Green Manager Training Syllabus

Green labs project

Co-funded by the European Union

Erasmus+

GREEN LABS

Training Syllabus

Green labs

Green Manager Training Syllabus

Developed by :

Academy of Entrepreneurship®

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IRFEDD
INSTITUT RÉGIONAL DE FORMATION À L'ENVIRONNEMENT ET AU DÉVELOPPEMENT DURABLE

YOUNG AMBASSADORS

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Index

1/ The project 1

2/ Methodology 3

3/ General Description of the training programme 7

4/ Summary of key skills 11

5/ Modules of the training initiative 14

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GREEN LABS

1/ The project

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Project context

Project co-funded by the European Union under the European ERASMUS+ program in the field of vocational education and training (VET).

The GREEN LABS project aims to support and stimulate the green transition by promoting innovation and the greening of VET systems through internationalization, the exchange of practices, and knowledge sharing between partners, in line with the 2020 Osnabrück Declaration on Vocational Education and Training for Sustainable Competitiveness, Social Equity, and Resilience.

Project objectives

The project aims to promote the strengthening of a European education area, while contributing to strengthening skills for sustainable development:

- Co-creation of a European network of local laboratories (living labs) aimed at stimulating the green transition and the development of territorial initiatives and projects.
- Design and development of a new professional training program for facilitators/managers of these living labs (called "green innovation managers—GIM"), capable of acting as facilitators of the green transition.
- Steering of the living labs created, thanks to the involvement of key public and private stakeholders and the direct commitment of trained green innovation facilitators/managers.
- Implementation of a web portal for the international network of living labs, development and testing of a set of support services for stakeholders.
- Implementation of targeted, multi-channel awareness campaigns to raise awareness among all stakeholders.

Expected results

- Co-creation of a European network of local laboratories aimed at stimulating the green transition.
- Design and development of a new professional education program for green innovation managers, capable of acting as facilitators to stimulate the green transition.
- Implementation of targeted multi-channel awareness campaigns and broad multi-stakeholder awareness campaigns throughout the project and with a view to sustainability and further exploitation.

2/ Methodology

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This document shows the training syllabus for GREEN MANAGERS, developed under the framework of the GREEN LABS project.

The main aim of this training syllabus is to guide training providers in the organization and delivery of training programmes devoted to upskilling GREEN Managers, able to animate, manage and further carry out successful living labs, supporting the green and circular transition of local ecosystems and communities.

The training programme/syllabus has been conceived devoted to all trainers, green innovation consultants, co-creation and community development experts willing to contribute to the green and circular transition of local ecosystems, by animating local green living labs, knots of an international network.

Under the GREEN LABS project, green living labs cooperating at glocal level (both at ecosystem level and at international level) are the places for participatory approaches to innovative initiatives and projects contributing and even speeding up the green and circular economy transition. The GREEN Managers are the professionals able to engage all local relevant stakeholders, private and public, playing a role in the transition to sustainable communities. Green Managers can facilitate the dialogue between those stakeholders to identify spaces of joint initiatives to boost the circular transition of territories.

From a methodological perspective, in the design and development of the training syllabus, an individualized approach to training pathways has been followed, to customize training to every learner's upskilling needs. To guarantee this:

- **The syllabus has a modular structure**, allowing each learner to attend the modules/training contents they feel need the most. According to the adopted learner-centred approach adopted, this means that, out of the overall 130 training hours duration, every learned can attend the self-consistent modules they want, without mandatory attendance to the entire pathway. Recruited participants will be supported by career counsellors and VET experts in the design of their personalized training plan to become GREEN MANAGERS.

- **Universal design for learning principles - UDL,** (see Picture 1 below), have inspired the design of the training syllabus itself, to meet the learning styles and needs of most of potential participants, of different ages, with diverse background, gender, level of expertise, etc.

