

GREENBRIDGE Methodological guidebook

Digital Technologies for the European Green Deal

1. Introduction

This methodological guidebook supports VET teachers in delivering the course Digital Technologies for the European Green Deal. Its purpose is to help educators understand the structure of the course, the logic behind each module, and the teaching approaches used throughout the learning journey. The guidebook explains how the course introduces learners to the role of digital technologies in supporting sustainability objectives, particularly within the framework of the European Green Deal. It also outlines how teachers can use the course materials, including videos, case studies, reflective tasks, and practical examples, to help learners develop both digital and green competences. The document is designed for flexible use. VET teachers can follow it as a complete course plan, or they can adapt each module to fit their classroom needs, learner profiles, or sector-specific training programmes. The guidebook also highlights opportunities for discussion, hands-on activities, digital tool demonstrations, and applied learning, ensuring that the course can be implemented in different vocational contexts.

2. Teaching approaches

The course uses a combination of short video inputs, clear explanations, and practical examples to introduce digital technologies that support the European Green Deal. Each module builds gradually from key concepts to practical applications, helping learners understand both the “why” and the “how” of digital sustainability. Case studies, simple digital tools, and short reflection tasks support active learning and help learners connect the content to real vocational contexts. The materials can be used for self-paced study or adapted by VET teachers for group discussions, demonstrations, or classroom activities.

2.1. Structure of the course

The course Digital Technologies for the European Green Deal is organised into two modules, each containing three subtitles and supported by video materials, examples, and reflective tasks. The structure follows a logical progression, moving from essential concepts and data interpretation toward practical applications and implementation planning. This allows VET teachers to guide learners from understanding the foundations of digital sustainability to exploring concrete tools and technologies used across different sectors.

Module 1 – Understanding the European Green Deal

This module introduces the relationship between digital transformation and the European Green Deal. It begins by explaining key indicators and the twin transition, showing how data supports sustainability objectives. Learners then explore how to interpret operational data, identify patterns, and understand trends. The final subtitle focuses on contextual analysis and sense-



checking, emphasising the importance of critical thinking, data quality, and responsible interpretation. Together, these elements help learners understand why digital information is central to sustainability monitoring and decision-making.

Module 2 – Enabling Digital Technologies for Greener Practice

This module focuses on practical applications. It presents real case studies from sectors such as agriculture, manufacturing, construction, energy, and community initiatives, showing how digital tools support greener operations. Learners then examine clear criteria for selecting appropriate technologies, including purpose, ease of use, interoperability, privacy, environmental impact, and scalability. The final subtitle guides learners through planning the implementation of a new digital tool, highlighting communication, training, risk awareness, and continuous improvement. This module helps learners connect digital strategies with real workplace challenges and opportunities.

Each module is supported by an introductory video, written explanations, sector examples, and short reflective activities. These components help VET teachers deliver the course across diverse classroom settings and adapt content to the needs of different professional groups.

2.2. Teaching methods used in the course

The course combines several teaching methods to support different learning styles. Short videos introduce key ideas in an accessible way, while the written modules provide clearer explanations and practical examples. Case studies show how digital tools are used in real sectors, helping learners link concepts to workplace situations.

Reflective activities encourage personal engagement and help learners consider how digital sustainability applies in their own context. The course is designed for flexible use, allowing VET teachers to deliver it through self-paced study, guided classroom sessions, group discussions, or practical demonstrations using simple digital tools or datasets.

3. Lessons plan

This section provides an overview of the learning goals and structure of the course, followed by a simple lesson plan for each subtitle. It is designed to help VET teachers organise delivery, understand the focus of each part of the course, and adapt activities to the needs of their learners. Each subtitle includes the expected duration, a brief summary of the content, and space for comments or adaptation notes.



