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TICHE ACADEMY

Training Offer

ABSTRACT

The TICHE - Training Innovation for Circularity and Holistic economies, project aims at establishing a European VET Academy on Circular Economy, based on transnational cooperation of a very experienced and complementary partnership, (including associated partners), joining Research centers, Vet centers, Universities, SMEs, clusters, Umbrella organizations, and international networks, public administrations, that will work together as an ecosystem to increase capacity building and responsiveness of the VET systems, according to a “European Education Area”.

Co-funded by the European Union

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2021-1-IT01-KA220-VET-000033123

LEARN MORE ABOUT PROJECT

TICHE ACADEMY TRAINING OFFERS

About the TICHE Academy

- New business models and new technologies supporting the transition to Circular Economy
- Project management for environmental sustainability and circular economy
- Towards circularity
- Circular Economy in a Nutshell – Educational Video Series
- Waste-to-energy: a brief review of actual mature technologies
- Towards circular and sustainable business models
- Master's Degree in Green Economy and Sustainability
- Circular economy game
- Waste Management and Valorisation
- Urban Environment Cleaning, Collection and Recycling
- Circular System Design for Resources and Products
- CEIS - Circular Economy Innovation & Skills
- Foundations of Good Design
- Certificate of Professional Qualification "Operator of manual waste sorting"
- Introduction on Sustainable Development, Circular Economy and CSR
- A journey into the Circular Economy model – Educational Video Series

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1. Introduction

In the framework of an urgent global green transition, sustainable practices and innovation are crucial, as well as the adoption of ecosystemic approaches to Circular economy. As underlined in the **TICHE – R2– Circular Skills Catcher**, to ground and accelerate the transition is essential to upskill and reskill people, the work force, and the entrepreneurs, present and future.

The TICHE Academy will provide to any potential interested user/participants flexible opportunities, delivered through a various set of training modes (on site, online, blended), training paths of different category (short courses, training pills, masters, etc.), of different level of proficiency (basic, intermediate, advanced, specialistic), and delivered in English and some of partners national languages.

This document provides a comprehensive overview of TICHE Academy's blended training offer, built on a set of **n. 16 training opportunities**, conceived to equip learners with the necessary competencies to be the agents of change and to support the green and circular transition through their own daily activity.

This document represents the collaborative efforts of a TICHE project consortium of seven partners from six EU countries, (IT, GR, FR, IE, FL, G), with an international well-known expertise in the fields of the green innovation and circular economy spectrum of topics.

In the following pages it is possible to find a detailed description the TICHE Academy framework of opportunities. Since the Academy is conceived as blended, more information and free access to these opportunities are available through the project web site https://tiche-academy.eu/

Read more to become partner in our TICHE journey towards circular economy!

TICHE ACADEMY TRAINING OFFER -
CIRCULAR SYSTEM DESIGN FOR RESOURCES AND PRODUCTS

1

TICHE Academy training offer's detailed description

General Description of the training initiative

Training initiative (title) *(ex. Expert in an eco-design for circular economy in the text Title and fashion industries)*	Circular System Design for Resources and Products
EQF Level (if applicable)	None
Proficiency level *(foundation/basic, intermediate, advanced, high specialized level)*	Foundational to Intermediate
Expected learning outcomes *(By the end of this course, the learners will acquire …….)*	Participants will be introduced to key aspects of circular system design and will gain insights and practical guidance on how to holistically and strategically align Branding, Value Chains, Product Designs and Business Models in a circular manner. The program will enable participants to lay the foundations for future proofing any company by gaining insights into trends, opportunities, risks and policy as well as developing the required skills to kickstart their circular transition.
Methodologies	A series of 6 modules will initially be developed and delivered through lectures and interactive engagements. Real world case studies will be used to demonstrate the different aspects of Circular System Design. Participants will have full flexibility to attend individual modules in isolation or attend all 6 modules to gain complete Circular Systems Design training. Throughout delivery of the 6 modules, anois will conduct surveys to determine future interest and training needs for more in-depth modules covering individual content subjects as listed in each module below. These additional subjects can potentially be developed into future course modules if required. Thus, co-creating future course developments directly with participants. These new modules could also focus on specific sectors (e.g. furniture, electronics, textile, constructions etc.). The course will be delivered over a 3-week period with each course delivered on a Tuesday or Thursday morning.
Mode of Learning *(Blended, online, onsite)*	Online
Assessment *(ex. test)*	Test, or equivalent assessment
Certification and recognition	Certification of Attendance for full attendance at all 6 lessons, Europass Digital Credentials, upon the request
Targets	The course will be open to all interested in understanding how a transition to a Circular Economy and sustainability issues related to resource use in products. It will be aimed at entrepreneurs, professionals, and students. Those specifically involved in product related companies or material/product value chains (e.g. material production, manufacturing, design, repair, reuse and recycling etc.) will be targeted through social media and the wider TICHE Academy network.