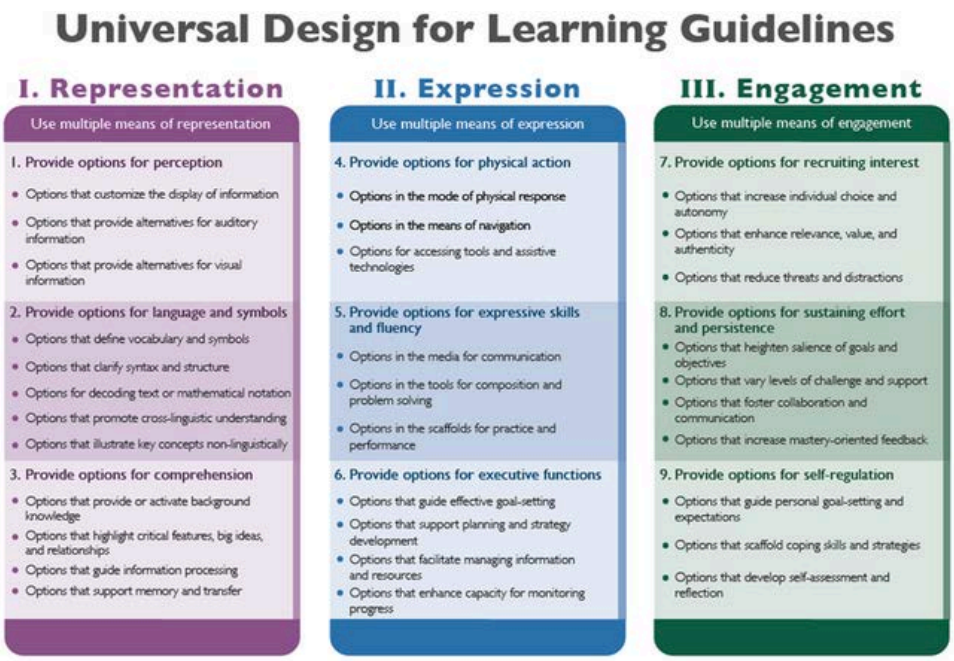

Figure 1- UDL principles for inclusive learning experiences

- **Blended learning approach is recommended** to increase flexibility in the delivery mode of the training programme devoted to GREEN MANAGERS, since potential interested attendees might be professional from different fields and background, VET/education experts, or public servants, namely practitioners potentially appreciating the possibility of connection from remote for some training sessions.
- **Glocal approach to boost a community-based green transition** is assumed as a milestone in conceiving the international network of living labs for the green transition in combination with local customization of the different country-specific implemented living labs (e.g. agri-food sector, building and construction sector, etc.). **This approach has inspired the design training programme for GREEN MANAGERS by foreseen an ad hoc module, MODULE 3 – Establishing, animating and overseeing a living lab for the green and circular transition (16 training hours),** on how to manage a living lab for green transition also with reference to specific sectors/areas and in a local ecosystem continuously dialoguing with the EU dimension. Moreover, in this module, action research as methodology is suggested, to learn from practice and "immersive learning" coming from being directly included in a specific context/environment where competencies can be immediately mobilized.

- **Link to the ESCO Data Base to release Micro-credentials for Learning (MCs):** each training module of the training programme for GREEN MANAGERS has been micro credentialled to allow participants to see the official recognition of achievements though MCS at the end of their attendance and after evaluation steps. In agreement with the EU recommendation on Microcredentials, MCs represent, also in the framework of the GREEN LABS project a flexible "tool" to certify achievements, through schemes having an EU value and validity. This mechanism is also very much in line with the Life-long-learning (LLL) and continuous professional development (CDP) approach, guiding professionals in their upskilling processes.

3/ General Description of the training programme

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Training initiative	Green Manager
EQF Level	5
Proficiency level	SPECIALISED
Expected learning outcomes	By the end of the training programme, participants will be able to: • Engage private and public stakeholders and communities in the co-design and development of green initiatives, boosting the green and circular transition of local ecosystems • Supervise and address multidisciplinary/interdisciplinary hybrid working teams, by using a various set of digital collaborative tools • Stay updated regarding green innovation and circular economy-related issues • Stay updated regarding green-technologies development and innovation • Apply co-creation and facilitation techniques to empower and coordinate multistakeholder groups • Manage green and circular projects • Identify funding opportunities for green and circular projects • Coordinate and animate living labs for a community-led green transition at glocal level.
Overall duration/training time (in hours)	130 training hours
Training Methodologies	• Lessons • Virtual mobility • Project-based/challenge-based learning • Team working • Action learning • E-learning • Self-learning
Mode of Learning	Blended

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Assessment (ex. test)	Formative evaluation (ex-ante, in itinere, ex-post)
Certification and recognition	• Certification of achievements (competencies) according to the different national systems where the programme will be delivered • Possible release of European Digital Credentials for Learning (EDCs) through the Europass system • Professionals, consultants, adults with Diplomas/Degrees • English Entry Level: C1
Delivery Language/s	English/National languages

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3. General Description of the training programme/curriculum

Module N.	Title of the Module/s	Learning/ training hours (total)
MODULE 1	Introducing the Green Manager: orientation to the profile, competencies, role in the living lab and at community level	8
MODULE 2	Climate Change and Sustainability	8
MODULE 3	Establishing, animating and overseeing a living lab for the green and circular transition	16
MODULE 4	Personal Information management	10
MODULE 5	Project Management for green innovation and circular transition	24
MODULE 6	Introduction to secondary raw materials markets	8
MODULE 7	Green technologies	16
MODULE 8	Coordinating working teams and relational leadership	12
MODULE 9	Design thinking strategies and co-creation methods for effective multistakeholder circular projects	16
MODULE 10	Fundraising and incentives	12
TOTAL 130 TRAINING HOURS		

4/ Summary of key skills

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Module N.	Title of the Module/s	Key skills
MODULE 1	Introducing the Green Manager: orientation to the profile, competencies, role in the living lab and at community level	• Present and describe the professional profile of the Green Manager • Recognise in the Green Manager profile professional and personal development opportunities
MODULE 2	Climate Change and Sustainability	• Describe the SDGs • Recognise and interpret the main legal framework concerning sustainable development and green transition at the EU and national levels • Elaborate on corretations between digitalization and its support to green and circular transformation of processes ad products
MODULE 3	Establishing, animating and overseeing a living lab for the green and circular transition	• Identify the set of resources needed to establish a living lab • Animate a living lab for a community-led green transition • Coordinate and oversee the overall work plan of a living lab for the green transition of local ecosystems
MODULE 4	Personal Information management	• Evaluate how personal information management is fundamental for professional work performance • Apply techniques and AI -based tools to find relevant information on a topic of professional interest and to stay updated and to carry out research
MODULE 5	Project Management for green innovation and circular transition	• Explain the main principles of CE and circular design • Define realistic goals, necessary tasks and expected outcomes for a circular project management • Frame problems/challenges for circular project management across different sectors