3.1. Module 1: Understanding the European Green Deal

Expected duration	Content	Comments
20 min	<p>Subtitle 1.1: Key Indicators of the Green Deal and the Twin Transition</p> <p>This subtitle introduces the main sustainability indicators used to track progress under the European Green Deal, such as energy use, emissions, waste, and resource efficiency. It explains the idea of the twin transition (green and digital) and shows how digital transformation supports monitoring and decision-making. Learners explore how indicators reflect environmental, economic, and social goals, and how digital tools make data collection more accurate and accessible.</p>	<p>Useful to introduce key terms and link sustainability indicators with digital skills. Teachers may include simple examples from their sector to help learners understand how KPIs are used in real workplaces.</p>
20 min	<p>Subtitle 1.2: Data Interpretation for Sustainability</p> <p>This subtitle explains how to read and interpret sustainability data, focusing on identifying patterns, trends, and outliers. Learners explore how digital tools such as dashboards and simple datasets support analysis and help detect risks or opportunities. The section also highlights the importance of asking critical questions, checking data quality, and understanding how digital information guides environmental decision-making in different sectors.</p>	<p>Teachers can use small sample datasets or simple graphs to help learners practise identifying trends. Short group discussions work well here, encouraging learners to explain what the data might mean in real workplace situations.</p>
20 min	<p>Subtitle 1.3: Contextual Analysis and Sense-Checking</p> <p>This subtitle focuses on understanding data within its operational context and using sense-checking to verify whether results are realistic. Learners explore how external factors, data quality issues, and digital system limitations can influence sustainability indicators. The section highlights the value of combining digital evidence with professional experience to avoid misinterpretation and support more reliable decision-making.</p>	<p>Teachers may present short scenarios with unusual or unexpected data results and ask learners to discuss possible explanations. This helps build confidence in questioning and interpreting digital information responsibly.</p>



3.2. Module 2: Enabling Digital Technologies for Greener Practice

Expected duration	Content	Comments
20 min	<p>Subtitle 2.1: Case Studies of Green Digital Technologies in Action</p> <p>This subtitle presents real examples of how digital technologies support sustainability in different sectors, such as agriculture, manufacturing, construction, energy, and local communities. It shows how tools like IoT sensors, data platforms, smart grids, and digital models help organisations reduce waste, improve efficiency, and monitor environmental impact. The case studies illustrate how digital solutions connect directly to European Green Deal objectives and create new workplace practices relevant to VET learners.</p>	Teachers may select one or two case studies that match their learners' sectors and use them for discussion or short group analysis. Highlighting local or familiar examples can help learners better understand how digital tools are applied in real contexts.
20 min	<p>Subtitle 2.2: Criteria for Technology Selection</p> <p>This subtitle introduces a clear framework for choosing appropriate digital technologies to support sustainability goals. Learners explore key selection criteria such as purpose, ease of use, interoperability, privacy, environmental impact, and scalability. The section highlights how these factors help organisations choose tools that fit their needs, resources, and skills, and avoid technologies that are too complex or unsuitable for real conditions.</p>	Teachers may invite learners to compare two example tools and discuss which one would be more suitable in a given scenario. This supports critical thinking and helps learners link digital decision-making with practical sustainability challenges.
20 min	<p>Subtitle 2.3: Planning for Implementation</p> <p>This subtitle guides learners through the steps required to introduce a new digital technology in a realistic and sustainable way. It covers setting clear goals, assessing resources, running small pilot projects, training users, and communicating effectively throughout the process. Learners also explore how to collect feedback, address risks, and support continuous improvement, ensuring that digital tools become fully integrated into everyday work.</p>	Teachers may encourage learners to outline a simple implementation plan for a tool relevant to their sector. This helps them apply the course content to real workplace situations and strengthens their understanding of practical digital adoption.



4. Adapting the course for different contexts

This course can be adapted to a wide range of vocational settings and learner profiles. VET teachers may choose to focus more deeply on specific sectors, such as agriculture, construction, energy, or manufacturing, by selecting case studies that are most relevant to their learners. The digital tools and examples used in the course can also be replaced or expanded with local technologies or practices familiar to the group.

Teachers may integrate group discussions, simple data exercises, or demonstrations of basic digital tools to support different learning styles. For learners with limited digital experience, the course can be delivered more gradually, using short activities to build confidence. For more advanced groups, teachers can encourage the use of real datasets or ask learners to propose digital solutions for their own workplace challenges. These adaptations ensure flexibility and make the course suitable for diverse training contexts.

5. Conclusion

This guide supports VET teachers in delivering the course Digital Technologies for the European Green Deal in a clear and practical way. The course introduces essential concepts, explores real examples, and provides simple tools that can help learners understand how digital transformation contributes to sustainability. By adapting the materials to their teaching environment, educators can help learners build confidence, develop relevant skills, and apply digital solutions to real challenges in their sectors.