Delivery Language/s	English

Modules of the training initiative

Module N.	Title of the Module/s	Learning/training hours (total)
MODULE 1	Circular Product Design	1 Hour
MODULE 2	Circular Business Models	1 Hour
MODULE 3	Circular Branding & Communication	1 Hour
MODULE 4	Circular Lifecycles	1 Hour
MODULE 5	Circular Materials	1 Hour
MODULE 6	Circular Design Policy	1 Hour

Module's detailed description

MODULE 1	
Title of the module: Circular Product Design	
Main objectives of the module	
80% of environmental impacts are determined at the design stage, however, designers are not designing circular products to sufficient levels. The key objective of this module is to enable participants to understand the vital importance of selecting the right design strategies to ensure products are truly circular, taking into consideration global standards.	
Contents/subjects of the module	
• Transition from Linear to Circular Design • Design for Durability • Design for Repair • Design for Disassembly • Design for Resource Recovery	
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.)*
Participants will have a basic understanding of different circular design strategies definitions, how these design strategies overlap and integrate to create circular systems.	Participants will be able to describe appropriate circular design strategies.

Achievements

Module: Circular Product Design

Knowledge	***Skills***	***Competencies***
(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)	*(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)*	*(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:***
Understanding of various circular design strategies and their definitions. Knowledge of how circular design strategies overlap and integrate to create circular systems.	Ability to analyze different circular design strategies and their applicability. Skill in identifying opportunities to implement circular design strategies in practical scenarios.	Ability to integrate theoretical knowledge of circular design strategies into practical applications. Competence in recommending appropriate circular design strategies based on specific contexts and needs.

MODULE 2	
Title of the module: Circular Business Model	
Main objectives of the module	
Circular company transitions often fail as companies do not efficiently develop appropriate Circular Business Models to ensure they can financially and operational deliver on their circular transition plans. The key objective of this module is to enable participants to understand the vital importance of selecting the right business model(s) to ensure products are truly circular.	
Contents/subjects of the module	
• Remanufacturing • Incentives Return • Facilitated Reuse • On Demand Production • Product Service Systems • Sharing Economy	
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 inpractice.)*	**Assessment criteria:** **The learner can** *(ex. Define the concept of CE and provide relevant examples. Identify relevant supporting concepts related to CE.)*
Participants will have a basic understanding of each Circular Business Model definition, how these Business Modes overlap and integrate to create circular systems.	Participants will be able to describe appropriate circular business model(s) for a product(s).

Module: Circular Business Models

Knowledge	***Skills***	***Competencies***
(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)	*(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)*	*(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:***
Understanding of different circular business models (e.g., remanufacturing, product service systems). Knowledge of how circular business models contribute to operational and financial sustainability.	Ability to evaluate and select appropriate circular business models for different products or services. Skill in designing circular business models that support circular transition plans effectively.	Competence in implementing circular business models to achieve sustainable outcomes. Ability to adapt and innovate circular business models in response to changing business environments.

MODULE 3	
Title of the module: Circular Branding & Communication	
Main objectives of the module	
Many companies are afraid of greenwashing or circular washing and do not adequately communicate their circular activities. With the European Commission's and Denmark's emerging anti-greenwashing policies and regulations its important companies are ready. The key objective of this module is to enable participants to understand the key aspects of developing a coherent, consistent and accessible circular brand identity as well ensuring the brand clearly and accurately communicates the circular features (design strategy and business models) of the product.	
Contents/subjects of the module	
• Brand Values • Brand Personality • Brand Purpose • Brand Position • Avoiding Greenwashing • Circular Communication	
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.)*
Participants will have a basic understanding of what greenwashing is and how to avoid it. They will gain insight into the importance of aligning their brand with the appropriate circular design strategy and circular business models that target their unique market.	Participants will be able to describe their circular brand strategy.

Module: Circular Branding & Communication

Knowledge	***Skills***	***Competencies***
(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)	*(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)*	*(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:***
Understanding of key aspects of developing a circular brand identity. Knowledge of strategies to avoid greenwashing and communicate circular features effectively.	Skill in developing coherent and consistent circular brand messaging.	Competence in creating and maintaining a credible circular brand identity.

MODULE 4	
Title of the module: Circular Resources	
Main objectives of the module	
The module objective is to enable participants to understand why circular materials are key to their circular design strategy, business models, branding and value chain.	
Contents/subjects of the module	
• Design for Resource Recovery • Upcycle, Recycle & Downcycle • Biological Material Innovations • Industrial Symbiosis	
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.)*
Participants will have a basic understanding of the distinction between biological and technical materials. They will also have a basic understanding of the difference between upcycling, downcycling and recycling materials and will gain insight into emerging biological material innovations.	The participants will be able to identify sustainable materials that could potentially align with their circular design strategy and circular business model.

Module: Circular Resources		
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:***
Understanding of the significance of circular materials in design strategies and business models. Knowledge of different types of sustainable materials and their applications.	Skill in identifying and evaluating sustainable materials for circular design.	Competence in optimizing resource recovery and minimizing waste through circular materials.

MODULE 5
Title of the module: Circular Product Policy
Main objectives of the module

The Circular Economy will enable the EU to meet 50% of its Net Zero targets, with ambitions to double the EU average circular rates from its existing 12% to 24%. In addition, many countries are going beyond the EUs Circular Economy Action Plan 2 to develop tailored or stricter circular regulations. The objective of this module is to introduce participants to the variety of Circular Polices that can be used to promote, support, mandate and enable circular design and business models, ensuring we all transition to a Circular Economy.
Contents/subjects of the module
• Circular Product Policies Typology • Current & Emerging Circular Policy in EU • Designing new National & Regional Circular Policy

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.)*
The participants will have a basic understanding of the different types of Circular Product Policies.	Participants will be able to outline the key emerging EU Circular Policies.