Module N.	Title of the Module/s	Key skills
MODULE 6	Introduction to secondary raw materials markets	• Analyse SRMs and their dynamics • Describe properties and usability of recyclables
MODULE 7	Green technologies	• Analyse different green technologies and their applications • Evaluate impacts of green tech applications on resource management (energy, water, waste), quality of life and environment
MODULE 8	Coordinating working teams and relational leadership	• Manage working teams effectively • Oversee the teams 'activity offering guidance and support • Exercise his/her own leadership style • Empower and motivate teams member in reaching the set common goals • Apply strategies to overcome critical issues inside teams (conflicts, lack of motivation, etc.)
MODULE 9	Design thinking strategies and co-creation methods for effective multistakeholder circular projects	• Apply co-creation and design-thinking methods to identify challenges/problems and co-shape solutions • Apply co-creation methods to green and circular projects
MODULE 10	Fundraising and incentives	• Identify and apply for funding opportunities supporting green innovation

5/ Modules of the training initiative

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Module's detailed description

MODULE 1
Introducing the Green Manager: orientation to the profile, competencies, role in the living lab and at community level
Main objectives of the module
The module is aimed at: • Sharing with participants the skills profile of the Green manager (GM) • Discussing with participants the role of the Green manager as ambassador of the green and circular transitions • Discussing with participants the expected role of the GM as facilitator within a living lab • Presenting the overall architecture of the GREEN LABS project, of the training programme and its development
Contents/subjects of the module
• The Green manager as agent of change toward the green transition • The Green Manager: career opportunities for all • The Green Manager training programme

Module's detailed description

Learning Outcomes **The Learner will** *(ex. Have a clear understanding of the concept of CE, its historic development, its definitions, its principles. Know key examples of CE in practice.)*	**Assessment criteria:** **The learner can** *(ex. Define the concept of CE and provide relevant examples. Identify relevant supporting concepts related to CE.)*
• Understand role and responsibilities of the Green manager to support the green transition at community level • Understand the placement/career opportunities for the Green manager	• Achieve a clear overview of the Green manager skills profile and employment opportunities for men and women
Duration of the module (training hours) 8 training hours (classroom/online learning)	
Training mode/s Face-to-face or online	
Training methodologies Lessons, brainstorming, debate/discussion, e-learning	

Achievements

Module: Introducing the Green Manager: orientation to the profile, competencies, role in the living lab and at community level		
Knowledge *(Means the body of facts, principles, theories and practices that is related to a field of work or study. It is described as theoretical and/or factual knowledge)*	**Skills** *(Means the ability to apply knowledge and use know-how to complete tasks and solve problems. They are described as cognitive (logical, intuitive, and creative thinking) or practical (involving manual dexterity and the use of methods, materials, tools and instruments)*	**Competencies** *(Means the proven ability to use knowledge, skills and personal, social and methodological abilities in work or study situations and in professional and personal development. It is described in terms of responsibility and autonomy)*
At the end of this unit the participant will know:	At the end of this unit the participant will be able to:	At the end of this unit, the participant will have acquired the responsibility and autonomy to:
• How the Green Manager can support the sustainable transformation of communities with its agency	• Present and describe the professional profile of the Green Manager • Recognise in the Green Manager profile professional and personal development opportunities	• Describe the competencies and the Green manager • Foreshadow placement opportunities as Green manager in the public and private sector.

Europass Digital Credentials for Learning (EDCs)

Module Learning Objectives	Link to ESCO descriptors
Recognize in the Green Manager profile professional and personal development opportunities	(S) Show commitment Show willingness to take on tasks immediately, even if they are difficult or uncomfortable.
Recognise the placement opportunities for the Green manager	Job market offers (K) Job opportunities available on the labour market, depending on the economic field concerned.

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Module's detailed description

MODULE 2
Climate Change and Sustainability
Main objectives of the module
This module aims at making learners: • Understanding the impacts of climate change • Understanding implications and relevance of Sustainable Development Goals (SDGs) and global sustainability transition
Contents/subjects of the module
• Introduction to Sustainable Development • The Policy Framework for the Transition to Sustainability • Climate Change Challenges, Adaptation and Mitigation • Digital Transition for Sustainability

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Module's detailed description

Learning Outcomes **The Learner will** *(ex. Have a clear understanding of the concept of CE, its historic development, its definitions, its principles. Know key examples of CE in practice.)*	**Assessment criteria:** **The learner can** *(ex. Define the concept of CE and provide relevant examples. Identify relevant supporting concepts related to CE.)*
• Understand foundational concepts of sustainable development and SDGs • Understand climate change impacts • Undestand correlations between digitalization and green transitions	• Define sustainable development and outline the main pillars (e.g., economic, social, environmental) • List the 17 SDGs and their key targets/ • Interpret key EU and international legal instruments on climate, energy, and the environment • Explain correlations between digital and green transformation
Duration of the module (training hours) 8 training hours	
Training mode/s Blended	
Training methodologies eLearning, classroom	

Achievements

Module: Climate Change and Sustainability		
Knowledge *(Means the body of facts, principles, theories and practices that is related to a field of work or study. It is described as theoretical and/or factual knowledge)*	**Skills** *(Means the ability to apply knowledge and use know-how to complete tasks and solve problems. They are described as cognitive (logical, intuitive, and creative thinking) or practical (involving manual dexterity and the use of methods, materials, tools and instruments)*	**Competencies** *(Means the proven ability to use knowledge, skills and personal, social and methodological abilities in work or study situations and in professional and personal development. It is described in terms of responsibility and autonomy)*
At the end of this unit the participant will know:	At the end of this unit the participant will be able to:	At the end of this unit, the participant will have acquired the responsibility and autonomy to:
• The foundational concepts of sustainable development and SDGs • Main impacts caused by Climate change at global and ecosystem level	• Describe the SDGs • Recognise and interpret the main legal framework concerning sustainable development and green transition at the EU and national levels • Elaborate on corretations between digitalization and its support to green and circular transformation of processes ad products	• Interpret the main legal framework concerning sustainable development and green transition at the EU and national levels • Interpret key EU and international legal instruments on climate, energy, and the environment and stay updated

