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Green Bridge

GREENBRIDGE Methodological guidebook

Green Skills – 1.2 Key Elements of the Green Economy

1. Introduction

The aim of this methodological guidebook is to provide VET teachers with a clear understanding of the methodologies and approaches used in the course Green Skills – 1.2 Key Elements of the Green Economy, as well as practical guidance on how to deliver the material to colleagues and learners. The document is intended as a hands-on resource, offering both an overview of the course structure including modules, subtitles, and teaching methods, also a lesson plans that outline learning outcomes, expected duration, content, and practical teaching tips. Additionally, it provides advice on how to adapt the course for different target groups, tailor it to specialized contexts, or incorporate additional activities. Designed to support VET educators in planning, delivering, and adjusting the content effectively, the guidebook serves as both a reference tool and a practical roadmap for implementing the course in diverse educational settings.

2. Teaching approaches

The following chapter provides VET teachers with an overview of the teaching approaches used in the Green Skills – 1.2 Key Elements of the Green Economy course, helping them understand the course structure and teaching methods. The first part - structure of the Course, presents the modules, explains the logic behind their sequencing, and offers a brief overview of the syllabus content. Followed by teaching methods used in the course, introduces the various approaches used in the course.

2.1. Structure of the course

The course on Green Skills – 1.2 Key Elements of the Green Economy is organized into three main modules, each designed to build both theoretical knowledge and practical skills for VET educators.

Module 1: Introduction to the Green Economy

The first module introduces educators to the concept of the green economy and its multi-dimensional framework, highlighting the differences from traditional economic models. Subtitle 1.1: Defining the green economy provides a clear overview of the concept, its principles, and the rationale behind the transition to a green economy. In Subtitle 1.2: Dimensions of the green economy – economic, participants explore the economic aspects, including innovation, job creation, and low-carbon growth. Subtitle 1.3: Dimensions of the green economy – social and environmental focuses on the social and environmental dimensions, emphasizing equity, inclusion, climate change, biodiversity, and sustainable resource management. The module also situates the green economy within global and regional policy frameworks, linking the content to the United Nations Sustainable Development Goals (SDGs) and the European Green Deal, providing educators with a policy-informed perspective on sustainable development.

Module 2: Green policies, industries, and the labour market

The second module examines how green policies shape industry practices, workforce needs, and the design of vocational education programs. Subtitle 2.1: Overview of green policies introduces key international and regional policies, such as the EU Green Deal and the Paris Agreement, and explains how they drive the green transition. In Subtitle 2.2: Impact on industries, educators explore practical examples and case studies from sectors such as renewable energy and waste management, highlighting both challenges and opportunities for businesses. Subtitle 2.3: Labour market transformation focuses on emerging job profiles, skill requirements, and strategies for VET educators to adapt curricula, ensuring learners are prepared for the evolving demands of the green economy.

Module 3: Circular economy and resource efficiency

The third module deepens educators' understanding of circular economy principles and resource efficiency, equipping them to embed these concepts in VET teaching. Subtitle 3.1: Basics of circular economy – acquaintance with the main documents introduces core principles such as reduce, reuse, recycle, redesign, and repair, contrasting them with the traditional linear "take-make-dispose" model. Subtitle 3.2: Resource efficiency in practice and the link to circular economy explores practical applications in sectors such as renewable energy, waste management, and eco-innovation, helping educators understand how efficiency measures support sustainability. Subtitle 3.3: Good examples of circular economy and resource efficiency implementation highlights successful cases where organizations apply circular principles to achieve environmental, social, and economic benefits. By the end of this module, educators will be able to connect theoretical principles with tangible, real-world applications, preparing learners to adopt sustainable practices in their professional contexts.

2.2. Teaching methods used in the course

The course employs a variety of teaching methods to support diverse learning styles and ensure engagement with the content. Across the modules, short explanatory texts are used to present core ideas, while video scripts help summarise key points and offer an alternative way to understand the material. Reflective activities encourage participants to think critically about their own context and make connections between labour-market demands and the digital skills needed in their sector. Practical examples from businesses are included to illustrate real situations and support problem-solving, and self-paced study through the learning platform allows learners to explore the content independently at their own pace. In addition, a set of supporting resources, including the course presentation and methodological guidebook, provides useful tools and references to assist with lesson planning and delivery. These methods are designed to be flexible, allowing educators to adapt them to their teaching environment and learners' needs while fostering active and meaningful learning.