Module: Circular Product Policy		
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:***
Understanding of various types of circular product policies and their objectives. Knowledge of current and emerging circular policies, particularly in the EU context.	Skill in analyzing the impact of circular policies on business operations and strategies.	Ability to advocate for policy changes that support circular economy principles and practices.

MODULE 6	
Title of the module: Circular Lifecycles	
Main objectives of the module	
Understanding the full lifecycle of a product and its resources is critical to understanding where appropriate circular interventions can be made. The objective of this module is for participants to understand the importance of mapping a products full lifecycle to identify appropriate circular interventions that successfully combine Circular Product Design Strategies, Circular Business Models, Circular Materials, Branding and emerging Circular Policies.	
Contents/subjects of the module	
• Lifecycle Thinking • Lifecycle Mapping • Lifecycle Assessment • Circular Traceability (Product & Material Passports)	
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.)*
Participants will have a basic understanding of what lifecycle thinking is, how Lifecycle Assessments are conducted and what key steps are important for mapping a product's lifecycles.	Participants will be able to draft a basic life cycle for a circular product.

Module: Circular Lifecycles		
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:***
Understanding of lifecycle thinking and its application in circular economy strategies. Knowledge of lifecycle assessment methods and tools for evaluating environmental impacts	Ability to apply lifecycle thinking to improve product design, materials selection, and end-of-life strategies.	Competence in implementing circular lifecycle strategies to enhance sustainability performance.

TICHE ACADEMY TRAINING OFFER -
TOWARDS CIRCULAR AND SUSTAINABLE BUSINESS MODELS

2

TICHE Academy training offer's detailed description

General Description of the training initiative

Training initiative (title) *(ex. Expert in an eco-design for circular economy in the text Title and fashion industries)*	First Annual Workshop: More than 20 years of Eco-Innovation Research: lessons learnt and new directions (10-11 November, 2022)
EQF Level (if applicable)	None
Proficiency level *(foundation/basic, intermediate, advanced, high specialized level)*	High specialized level
Expected learning outcomes *(By the end of this course, the learners will acquire …….)*	By the end of this workshop participants will be able to develop critical understanding and the ability to reflect on the importance of the role played by eco-innovation in firms' transition toward circular and sustainable business models
Methodologies	Presentation of latest research insights, data presentation, experiment presentation in the field of circular economy, eco-innovation and sustainability at EU level
Mode of Learning *(Blended, online, onsite)*	Onsite
Assessment *(ex. test)*	Test, or other method of assessment
Certification and recognition	Certificate of attendance, Europass Digital Credentials Certificate upon the request
Targets	Students, academics, experts in the field, employees in public organizations
Delivery Language/s	English

Modules of the training initiative

Module N.	Title of the Module/s	Learning/training hours (total)
MODULE 1/ DAY 1	DAY 1 /More than 20 years of Eco-Innovation Research: lessons learnt and new directions	8 hours
MODULE 2/ DAY 2	DAY 2 /More than 20 years of Eco-Innovation Research: lessons learnt and new directions	8 hours

Module's detailed description

MODULE 1	
Title of the module: DAY 1 /More than 20 years of Eco-Innovation Research: lessons learnt and new directions	
Main objectives of the module	
The workshop aims to provide both fundamental knowledge and the latest research developments concerning environmental innovations - "eco-innovation" - following a micro and macro-economic perspective.	
Contents/subjects of the module	
12.00 Opening address Fernando J. Diaz Lopez (EIT Climate KIC and Stellenbosch University) 12.30 Session 1 Eco-Innovation research and new perspectives Chair: Claudia Ghisetti (University of Milan – Bicocca) René Kemp (Maastricht University) Co-authors: Arie Rip and Harro van Lente *Evolutionary approaches to innovation for sustainability. How sustainability and needs may change too* Sandra Schillo (University of Ottawa) *20 years of Eco-Innovation Research – Reflections, observations and a constructive challenge* 13:30 Lunch break 14:30 Keynote lecture Alessio D'Amato (University of Rome "Tor Vergata" and IAERE) *Eco-Innovation for the Circular Economy Transition* 15.30 Presentation Eco-innovation Society Fernando J. Diaz Lopez (EIT Climate KIC and Stellenbosch University) *Eco-innovation, a global community and a research agenda* 16:00 Guest presentation Nicholas Palaschuk (University of Waterloo) *North American Eco-Innovation Network* 16:30 Session 2 Eco-innovation in business 17:30 Chair: Elisa Chioatto (University of Ferrara) Valery Chistov (Deusto Business School) Co-authors: Javier Carrillo Hermosilla, Nekane Aramburu Goya *How does Open Eco-innovation affect the Radicalness of Eco-innovation?* Manyabe Esangela Daniel (Kyngpook National University) Co-authors: Mahamadou Biga-Diambedou , Gye-Wan Moon , Bungandwa Toussain, Yeguignafere Diarassouba,Valérie Swaen *Building sustainable entrepreneurship ecosystem in Sub-Saharan Africa: The role of eco-innovation, cleaner production, circular economy* Coffee break (10') Asia Guerreschi (University of Ferrara) Co-author: Fernando J. Diaz Lopez (EIT Climate KIC and Stellenbosch University) *Cooperation a driver for eco-innovation: a literature review focusing on co-operatives* Ahmed Bin Sanaullah *(University of Warsaw)* Co-author: Magdalena Marczewska *Vertical Farming as a Solution for Sustainable Agriculture: Business model suggestions for vertical farm growers* 18:30 *End of activities (followed by social programme)*	
Learning Outcomes **The Learner will** *(ex. Have a clear understanding of the concept of*	**Assessment criteria:** **The learner can** *(ex. Define the concept of CE and provide*