Europass Digital Credentials for Learning (EDCs)

Module Learning Objectives	Link to ESCO descriptors
Recognise the impacts caused by Climate change at global and ecosystem level	Climate change impact (K) The impact of climate change on biodiversity and life conditions for plants and animals.
Describe the SDGs	Sustainable Development Goals (K) The list of 17 global goals set by the United Nations General Assembly and designed as a strategy to achieve a better and more sustainable future for all.
Interpret key EU and international legal instruments on climate, energy, and the environment and stay updated	Interpret Regulations (S) Interpret the law during the investigation of a case in order to know the correct procedures in handling the case, the specific status of the case and the parties involved, the possible outcomes, and how to present the best arguments for the most favourable outcome.

Module's detailed description

MODULE 3
Establishing, animating and overseeing a living lab for the green and circular transition
Main objectives of the module
This module aims at making learners: • Reflecting on living lab related concept and practice • Acquiring proper knowledge and tools to establish, animate and further develop living labs supporting the green transition • Identifying the whole set of resources needed to establish, launch and implement a successful living lab • Acquiring knowledge and tools to customise established living labs for the green transition of local ecosystems
Contents/subjects of the module
• Concept, examples and ways of working of a living lab • The GREEN LAB conception of living labs supporting the green and circular transition of local ecosystems • Living labs as a leverage for community-led green transition • Resources and tools to be used for establishing and making living labs working

Module's detailed description

Learning Outcomes **The Learner will** *(ex. Have a clear understanding of the concept of CE, its historic development, its definitions, its principles. Know key examples of CE in practice.)*	**Assessment criteria:** **The learner can** *(ex. Define the concept of CE and provide relevant examples. Identify relevant supporting concepts related to CE.)*
• Understand the concept of "living lab" • Understand the concept of living labs adopted in the GREEN LABS project • Understand the foundational way of working of a living lab for the green transition	• Establish and animate a living lab • Keep stakeholders engaged in the co-creation process of living labs • Set and updated priorities for the living labs
Duration of the module (training hours) 16 training hours (classroom/online situated learning)	
Training mode/s Face-to-face	
Training methodologies Lessons, brainstorming, debate/discussion, action-learning, self-learning	

Achievements

Module: Establishing, animating and overseeing a living lab for the green and circular transition		
Knowledge *(Means the body of facts, principles, theories and practices that is related to a field of work or study. It is described as theoretical and/or factual knowledge)*	**Skills** *(Means the ability to apply knowledge and use know-how to complete tasks and solve problems. They are described as cognitive (logical, intuitive, and creative thinking) or practical (involving manual dexterity and the use of methods, materials, tools and instruments)*	**Competencies** *(Means the proven ability to use knowledge, skills and personal, social and methodological abilities in work or study situations and in professional and personal development. It is described in terms of responsibility and autonomy)*
At the end of this unit the participant will know:	At the end of this unit the participant will be able to:	At the end of this unit, the participant will have acquired the responsibility and autonomy to:
• What a living lab might be • The set of resources needed to establish and make a living lab working	• Identify the set of resources needed to establish a living lab • Animate a living lab for a community-led green transition • Coordinate and oversee the overall work plan of a living lab for the green transition of local ecosystems	• Coordinate and oversee the work plan of a living lab for the green transition of local ecosystems • Update the living lab's workplan • Engage relevant stakeholders to support the localization of the living lab for the green transition

Europass Digital Credentials for Learning (EDCs)

Module Learning Objectives	Link to ESCO descriptors
Identify the set of resources needed to establish a living lab	Assess project resource needs (S) Test ideas and purposes of the program against available financial and human resources to work out if the idea is realistic. Take an active role in creating the work situations you step into. Ensure that your available skills match with the needs of the end user/participant. The design of the programme must clearly define the role you will provide and the support you expect in return from stakeholders.
Engage relevant stakeholders to support the localization of the living lab for the green transition	Communicate with stakeholder (S) Facilitate communication between organisations and interested third parties such as suppliers, distributors, shareholders and other stakeholders to inform them of the organisation and its objectives.
Coordinate and oversee the overall work plan of a living lab for the green transition of local ecosystems	Organise projects (S) Lead events by managing budget, logistics, event support, security, emergency plans and follow up.

Module's detailed description

MODULE 4
Personal Information management
Main objectives of the module
The module is aimed at: • Increasing participants' awareness about their personal information management strategies • Sharing with participants techniques to identify and access, open databases and open access resources to find valuable information, going in depth and keeping themselves updated on the topic/s • Helping participants in setting tools to automatically find and collect data and information on a specific topic • Making learners understand AI Fundamentals to search for information related to specific topics
Contents/subjects of the module
• Digital information competence as the capability to use digital information, content and data critically and effectively to perform information-related job tasks. • Techniques and tools to find, properly organise and keep relevant information updated on a specific topic or a specific area of interest • AI-based tools for research and scouting of information and resources • Web sites, databases and channels to find relevant information on a specific topic/area of interest • Green Innovation-related digital platforms and data bases