3. Lessons plan

This chapter provides VET educators with a detailed framework for delivering Green Skills – 1.2 Key Elements of the Green Economy course, outlining the learning goals, content, and practical guidance for each lesson. By the end of this course, VET educators are expected to gain knowledge of the definitions and dimensions of the green economy and their relevance to vocational training, understand and be able to teach the principles of circular economy and

resource efficiency, support students in connecting green economy knowledge to their future professions while enhancing awareness and confidence in green skills, identify the main advantages of the transition to a circular economy, and locate and interpret relevant legal and regulatory documents related to these topics. The chapter presents a structured lesson plan for each module and subtitle, detailing the expected duration, content and comments.

3.1. Module 1: Introduction to the green economy

Expected duration	Content	Comments
20 min	**Subtitle 1.1: Defining the green economy** The subtitle on defining the green economy introduces learners to the concept as a holistic approach that balances economic growth, social inclusion, and environmental protection. Educators can begin by contrasting the green economy with the traditional "brown" economy, highlighting the environmental degradation, resource overuse, and social inequities associated with conventional models. Educators can incorporate case studies, such as the UNEP definition of a green economy, and explore related concepts like the blue economy to emphasize sustainability in marine and freshwater contexts. Active discussions, brainstorming sessions, and reflective exercises can help learners understand principles such as sustainable development, green jobs, resource and energy efficiency, ecological limits, social inclusion, and good governance. A practical activity could involve students mapping green economy strategies in their region or analyzing the EU Green Deal and other global initiatives, reinforcing how the green economy is applied differently depending on local priorities and contexts.	Encourage learners to identify local examples of green economy initiatives and compare them to brown economy practices. Use reflective exercises to explore ethical, social, and environmental considerations in economic decisions. Facilitate discussions on how green and blue economy principles complement each other in sustainable development.
20 min	**Subtitle 1.2: Dimensions of the green economy – economic** In this subtitle, learners explore the economic dimension of the green economy, emphasizing sustainable prosperity through innovation, resource efficiency, and job creation. Educators can present core concepts such as decoupling economic growth from environmental harm and illustrate economic areas like renewable energy, green manufacturing, sustainable agriculture, green buildings, sustainable transport, and waste management. Case studies and video content on just transition policies help learners understand how economic restructuring can support both	Highlight that economic growth should be sustainable, ethical, and socially responsible. Include activities that quantify environmental impacts and assess economic trade-offs.

	environmental sustainability and social fairness. Practical exercises could include analysing economic impacts of green initiatives in a given region or sector and evaluating emerging green jobs and entrepreneurial opportunities.	
20 min	**Subtitle 1.3: Dimensions of the green economy - social and environmental** This lesson focuses on the interlinked social and environmental dimensions of the green economy. Educators can guide learners through concepts such as social inclusion, equitable access to green jobs, gender equality, youth empowerment, and community engagement, alongside environmental priorities like climate action, biodiversity conservation, circular economy practices, and sustainable resource management. Learners can explore global frameworks such as the SDGs and regional roadmaps like the European Green Deal to understand how social and environmental considerations shape policy and practice. Group work and reflective activities can include designing community-based sustainability initiatives, evaluating environmental policies, or creating presentations on the interdependence of social well-being, economic prosperity, and environmental stewardship.	Encourage learners to connect social inclusion with environmental sustainability. Facilitate group activities that simulate policy-making or community engagement. Use reflection exercises to explore the interdependence of social, economic, and environmental dimensions.