CE, its historic development, its definitions, its principles. Know key examples of CE in practice.)	*relevant examples. Identify relevant supporting concepts related to CE.)*
Have a clear understanding of key environmental sustainability theories Have a clear understanding of viable eco-innovations which boost the circular transition at business level	To generate and select viable eco-innovations which are compatible with circular economy and reduce environmental impacts

Achievements

Module: DAY 1 /10 November, 2022: More than 20 years of Eco-Innovation Research: lessons learnt and new directions		
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 environmental impact can be reduced with the adoption of more Environmentally focused and sustainable/circular business models	To identify viable eco-innovations which are compatible with circular economy To recognize key drivers of innovation, and leverage organizational systems, structures, and culture Practical frameworks, and a future-focused innovation mindset	Develop inter-personal, analytical and presentation skills; to give detailed insights into the challenges and problems encountered by firms willing to Adopt a more environmentally friendly innovative set-up

MODULE 2
Title of the module: DAY 2 More than 20 years of Eco-Innovation Research: lessons learnt and new directions
Main objectives of the module
The workshop aims to provide both fundamental knowledge and the latest research developments concerning environmental innovations - "eco-innovation" - following a micro and macro-economic perspective.
Contents/subjects of the module
8.30 **Registration** 09:00 Introduction to the workshop Fernando J. Diaz Lopez (EIT Climate KIC and Stellenbosch University) 09:10 **Keynote lecture** Massimiliano Mazzanti (University of Ferrara, SEEDs and CERCIS) *Modelling green knowledge production and eco-innovation policies*

10:00 **Session 3 Eco-innovation for the energy, digital, sustainable and climate transition** Chair: Christoph Kiefer (Fraunhofer ISI)
Ryan Roberts (Victoria University of Wellington)
Co-authors: Alan Brent, Jim Hinkley, Bob Cavana
Understanding the impacts of eco-innovation: Community Renewable Energy projects in Aotearoa New Zealand
Sandro Montresor (GSSI)
Co-authors: Francesco Rentocchini and Antonio Vezzani
"Walking the green line": government sponsored R&D and clean technologies in the US
Claudia Ghisetti (Bicocca University)
Co-authors: Davide Antonioli, Massimiliano Mazzanti, Francesco Nicolli, Marco Quatrosi
"Twin transition" and organisational settings: empirical evidence from Italian regions
Magdalena Marczewska (University of Warsaw)
Digital or sustainable: SMEs dilemma
11:30 **Invited mini-lecture**
Guy Fournier (Pforzheim University)
System innovation in transport with automated minibuses and ITS: the citizen centric approach of AVENUE
11:45 **Coffee break**
12:00 **Guest presentation**
Ubiratã Tortato (Pontifical Catholic University of Parana)
Circular Economy and ESG in an Eco-innovation perspective: progress in Brazil
12:30 **Guest presentation**
Mahamadou Biga-Diambeidou (UCLouvain and ICN Business School, Lorraine Universiy-CEREFIGE)
Fostering a Sustainable Entrepreneurship Research Ecosystem in Africa
12:45 **Closing messages**
Massimiliano Mazzanti (University of Ferrara, SEEDS and CERCIS)

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.)*
Have a clear understanding of key environmental sustainability theories Have a clear understanding of viable eco-innovations which boost the circular transition at business level	To generate and select viable eco-innovations which are compatible with circular economy and reduce environmental impacts

Achievements

Module: DAY 2 /11 November, 2022: More than 20 years of Eco-Innovation Research: lessons learnt and new directions

Knowledge	***Skills***	***Competencies***
(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)	*(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)*	*(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 environmental impact can be reduced with the adoption of more environmentally focused and sustainable/circular business models	To identify viable eco-innovations which are compatible with circular economy To recognise key drivers of innovation, and leverage organisational systems, structures, and culture Practical frameworks, and a future-focused innovation mindset	To develop inter-personal, analytical and presentation skills; to give detailed insights into the challenges and problems encountered by firms willing to adopt a more environmentally friendly innovative set-up