Module's detailed description

Learning Outcomes **The Learner will** *(ex. Have a clear understanding of the concept of CE, its historic development, its definitions, its principles. Know key examples of CE in practice.)*	**Assessment criteria:** **The learner can** *(ex. Define the concept of CE and provide relevant examples. Identify relevant supporting concepts related to CE.)*
• Understand the importance of so-called "scientific updating" (intended as the ability to "monitor" a specific area of interest for a specific period, collecting information, updates, trends, etc) as key competence for the Green Manager • Understand the importance of finding, updating and organizing information and data sources to improve overall work performance • Understand the basics of AI and the functionalities of AI-based tools for research and scouting	• Identify affordable data sources to stay updated on specific green-related topics • Apply techniques and use digital tools to identify, collect information and stay updated on specific topics relevant for the Green Manager • Properly apply AI-based tools for information related to a specific topic/field of interest • Identify topic-related web sites, platforms, databases and resources for scouting of opportunities, updates and analysis
Duration of the module (training hours) 10 training hours (classroom, e-learning)	
Training mode/s Face-to-face or online	
Training methodologies Lessons, teamwork, exercise/practice/simulations	

Achievements

Module: Personal Information management		
Knowledge *(Means the body of facts, principles, theories and practices that is related to a field of work or study. It is described as theoretical and/or factual knowledge)*	**Skills** *(Means the ability to apply knowledge and use know-how to complete tasks and solve problems. They are described as cognitive (logical, intuitive, and creative thinking) or practical (involving manual dexterity and the use of methods, materials, tools and instruments)*	**Competencies** *(Means the proven ability to use knowledge, skills and personal, social and methodological abilities in work or study situations and in professional and personal development. It is described in terms of responsibility and autonomy)*
At the end of this unit the participant will know:	At the end of this unit the participant will be able to:	At the end of this unit, the participant will have acquired the responsibility and autonomy to:
• What "personal information management" means • A set of relevant and affordable data sources to stay informed and updated on professional-related topics • The basics for AI-based research activity	• Evaluate how personal information management is fundamental for professional work performance • Apply techniques and AI -based tools to find relevant information on a topic of professional interest and to stay updated and to carry out research	• Apply techniques and AI -based tools to find relevant information on a topic of professional interest and to stay updated and to carry out research • Adopt personal strategies to stay updated and informed on specific topics/files of interest

Europass Digital Credentials for Learning (EDCs)

Module Learning Objectives	Link to ESCO descriptors
Adopt personal strategies to stay updated and informed on specific topics/fields of interest	(K) Knowledge management "Understanding systematic approaches to gather, organize, and retain domain-specific information. (S) Monitor trends and innovations "Ability to track emerging developments in recycling technologies, regulations, and market practices." (S) Monitor technology trends Survey and investigate recent trends and developments in technology. Observe and anticipate their evolution, according to current or future market and business conditions. (S) Adaptability to industry changes "Competence to integrate new findings into workflows and decision-making processes."
Apply techniques and AI - based tools to find relevant information on a topic of professional interest and to stay updated and to carry out research	(K) Artificial Intelligence fundamentals "Understanding core AI concepts (e.g. machine learning, natural language processing) and their applications in research." (S) Use IT tools Application of computers, computer networks and other information technologies and equipment to storing, retrieving, transmitting and manipulating data, in the context of a business or enterprise. (K) Principles of artificial intelligence The artificial intelligence theories, applied principles, architectures and systems, such as intelligent agents, multi-agent systems, expert systems, rule-based systems, neural networks, ontologies and cognition theories.

Module's detailed description

MODULE 5
Project Management for green innovation and circular transition
Main objectives of the module
The module is aimed at: • Making learners understand concepts and implications of circular economy, circularity and circular design • Analysing and critically discussing circular design projects and interventions across different sectors • Making learners acquire competencies for managing projects and initiatives promoting the circular transition at community level • Making learners achieve competencies to design, implement and oversee circular economy projects • Making learners apply project management techniques and tools to circular economy initiatives
Contents/subjects of the module
• Definition of circular economy and circular economy principles • Differences between circular economy models and linear economy models • Advantage offered by CE for people/society, economy, environment • Circular design principles, opportunities, and limits • Best practice projects on circular economy and green transition at community level • Project management techniques and tools to promote and co-implement circular economy projects • Foundational concepts related to Life cycle assessment (LCA) and circular design

Module's detailed description

Learning Outcomes **The Learner will** *(ex. Have a clear understanding of the concept of CE, its historic development, its definitions, its principles. Know key examples of CE in practice.)*	**Assessment criteria:** **The learner can** *(ex. Define the concept of CE and provide relevant examples. Identify relevant supporting concepts related to CE.)*
• Understand the principles of Circular Economy • Understand the differences between circular economy models and linear economy models • Have a clear understanding of PM techniques and tools to implement and monitor CE initiatives/projects at community level	• Explain the main principles of CE and circular design to stakeholders • Define realistic goals, necessary tasks and expected outcomes for a circular design process • Apply approaches, methods and tools for circular project management
Duration of the module (training hours) 24 training hours (classroom, e-learning)	
Training mode/s Face-to-face or online	
Training methodologies Lessons, best practices/case studies' analysis, debate/discussion	

Achievements

Module: Project Management for green innovation and circular transition		
Knowledge *(Means the body of facts, principles, theories and practices that is related to a field of work or study. It is described as theoretical and/or factual knowledge)*	**Skills** *(Means the ability to apply knowledge and use know-how to complete tasks and solve problems. They are described as cognitive (logical, intuitive, and creative thinking) or practical (involving manual dexterity and the use of methods, materials, tools and instruments)*	**Competencies** *(Means the proven ability to use knowledge, skills and personal, social and methodological abilities in work or study situations and in professional and personal development. It is described in terms of responsibility and autonomy)*
At the end of this unit the participant will know:	At the end of this unit the participant will be able to:	At the end of this unit, the participant will have acquired the responsibility and autonomy to:
• The principles of Circular Economy • The differences between circular economy models and linear economy models • The principles of circular design • Different kinds of circular business models • Circular design applications across the sectors	• Explain the main principles of CE and circular design • Define realistic goals, necessary tasks and expected outcomes for a circular project management • Frame problems/challenges for circular project management across different sectors	• Explain to the main stakeholders the advantages, barriers and implications of adopting circular economy models • Analyse green business models • Oversee the implementation of circuit projects