3.2. Module 2: Green policies, industries, and labour market

Expected duration	Content	Comments
20 min	**Subtitle 2.1: Overview of green policies** This subtitle introduces learners to the foundational green policies shaping the transition toward sustainable economies. It covers international frameworks such as the Paris Agreement, highlighting commitments to limit global warming and implement nationally determined contributions. Learners can discuss how these agreements drive demand for trained professionals in renewable energy, energy efficiency, and sustainable infrastructure. The lesson also examines the UN Sustainable Development Goals (SDGs), emphasizing how goals like affordable and clean energy, sustainable cities, and climate action guide both policy-making and vocational education priorities. At the European level, the EU Green Deal, European Climate Law, Renewable Energy	Use comparative exercises to show how international, European, and national policies interconnect. Encourage learners to identify local opportunities emerging from policy-driven green initiatives. Highlight policy literacy as a key competence for vocational educators and students.

	Directive, Energy Efficiency Directive, and Circular Economy Action Plan provide a roadmap for industry transformation. Educators can facilitate exercises in which learners explore country-specific policies, such as Germany's Energiewende, France's National Low-Carbon Strategy, and Italy's NECP, analysing how these frameworks generate new skill demands and green career opportunities in sectors like energy, transport, and waste management.	
20 min	**Subtitle 2.2: Impact on industries** This subtitle explores how green policies are reshaping industries and driving the so-called Green Industrial Revolution. Educators can provide historical context by reviewing the first three industrial revolutions, demonstrating how each transformed production, skills, and labour markets. The lesson introduces the Fourth Industrial Revolution and Industry 5.0, highlighting how advanced technologies, automation, AI, and IoT are integrated with human creativity to promote sustainable and human-centric industrial models. Learners examine how energy, transport, manufacturing, construction, agriculture, waste management, water services, and ICT sectors are adopting low-carbon and circular economy practices. Case studies, such as Siemens Gamesa's wind farm repowering or Renewi's waste-to-resource systems, illustrate practical industrial transformations and the creation of new green roles. Educators can facilitate group work where learners map industrial changes to green skills, identify opportunities for VET engagement, and propose strategies for workforce adaptation.	Use historical timelines to contextualize current industrial changes. Include real-world case studies to illustrate the practical impact of green policies on industries. Encourage learners to identify emerging roles and sectors where green skills are in demand.
20 min	**Subtitle 2.3: Labor market transformation** In this subtitle, learners focus on how the green and digital transitions are reshaping the labour market in Europe. Students explore statistics on unemployment, youth employment, and skill mismatches while understanding the growing demand for green skills. The lesson highlights emerging professions such as renewable-energy technicians, circular-economy managers, sustainable-materials specialists, and energy auditors, along with the transformation of existing roles. Educators can contextualize these shifts using industrial revolution examples, emphasizing the continuity of skill evolution	Encourage learners to analyse labour market trends and identify gaps in green skills. Facilitate exercises connecting VET curriculum development to emerging professions. Promote reflection on just transition

	across historical transitions. Activities can include analysing job market data, forecasting skill demands, and developing strategies for VET institutions to align curricula with labour market needs. Apprenticeships, practical experience, and collaboration with industry partners are highlighted as essential methods to equip learners for green economy roles.	policies and lifelong learning strategies to support workforce adaptation.

3.3. Module 3: Circular economy and resource efficiency

Expected duration	Content	Comments
20 min	**Subtitle 3.1: Basics of circular economy, acquaintance with the main documents** This subtitle introduces learners to the fundamental concepts of the circular economy, emphasizing the shift from the traditional linear "take–make–dispose" model toward a regenerative, closed-loop approach. Learners explore key principles such as sharing, leasing, reusing, repairing, refurbishing, and recycling, along with the "multi-R" framework Refuse, Reduce, Reuse, Repair, Recycle, and Rethink, which provides practical guidance for sustainable consumption and resource management. Educators present the main policy and strategic documents shaping circular economy implementation, including the EU Circular Economy Action Plan, the 8th Environment Action Programme, the EU Roadmap to a Resource-Efficient Europe, and local guidelines like those from the ACR+ network. The lesson highlights how circular economy principles inform innovative business models, creating opportunities for entrepreneurship, green jobs, and responsible production. Activities can include group discussions, mapping exercises, and case studies to explore how policies, principles, and local practices intersect.	Emphasize the systemic nature of the circular economy as a redesign of production, consumption, and waste systems. Encourage learners to relate the multi-R framework to everyday and professional contexts. Include analysis of EU policy documents and local strategies to demonstrate regulatory and practical guidance.
20 min	**Subtitle 3.2: Resource efficiency in practice and the link to circular economy** This subtitle focuses on resource efficiency as the operational side of circular thinking. Learners explore how materials, water, and energy can be used more effectively throughout their life cycles to reduce environmental impact and improve productivity. Practical examples, such as waste management hierarchies, energy audits, water-	Highlight the connection between resource efficiency and circular economy principles. Use practical exercises to show how efficiency improves both