TICHE ACADEMY TRAINING OFFER - *TOWARDS CIRCULARITY*

3

TICHE Academy training offer's detailed description

General Description of the training initiative

Training initiative (title) *(ex. Expert in an eco-design for circular economy in the text Title and fashion industries)*	Towards circularity
EQF Level (if applicable)	7
Proficiency level *(foundation/basic, intermediate, advanced, high specialized level)*	Advanced
Expected learning outcomes *(By the end of this course, the learners will acquire …….)*	After completing the course, the student is able to explain the concepts of linear and circular economies and the underlying sustainability challenges that force us to a shift from a linear model to a circular economy with circular business models. The students can summarize the national and EU policies and action plans for CE. In addition, the student can explain and utilize circular economy tools and instruments that are used to promote the transition to a circular economy. The student is able to analyze the capability of the selected products, processes and services to fulfill the requirements of circular economy. In connection with the above, the student can judiciously suggest development needs and practical actions in order to achieve circularity targets.
Methodologies	Lectures, a team exercise with exercise reporting meetings and a disassemble exercise.
Mode of Learning *(Blended, online, onsite)*	Online (Implementation in September-October)
Assessment *(ex. test)*	The course evaluation is based on the grades of a final exam and exercises. The course unit utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a failure.
Certification and recognition	Europass Digital Credentials, upon the request
Targets	Students
Delivery Language/s	English

Modules of the training initiative

Module N.	Title of the Module/s	Learning/training hours (total)
MODULE 1	Towards circularity	Lectures 30 h, team work 30 h, self-study 75 h.

Module's detailed description

MODULE 1	
Title of the module: Towards circularity	
Main objectives of the module	
See: Expected learning outcomes.	
Contents/subjects of the module	
Definitions and principles of linear and circular economies. Sustainability challenges. Use of resources. National and EU policies for CE. Tools and instruments of CE, such as dematerialization, life cycle thinking, eco-design, green chemistry and engineering, industrial symbiosis, remanufacturing. Measures for circularity.	
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.)*
Understanding of Concepts Related to Linear and Circular Economies Knowledge of National and EU Policies and Action Plans Pertaining to Circular Economy (CE) Familiarity with Various Tools and Instruments Used in Promoting Circular Economy Transition Understanding of Relevant National and EU Policies for Informed Decision-Making Capacity to Adapt to Evolving Sustainability Challenges and Business Landscapes	Clearly articulate differences between linear and circular economies. Provide relevant examples to illustrate the application of circular economy principles. Summarize key elements of national and EU policies concerning circular economy. Demonstrate effective use of circular economy tools to analyze and promote circularity. Provide reasoned assessments and recommendations for improving circularity. Propose adaptive strategies to address changing sustainability and business landscape dynamics.

Achievements

Module: *Towards circularity*		
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:***

Understanding of concepts related to linear and circular economies, including the principles, dynamics, and challenges associated with each model. Familiarity with national and EU policies and action plans pertaining to Circular Economy (CE). Knowledge of various tools and instruments used in promoting the transition to a circular economy.	Ability to explain and articulate the concepts of linear and circular economies clearly. Proficiency in summarizing and synthesizing information related to national and EU policies and action plans concerning circular economy. Competence in utilizing circular economy tools and instruments effectively to promote circularity. Analytical skills to evaluate the suitability of products, processes, and services for circular economy principles.	Capable of effectively explaining concepts and synthesizing information related to linear and circular economies. Ability to analyze and assess the compatibility of products, processes, and services with circular economy principles. Understanding of relevant national and EU policies and action plans, enabling informed decision-making. Capacity to adapt to evolving sustainability challenges and changing business landscapes, especially in the context of circular economy transitions.

TICHE ACADEMY TRAINING OFFER - *CIRCULAR ECONOMY GAME*

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TICHE Academy training offer's detailed description

General Description of the training initiative

Training initiative (title) *(ex. Expert in an eco-design for circular economy in the text Title and fashion industries)*	Circular economy game
EQF Level (if applicable)	6-7
Proficiency level *(foundation/basic, intermediate, advanced, high specialized level)*	Intermediate
Expected learning outcomes *(By the end of this course, the learners will acquire …….)*	After completing the course, the student is able to explain the concept of circular economy. In addition, the student can explain and utilize circular economy business models and methods that are used in building a sustainable life cycle for a product. The student is able to make justified decisions to balance the different aspects of sustainable life cycle, such as cost, durability, recycling possibilities etc. The student is able to analyze the impact of different circular economy solutions when the complete life cycle is considered.
Methodologies	Preliminary task, game-based learning, discussion, reflection and reporting
Mode of Learning *(Blended, online, onsite)*	Online
Assessment *(ex. test)*	Written report
Certification and recognition	Attendance Certificate, Europass Digital Credentials Certificate upon the request
Targets	Students, Workers, Unemployed people
Delivery Language/s	English

Modules of the training initiative

Module N.	Title of the Module/s	Learning/training hours (total)
MODULE 1	Circular economy game	Preliminary task 10 h, game-based learning 3 h, discussion 1 h, reflection and reporting 13 h

Module's detailed description

MODULE 1	
Title of the module: Circular economy game	
Main objectives of the module	
The student is able to explain the concept of circular economy. In addition, the student can explain and utilize circular economy business models and methods that are used in building a sustainable life cycle for a product. The student is able to analyze the impact of different circular economy solutions when the complete life cycle is considered.	
Contents/subjects of the module	
• Preliminary task: Independent studying on the principles of circular economy and life cycle thinking • Game playing: Teamwork • Discussion: Class activity • Reflection and reporting: Individual work	
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.)*
The learner will have an understanding of the concept of circular economy and life cycle thinking. In addition, the learner knows the impact of different circular economy solutions when the complete life cycle is considered.	The learner can define the concept of circular economy, make choices that benefit the circularity targets of product life cycle, and analyze the effect of the choices.