Europass Digital Credentials for Learning (EDCs)

Module Learning Objectives	Link to ESCO descriptors
Explain the principles of Circular Economy	(K) Circular economy The circular economy aims to keep materials and products in use for as long as possible, extracting the maximum value from them while in use and recycling them at the end of their life cycle. It improves resource efficiency and helps to reduce the demand for virgin materials. (K) Product life cycle The management of the life cycle of a product from the development stages to the market entry and market removal.
Elaborate on the differences between circular economy models and linear economy models	(K) Sustainable technologies with the aim of reducing environmental and ecological risks, achieving at the same time, a positive economic, social, and environmental impact. They are innovative technologies designed to prevent, reduce and recover from the negative impact of humanity in the planet.
Apply PM and FM techniques and tools to carry out projects and initiatives	(K) Project Management The discipline of project management, the activities which comprise this area and the variables implied in it, such as time, resources, requirements, deadlines, and responding to unexpected events. (S) Control financial resources Monitor and control budgets and financial resources providing capable stewardship in company management.

Module's detailed description

MODULE 6
Introduction to secondary raw materials markets
Main objectives of the module
The module is aimed at: • Making learners acquire knowledge regarding the secondary raw materials markets (SRMs), and their peculiarities • Making learners interpret and evaluate the state of development SRM markets
Contents/subjects of the module
• SRMs, value-chain and market dynamics • SRMs, kinds of available recyclable materials, barriers/weaknesses to development (lack of trust in the markets by investors/buyers, lack of harmonized technical specifications on materials, lack of end-of-waste criteria across the EU, etc.) • Examples of well-functioning SRMs, waste recycling and new materials (e.g. aluminium, paper, glass, wood, plastics, etc.) • Examples of difunctional SRMs

Module's detailed description

Learning Outcomes **The Learner will** *(ex. Have a clear understanding of the concept of CE, its historic development, its definitions, its principles. Know key examples of CE in practice.)*	**Assessment criteria:** **The learner can** *(ex. Define the concept of CE and provide relevant examples. Identify relevant supporting concepts related to CE.)*
• Understand the dynamics of SRMs • Understand the barriers to SRMs development • Understand the role of SRMs in boosting the circular transition in the EU	• Analyse and interpret the main dynamics od SRMs • Describe the technical properties and peculiarities of recyclables
Duration of the module (training hours) 8 training hours (classroom, e-learning)	
Training mode/s Face-to-face or online	
Training methodologies Lessons, Case studies analysis e-learning	

Achievements

Module: Project Management for green innovation and circular transition		
Knowledge *(Means the body of facts, principles, theories and practices that is related to a field of work or study. It is described as theoretical and/or factual knowledge)*	**Skills** *(Means the ability to apply knowledge and use know-how to complete tasks and solve problems. They are described as cognitive (logical, intuitive, and creative thinking) or practical (involving manual dexterity and the use of methods, materials, tools and instruments)*	**Competencies** *(Means the proven ability to use knowledge, skills and personal, social and methodological abilities in work or study situations and in professional and personal development. It is described in terms of responsibility and autonomy)*
At the end of this unit the participant will know:	At the end of this unit the participant will be able to:	At the end of this unit, the participant will have acquired the responsibility and autonomy to:
• SMRs dynamics, barriers to development, • The SMR value chain • The peculiarities and marketability of recyclables	• Analyse SRMs and their dynamics • Describe properties and usability of recyclables	• Describe SRMs dynamics, strengths and weaknesses

Europass Digital Credentials for Learning (EDCs)

Module Learning Objectives	Link to ESCO descriptors
Interpret the dynamics of SRMs	(K) Resource efficiency strategies Understanding methods to optimize material use, reduce waste, and extend resource lifecycles in supply chains.
Analyse SRMs and their dynamics	K) Sustainability assessment methodologies "Knowledge of frameworks (e.g. Lifecycle Assessment, Material Circularity Indicator) to evaluate the environmental and social impacts of raw materials." (S) Apply sustainability metrics "Ability to use tools and indicators to assess raw material sustainability (e.g. carbon footprint, water usage, recyclability)."
Describe SRMs dynamics, strengths and weaknesses	(K) Supply chain risks Characteristics, operations and resources involved in moving a product or service from supplier to the customer. (S) Analyse regulatory and market constraints "Skill to identify legal, economic, or logistical barriers to adopting sustainable raw materials." (K) Material substitution strategies "Understanding methods to replace non-renewable resources with sustainable alternatives in production processes."

