalence to national or European accreditation decisions.

## **Evaluation Process**

A reference evaluation procedure described in Section 3.3 to support structured assessment and piloting activities. It is illustrative and indicative, does not establish a permanent certification mechanism, and does not require the creation of a formal awarding body within the project.

## **Evidence**

Documented information used to illustrate how a provider meets the Digital4Sustainability quality criteria. Evidence is assessed at provider level only and may be proportionate, partial or cross-referenced to existing QA systems.

## **ESG (European Standards and Guidelines for Quality Assurance in Higher Education)**

A European reference framework used as methodological inspiration. References to ESG do not imply compliance, accreditation or alignment requirements beyond those already applicable to providers under national systems.

## **EQAVET (European Quality Assurance Reference Framework for VET)**

A European quality reference framework for VET, used in this deliverable as an alignment logic only, without creating additional QA obligations.

## **Internal Quality Assurance (QA) System**

The internal policies, processes and review mechanisms operated by a learning provider to monitor and improve learning quality. The Digital4Sustainability framework does not replace, duplicate or validate such systems.

## **Micro-credential**

The record of the learning outcomes that a learner has acquired following a small volume of learning. These learning outcomes will have been assessed against transparent and clearly defined criteria. Learning experiences leading to micro-credentials are designed to provide the learner with specific knowledge, skills and competences that respond to societal, personal, cultural or labour market needs. (Council of the European Union, 2022)

## **Piloting in WP4**

The testing of criteria, templates and processes during WP4 to assess clarity, feasibility and proportionality. Piloting activities do not result in formal recognition, accreditation or awarding of the Digital4Sustainability quality label.

## **Programme-Level Quality**

The quality of individual learning programmes is assessed indirectly by assessing the way learning programmes are designed, implemented and quality controlled by the provider. The provider has to prove that their approach leads to high quality Digital4Sustainability learning programmes. This includes proving how they ensure that their intended learning outcomes correspond with learning outcomes defined in this project to address the competence needs that are identified within this project.

## **Provider-Level Approach**

An approach focusing on the capacity, systems and processes of learning providers. In the context of this quality label this is only focused on specifically the Digital4Sustainability related learning programmes. This means that only the part of the provider that is involved in this kind of learning programmes should demonstrate their ability to provide quality Digital4Sustainability learning programmes.

## **Proportionality**

The principle that requirements and evidence expectations should be adapted to provider type, scale and context, in line with European QA good practice.

## **Quality Criteria**

A set of provider-level quality reference criteria defined in this deliverable to support consistent interpretation of quality requirements for digital sustainability learning. The criteria are indicative, non-binding and non-exhaustive, and do not establish minimum thresholds, programme-level standards or legal compliance requirements.

## **Self-assessment**

A structured, reflective exercise using the template in Annex 5.1. Self-assessment has no automatic or legal effect and is used solely for reflection, piloting and indicative evaluation.

## **Stakeholder Engagement**

Structured interaction with relevant stakeholders (e.g. employers, industry bodies, learners) to inform learning relevance. Engagement mechanisms are illustrative examples, not mandatory requirements.

### **Legal Disclaimer**

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