Achievements

Module: *Circular economy game*		
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 and life cycle thinking.	Make creative choices that benefit the circularity of a product life cycle using a practical case example.	Support decisions leading to circular solutions enhancing sustainability.

TICHE ACADEMY TRAINING OFFER - *CIRCULAR ECONOMY INNOVATION & SKILLS*

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TICHE Academy training offer's detailed description

General Description of the training initiative

Training initiative (title) *(ex. Expert in an eco-design for circular economy in the text Title and fashion industries)*	CEIS - Circular Economy Innovation & Skills
EQF Level (if applicable)	None
Proficiency level *(foundation/basic, intermediate, advanced, high specialized level)*	High specialized level
Expected learning outcomes *(By the end of this course, the learners will acquire …….)*	Realization of a course that provides knowledge and skills related to environmental sustainability and circular economy in production processes, combining economic concepts and evaluations with elements of energy efficiency analysis and sustainability in product design
Methodologies	Educational course 128 hours of lessons, 2 editions, each edition for groups of 20 participants
Mode of Learning *(Blended, online, onsite)*	Hybrid form- Onsite and Online. Blended learning: 80 hours at distance and 48 hours in presence in Ferrara (2 weeks)
Assessment *(ex. test)*	Test or other method of assessment
Certification and recognition	Certificate of attendance, Europass Digital Credentials Certificate upon the request
Targets	Students, academics, experts in the field, employees in public organizations
Delivery Language/s	English

Modules of the training initiative

Module N.	Title of the Module/s	Learning/training hours (total)
MODULE 1	1st set of lessons	52 Hours
MODULE 2	2nd set of lessons	24 Hours
MODULE 3	3rd set of lessons	36 Hours
MODULE 4	4th set of lessons	16 Hours

Module's detailed description

MODULE 1	
Title of the module: Sustainable Development and Industrial Production	
Main objectives of the module	
The module aims to provide the basics of the circular economy from a macro- and microeconomic perspective and to give an overview of the relevant legislation	
Contents/subjects of the module	
1. SUSTAINABLE DEVELOPMENT Economic-environmental sustainability: technological innovation, policies and international scenarios. Macroeconomic aspects, structural changes in sectors, business dynamics. Themes: greenhouse gas emissions, energy, circular economy 2. **CIRCULAR ECONOMY** The role of enterprises and productive sectors in the transition towards a green economy (low carbon and circular economy). Environmental policies based on market incentives (taxation, emissions trading, liability) and innovative business strategies and responses. 3. **ENVIRONMENTAL LEGISLATION** The reference regulatory framework on environmental issues, both EU and national, the related institutional architecture, authorisation regimes, standards and control systems **4. ENERGY PERFORMANCE** • Energy markets and policies: electricity markets and the role of renewables. • Economic tax incentives • Energy audit methodologies. Overview of energy consumption in various industrial sectors	
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.)*
Have a clear understanding of key environmental sustainability theories Have a clear understanding of energy, circular economy and legislative aspect	Identify relevant supporting concepts related to CE

Achievements

Module: Sustainable Development and Industrial Production		
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 environmental impact can be reduced with the adoption of more environmentally focused and sustainable/circular model	Knowledge about sustainable development Practical frameworks, and a future-focused circular models	Develop inter-personal, analytical and presentation skills; to give detailed insights into the challenges and problems encountered

MODULE 2	
Title of the module: The Economic Evaluation of Environmental Innovation Projects in Relation to Company Performance	
Main objectives of the module	
The module aims to provide basics of environmental and economic evaluation of environmental projects	
Contents/subjects of the module	
1. Cost-Benefit Analysis (CBA) The economic valuation of the environment. Basic principles of economic evaluation: measuring environmental and non-environmental values, benefits and costs; evaluation methods; aggregation of values over time. Use of Cost-Benefit Analysis as a tool for the evaluation of public policies and private investment choices. Applications to the energy market. Study of cost-benefit analysis for ex-ante evaluations of the effectiveness and impact of different types of intervention. The module will be organised into the following sub-units: structure and use of cost-benefit analysis; choice and implications of different discount rates; cost and benefit estimation techniques; practical examples. 2. **LCA (Life Cycle Assessment)** Study of the entire life cycle of the product or service, including the relationship in the supply chain; detailed analysis of ecological, human health impacts in integration with technological and economic development	
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.)*
Have a clear understanding of key environmental and economic evaluation theories	Knowledge of main evaluation techniques

Achievements

Module: The Economic Evaluation of Environmental Innovation Projects in Relation to Company Performance		
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:***

Basics evaluation theories	Evaluate environmental and projects	Assess the impacts of environmental projects