Module's detailed description

MODULE 7
Green technologies
Main objectives of the module
The module is aimed at: • Making learners understand and exploring green mature and emerging technologies supporting the transition to circular business models
Contents/subjects of the module

• Emerging and mature green technologies (non-exhaustive list):
  ◦ Waste to-energy
  ◦ Industrial Symbiosis
  ◦ Short supply chain (SSC)
  ◦ Carbon farming
  ◦ AI-based solutions for green innovation and circular economy

Module's detailed description

Learning Outcomes **The Learner will** *(ex. Have a clear understanding of the concept of CE, its historic development, its definitions, its principles. Know key examples of CE in practice.)*	**Assessment criteria:** **The learner can** *(ex. Define the concept of CE and provide relevant examples. Identify relevant supporting concepts related to CE.)*
• Understand peculiarities of each analysed green technology, how it works, its implications, impacts, benefits and barriers • Understand interconnections between resource management and each green tech analysed	• Describe main green technologies in use, mature and emerging • Apply system-thinking approaches to green tech applications/systems applications and projects
Duration of the module (training hours) 16 training hours (classroom, e-learning)	
Training mode/s Face-to-face or online	
Training methodologies Case studies analysis, simulations, project-based learning, self-learning	

Achievements

Module: Project Management for green innovation and circular transition		
Knowledge *(Means the body of facts, principles, theories and practices that is related to a field of work or study. It is described as theoretical and/or factual knowledge)*	**Skills** *(Means the ability to apply knowledge and use know-how to complete tasks and solve problems. They are described as cognitive (logical, intuitive, and creative thinking) or practical (involving manual dexterity and the use of methods, materials, tools and instruments)*	**Competencies** *(Means the proven ability to use knowledge, skills and personal, social and methodological abilities in work or study situations and in professional and personal development. It is described in terms of responsibility and autonomy)*
At the end of this unit the participant will know:	At the end of this unit the participant will be able to:	At the end of this unit, the participant will have acquired the responsibility and autonomy to:
• Have knowledge about the fundamentals of mature and emerging green technologies applicable at company and community level	• Analyse different green technologies and their applications • Evaluate impacts of green tech applications on resource management (energy, water, waste), quality of life and environment	• Promote green tech-based projects at business and community level

Europass Digital Credentials for Learning (EDCs)

Module Learning Objectives	Link to ESCO descriptors
Analyse different green technologies and their applications	(K) Energy recovery technologies "Knowledge of thermal, biological, and chemical processes for converting waste into energy (e.g. incineration, gasification, anaerobic digestion)."

Co-funded by the European Union

Module's detailed description

MODULE 8
Coordinating working teams and relational leadership
Main objectives of the module
The module is aimed at: • Making learners achieve knowledge and skills necessary to coordinate and oversee working teams effectively • Making learners achieve skills in empowering and motivating collaborators and teams • Making learners increase awareness regarding their style of leadership • Making learners increase leadership skills
Contents/subjects of the module
• Techniques, approaches and strategies to oversee, support and offer guidance to working teams and their members • Techniques and approaches to guide a team effectively • Empowerment and motivation in collaborative environments and teams • Leadership styles • Case studies regarding team management

Module's detailed description

Learning Outcomes **The Learner will** *(ex. Have a clear understanding of the concept of CE, its historic development, its definitions, its principles. Know key examples of CE in practice.)*	**Assessment criteria:** **The learner can** *(ex. Define the concept of CE and provide relevant examples. Identify relevant supporting concepts related to CE.)*
• Understands the team's dynamics and how to manage a team effectively • Empowerment and motivation techniques • Leadership style and their characteristics	• Manage working teams effectively • Oversee the team's activity offering guidance and support • Exercise his/her own leadership style • Empower and motivate teams member in reaching the set common goals • Apply strategies to overcome critical issues inside teams (conflicts, lack of motivation, etc.)
Duration of the module (training hours) 12 training hours (classroom, online learning)	
Training mode/s Face-to-face or online	
Training methodologies Lessons, brainstorming, debate/discussion, simulations/roleplaying, case studies analysis, e-learning	

Achievements

Module: Project Management for green innovation and circular transition		
Knowledge *(Means the body of facts, principles, theories and practices that is related to a field of work or study. It is described as theoretical and/or factual knowledge)*	**Skills** *(Means the ability to apply knowledge and use know-how to complete tasks and solve problems. They are described as cognitive (logical, intuitive, and creative thinking) or practical (involving manual dexterity and the use of methods, materials, tools and instruments)*	**Competencies** *(Means the proven ability to use knowledge, skills and personal, social and methodological abilities in work or study situations and in professional and personal development. It is described in terms of responsibility and autonomy)*
At the end of this unit the participant will know:	At the end of this unit the participant will be able to:	At the end of this unit, the participant will have acquired the responsibility and autonomy to:
• Understands the teams' dynamics and how to manage a team effectively • Empowerment and motivation techniques • Leadership style and their characteristics	• Manage working teams effectively • Oversee the team's activity offering guidance and support • Exercise his/her own leadership style • Empower and motivate teams member in reaching the set common goals • Apply strategies to overcome critical issues inside teams (conflicts, lack of motivation, etc.)	• Manage working teams effectively

Europass Digital Credentials for Learning (EDCs)

Module Learning Objectives	Link to ESCO descriptors
Exercise own leadership style	(S)Team leadership Ability to guide team members, delegate tasks, and ensure alignment with organizational goals." (K) Leadership principles Set of traits and values which guide the actions of a leader with her/his employees and the company and provide direction throughout her/his career. These principles are also an important tool for self-evaluation to identify strengths and weaknesses and seek self-improvement.
Empower and motivate team members in reaching common goals	(S) Apply motivational techniques "Skill to use recognition, incentives, and feedback to enhance team engagement and morale." (S) Foster innovation and autonomy "Competence to create environments where team members take initiative and contribute creatively."