	saving technologies, and sustainable supply chain management, illustrate how efficiency translates abstract circular economy principles into measurable action. The lesson also introduces EU initiatives such as the Action Plan on Critical Raw Materials and the European Raw Materials Alliance, emphasizing strategies for recycling, substitution, and resilient value chains. Educators can guide learners in hands-on exercises like analysing local resource flows, conducting small-scale efficiency audits, or designing interventions to reduce material and energy waste.	environmental and economic outcomes. Discuss digital tools and innovations that enable monitoring and optimization of resource use.
20 min	**Subtitle 3.3: Good examples of circular economy and resource efficiency implementation** In this subtitle, educators present inspiring real-world examples of circular economy and resource efficiency in practice. Energy communities demonstrate collaborative renewable energy production, local decision-making, and reinvestment of economic benefits, aligning with circular principles while promoting social inclusion and resilience. SMEs and community-driven initiatives, such as the Food Think Tank Foundation in Warsaw, illustrate how small-scale projects can reduce waste, close material loops, and foster local engagement. Educators can use these case studies to spark classroom discussions, inspire student projects, and encourage learners to propose local adaptations. The lesson emphasizes that practical implementation bridges the gap between theory and impact, showing learners, how circular economy principles create economic, environmental, and social benefits.	Use case studies to demonstrate the feasibility and benefits of circular economy practices. Encourage project-based learning where students propose local applications of circular economy principles. Highlight the link between technology, governance, and community engagement in successful implementations.

4. Adapting the course for different contexts

This course can be adapted to a wide range of vocational settings and learner profiles. In Module one, educators may choose to focus on building a strong foundational understanding of the green economy by introducing key terminology and core principles. For more advanced learners, the module can be enriched with discussions on local examples of successful green economy integration across its various dimensions, or through brainstorming activities on how these principles could be applied within different education and training professions.

Module two can be delivered as a lecture-style session that introduces the major policy frameworks and overarching concepts driving the green transition, complemented by an exploration of local policies and socio-economic priorities. Depending on the needs and

experience level of the learners, educators can expand the module by incorporating real-world case studies that demonstrate the practical impact of green policies on different industries. Additional activities may include analysing labour market trends, identifying gaps in green skills, or engaging learners in project-based tasks that link VET curriculum development to emerging green professions. These activities help participants connect theoretical knowledge to labour market realities and future job requirements.

Module three enables educators to apply a range of educational approaches that make circular economy and resource efficiency more tangible and relevant. For instance, educators may guide learners in discussing how the multi-R approach can be embedded into everyday behaviour and professional practice. They can also encourage project-based learning where learners design practical local applications of circular economy principles, strengthening their problem-solving skills and fostering innovation. This module is particularly effective for supporting learners in translating circular economy concepts into actionable strategies they can implement in their own vocational contexts.

5. Conclusion

This guidebook provides VET educators with practical frameworks, tools, and examples to integrate the green and circular economy into their teaching. By combining theoretical concepts with case studies, hands-on activities, and digital tools, educators can design engaging lessons that develop students' green skills and ethical awareness. Circular economy principles, resource efficiency practices, and energy community models demonstrate how sustainability can be applied in real-world contexts. The methodological approaches outlined here support educators in fostering critical thinking, collaboration, and problem-solving among learners. Ultimately, this guide empowers educators to prepare students to actively contribute to resilient, inclusive, and sustainable societies.