MODULE 3
Title of the module: Drivers and Indicators for the Economic and Financial Monitoring of Interventions
Main objectives of the module
The module aims to provide basics of environmental and economic evaluation of environmental projects
Contents/subjects of the module

1. **PROJECT MANAGEMENT OF RESOURCE EFFICIENCY INTERVENTIONS**
   - Basis of project management. Drivers and indicators for economic and financial monitoring of interventions. Presentation of sectoral case studies on the adoption of green innovations and their impacts on economic performance (profits, productivity).
   - Introductory part on Energy Performance Indices and the Baseline concept.
   - Indicators for Energy Efficiency Cost Benefit Analysis with particular reference to the concept of Net Present Value (NPV) and Cost of Energy Conserved (CEC).
   - BAT (Best Available Technology) and income statement examples for an industrial energy efficiency intervention.

2. **INVESTMENT EVALUATION AND PROJECT FINANCING OF THE ENERGY AND ENVIRONMENT SECTOR**
   - Main financing sources and instruments. Regional energy plan
   - The analysis of the identification and development of green patents with reference to technologies used in manufacturing sectors, in order to understand the formal ways of appropriating the value of R&D investments.

3. **BUDGETING**
   - Estimated physical resources needed
   - Estimated human resources needed
   - Cost estimation of the necessary physical and human resources in relation to the project timeframe
   - analysis of possible suppliers

4. **PHYSICAL-FINANCIAL MONITORING and RISK MANAGEMENT Project monitoring** techniques
   - Main accounting and reporting tools and techniques
   - Identification of internal and external risks and opportunities
   - Identification of early warning signs of risks and identification of possible actions to address them.

5. **SUSTAINABILITY BUDGETS AND SOCIO-ECONOMIC AND ENVIRONMENTAL CSR STRATEGIES. COMPANY CASE STUDIES**.
   - Sustainability budgets and socio-economic and environmental CSR (Corporate Social Responsibility) strategies.
   - Carbon footprint.
   - Business case studies.

Learning Outcomes, The Learner will	**Assessment criteria: The learner can**
(ex. Have a clear understanding of the concept of CE, its historic development, its definitions, its principles. Know key examples of CE in practice.)	*(ex. Define the concept of CE and provide relevant examples. Identify relevant supporting concepts related to CE.)*

Have a clear understanding of key pillars of project management and financing	Definition, management and financing of a project

Achievements

Module: Drivers and Indicators for the Economic and Financial Monitoring of Interventions		
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:***
Basics theories of project management and financing	Management and coordination of environmental projects	Management and coordination of environmental projects

MODULE 4	
Title of the module: Budgeting and production processes for circular economy	
Main objectives of the module	
The module aims to provide basics of budgeting and project monitoring	
Contents/subjects of the module	
1. CIRCULAR ECONOMY IN PRODUCTION PROCESSES • Energy recovery (cogeneration, heat, incentives) • Food waste (biogas, bioplastics • Fashion • Solid waste (aluminum, glass, paper) 2. **DESIGN FOR RE-MANUFACTURING** • Environmental sustainability and industrial design • Principles of design for remanufacturing - disassembly • Concrete examples of design for remanufacturing	
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.)*
Have a clear idea of circular processes with a focus on eco-design and remanufacturing	Define di the concept of remanufacturing and eco-design

Achievements

Module: Budgeting and production processes for circular economy		
Knowledge	***Skills***	***Competencies***

(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)	*(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)*	*(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:***
Steps for circular processes and role of remanufacturing	Address strategies for circular processes	Address strategies for circular processes

TICHE ACADEMY TRAINING OFFER - *MASTER'S DEGREE IN GREEN ECONOMY AND SUSTAINABILITY*

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TICHE Academy training offer's detailed description

General Description of the training initiative

Training initiative (title) *(ex. Expert in an eco-design for circular economy in the text Title and fashion industries)*	Master's Degree in Green Economy and Sustainability
EQF Level (if applicable)	7
Proficiency level *(foundation/basic, intermediate, advanced, high specialized level)*	High specialized level
Expected learning outcomes *(By the end of this course, the learners will acquire …….)*	The course provides students with interdisciplinary abilities in order to enable them to address issues related to green economy and sustainable development. The main topics of green economy and sustainability are eco-innovation, green economy and sustainable development. Challenging eco-policy issues - from both national and international perspectives - are studied as well.
Methodologies	The course offers dedicated teaching in the advanced core areas of environmental economics, environmental law, econometrics and research methods, with the opportunity to choose from a portfolio of optional courses. The course is based on active teaching methodologies aimed at maximizing students' participation. In addition to theoretical sessions, all participants will be involved in the discussion of case studies and development of project works.
Mode of Learning *(Blended, online, onsite)*	Onsite
Assessment *(ex. test)*	Test, project works, research project, dissertation
Certification and recognition	Master's degree, Europass Digital Credentials Certificate upon the request
Targets	Graduated students
Delivery Language/s	English

Modules of the training initiative

Module N.	Title of the Module/s	Learning/training hours (total)
MODULE 1/YEAR 1	Master's Degree in Green Economy and Sustainability -1st YEAR	
MODULE 2/ YEAR 2	Master's Degree in Green Economy and Sustainability -2nd YEAR	