Module's detailed description

MODULE 9
Design thinking strategies and co-creation methods for effective multistakeholder circular projects
Main objectives of the module
The module is aimed at: • Describing entrepreneurial mindset, strategies of design thinking and co-creation • Methods for the formulation of innovative solutions supporting the green transition of communities and local ecosystems
Contents/subjects of the module
• Design thinking approaches and techniques • Collaborative design solutions to complex problems: participatory approaches, co-creation methods and stakeholder engagement • Contextualization of co-creation approaches to circular challenges: best practices across sectors

Module's detailed description

Learning Outcomes **The Learner will** *(ex. Have a clear understanding of the concept of CE, its historic development, its definitions, its principles. Know key examples of CE in practice.)*	**Assessment criteria:** **The learner can** *(ex. Define the concept of CE and provide relevant examples. Identify relevant supporting concepts related to CE.)*
• Understand the design thinking approach, its strengths and weakness • Have a deep knowledge of a set of co-creation methods • Have knowledge of different innovative participatory approaches in identify and analyse recycling challenges	• Apply co-creation methods to the identification and analysis of recycling challenges • Engage all the actors involved in the co-creation methods, according to a multistakeholder approach • Apply the design thinking methodology to identify and analyse challenges/problems and co-design solutions
Duration of the module (training hours) 16 (classroom, online learning)	
Training mode/s Face-to-face or online	
Training methodologies Case studies analysis, simulations/role playing, project-based learning, e-learning, self-learning)	

Achievements

Module: Project Management for green innovation and circular transition		
Knowledge *(Means the body of facts, principles, theories and practices that is related to a field of work or study. It is described as theoretical and/or factual knowledge)*	**Skills** *(Means the ability to apply knowledge and use know-how to complete tasks and solve problems. They are described as cognitive (logical, intuitive, and creative thinking) or practical (involving manual dexterity and the use of methods, materials, tools and instruments)*	**Competencies** *(Means the proven ability to use knowledge, skills and personal, social and methodological abilities in work or study situations and in professional and personal development. It is described in terms of responsibility and autonomy)*
At the end of this unit the participant will know:	At the end of this unit the participant will be able to:	At the end of this unit, the participant will have acquired the responsibility and autonomy to:
• Design thinking methodologies • Co-creation methods • Emerging green challenges at community/territorial level	• Apply co-creation and design-thinking methods to identify challenges/problems and co-shape solutions • Apply co-creation methods to green and circular projects	• Apply co-creation and design-thinking methods to identify challenges/problems and co-shape circular projects • Engage stakeholders in design thinking and co-creation methods for the green transition of local ecosystems

Europass Digital Credentials for Learning (EDCs)

Module Learning Objectives	Link to ESCO descriptors
Apply co-creation and design thinking methods to identify challenges/problems and co-shape solutions	Design thinking principles (K) The process used to identify creative solutions to problem-solving, by putting the user at its core. The five stages approach-empathise, define, ideate, prototype and test-are meant to challenge assumptions and iterate solutions that are better suited to the needs of the user. Innovation methodologies (K) The techniques, models, methods and strategies which contribute to the promotion of steps towards innovation. Apply design thinking tools (S) Apply the process of combining systems thinking methodologies with human-centred design in order to solve complex societal challenges in an innovative and sustainable way. This is most often applied in social innovation practices that focus less on designing stand-alone products and services to designing complex service systems, organizations or policies that bring value to the society as a whole.

Module's detailed description

MODULE 10
Fundraising and incentives
Main objectives of the module
The module is aimed at: • Making learners acquire competencies to scout private and public funding opportunities and incentives to implement green and circular projects at community level
Contents/subjects of the module
• Scouting of funding opportunities: regional/national, international funds and donors • Innovative and unconventional forms of fundraising for the green transformation • Incentives greening and circularity: monitoring digital platforms, analysis of incentives and eligibility requirements

Module's detailed description

Learning Outcomes **The Learner will** *(ex. Have a clear understanding of the concept of CE, its historic development, its definitions, its principles. Know key examples of CE in practice.)*	**Assessment criteria:** **The learner can** *(ex. Define the concept of CE and provide relevant examples. Identify relevant supporting concepts related to CE.)*
• Know the main source of financial opportunities and incentives to support the design and implementation of green and circular projects	• Properly inform stakeholders and company management regarding relevant accessible funding opportunities • Design, launch and implement fundraising programmes/initiatives (crowdfunding, etc.)
Duration of the module (training hours) 10	
Training mode/s Face-to-face or online	
Training methodologies Case studies analysis, simulation, project-based learning, e-learning	

Achievements

Module: Project Management for green innovation and circular transition		
Knowledge *(Means the body of facts, principles, theories and practices that is related to a field of work or study. It is described as theoretical and/or factual knowledge)*	**Skills** *(Means the ability to apply knowledge and use know-how to complete tasks and solve problems. They are described as cognitive (logical, intuitive, and creative thinking) or practical (involving manual dexterity and the use of methods, materials, tools and instruments)*	**Competencies** *(Means the proven ability to use knowledge, skills and personal, social and methodological abilities in work or study situations and in professional and personal development. It is described in terms of responsibility and autonomy)*
At the end of this unit the participant will know:	At the end of this unit the participant will be able to:	At the end of this unit, the participant will have acquired the responsibility and autonomy to:
• Scouting of funding opportunities and incentives for the green and circular transition at local ecosystem's level • Unconventional and innovative fundraising techniques	• Identify and apply for funding opportunities supporting green innovation	• Identify, analyse and inform about funding opportunities • Design and implement unconventional funding initiatives

Europass Digital Credentials for Learning (EDCs)

Module Learning Objectives	Link to ESCO descriptors
Identify and apply for funding opportunities supporting green innovation	Funding methods (K) The financial possibilities for funding projects such as the traditional ones, namely loans, venture capital, public or private grants up to alternative methods such as crowdfunding. Green bonds (K) The financial instruments traded in financial markets aim at raising capitals for projects with specific environmental benefits.

GREEN LABS

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