Module's detailed description

MODULE 1	
Title of the module: Master's Degree in Green Economy and Sustainability -1st YEAR	
Main objectives of the module	
Students will be able to analyze the effects of economic and social activities on the environment and sustainability in highly integrated contexts at the international level. They will have skills to evaluate the economic effects of technological innovation processes capable of exploiting the opportunities for new growth paradigms and sustainable business management with the aid of statistical and econometric methodologies.	
Contents/subjects of the module	
Compulsory courses	**ECTS**
Strategic control and performance management (1st SEM)	9
Governance and accounting of SMEs (1st SEM)	9
Quantitative methods for economics and business (1st SEM)	8
Econometric methods and models (2nd SEM)	7
Theory of the firm and of the markets (2nd SEM)	9
Industrial policy and sustainability (2nd SEM)	9
Organizational behavior and human resource management (2nd SEM)	8
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.)*

Understanding the meaning, characteristics and significance and role of SMEs in the economy Understand what it means becoming an entrepreneur and the consequences of firm life-cycle Understand the role of ethics and social responsibility in doing business Understand the role of accounting and management accounting in SMEs Understanding of human behavior in organizational contexts, with a specific focus on managerial decision making and some elements of human resource management. knowledge about the process of strategic management (i.e. strategic planning, strategy implementation and strategic control) and performance measurement. knowledge and the instruments to understand industrial dynamics and their policy implications, with particular emphasis on issues related to sustainability and small and medium-sized enterprises.	design strategic control systems and apply performance measurement framework in firms' real life, no matter what the business model is. Make a strategic analysis and pitch opportunities in the market and prepare a feasibility analysis Analyze the ethical implications of decision making Write, evaluate and present a business plan Make an analysis of the international entry strategy available for SMEs Analyze competitive challenges and structural changes which firms are facing today, to be able to develop a "vision of the world" which is essential for managers to define appropriate strategies and for economists to take part in the policy debate critically analyze the way organizational practices influence the choices and the behavior of manager and employees in the workplace.

Achievements

Module: Master's Degree in Green Economy and Sustainability -1st YEAR		
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:***
role of SMEs in the economy role of ethics and social responsibility process of strategic management industrial dynamics and their policy implications	accounting and management accounting human resource management strategic planning, strategy implementation and strategic control	design strategic control systems prepare a feasibility analysis Write, evaluate and present a business plan

MODULE 2

Title of the module: Master's Degree in Green Economy and Sustainability -2nd YEAR

Main objectives of the module

Students will be able to describe and correlate the fundamental aspects of business management in international contexts, both in its strategic, financial and commercial management profiles and in the aspects related to sustainability reflecting on market opportunities linked to global challenges and the circular economy.

Contents/subjects of the module

Compulsory courses	**ECTS**
Environmental and intellectual property law (1st SEM)	8
Eco-Innovations, firm's performance and industrial dynamics (1st SEM)	7
Environmental economics and the green economy (1st SEM)	7
Evaluation of public policies (2nd SEM)	7
Elective courses (1st SEM) You have to choose one of the following courses: • Internship(4 ECTS) • Chinese language (4 ECTS) • French language (4 ECTS) • German language (4 ECTS) • Spanish language (4 ECTS)	4
You have to choose 14 ECTS among of the following suggested courses: • Policies for sustainability and local development (7 ECTS) (1st SEM) • Development economics and emerging markets (7 ECTS) (1st SEM) • Economics of innovations (7 ECTS) (1st SEM) • Econometric techniques for policy evaluation (7 ECTS) (2nd SEM) • Financial public economics (7 ECTS) (2nd SEM) • Project work (7 ECTS) (2nd SEM)	14
Master Thesis (Research Project and Dissertation) (2nd SEM)	14

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.)*

Distinguish the different forms of protection of intangible assets Critical awareness of the competitive limitations that the protection of industrial and intellectual property necessarily brings Data management Concept of Eco Innovation, its determinants and effect on the economic system. Environmental regulation understanding of the key links between economics and environmental issues understanding of the role of environmental policies Understand how SMEs make important investment and financing decisions, and how they establish cash flow working capital policies.	Protection of intangible assets analyse innovation from existing databases (Patent module) Analyse major environmental issues from an economic perspective Analyse and understand cash flow dynamics and management. Make some important financial decisions as for investment project valuation and selection and financial policies

Achievements

Module: Master's Degree in Green Economy and Sustainability -2nd YEAR		
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:***
Porter Hypothesis innovation theory industrial and intellectual property environmental economics and policy theory	Protection of intangible assets Analyse of environmental regulations and measure methods (e.g., OECD environmental indicators stringency)	Financial accounting Analyse innovation investment project valuation Policy valuation

TICHE ACADEMY TRAINING OFFER - *CERTIFICATE OF PROFESSIONAL COMPETENCE (CAP IN FRENCH) IN URBAN ENVIRONMENT CLEANING, COLLECTION AND RECYCLING*

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Template for the TICHE Academy training offer's detailed description

General Description of the training initiative

Training initiative (title) *(ex. Expert in an eco-design for circular economy in the Text Title and fashion industries)*	Certificate of Professional Competence (CAP in French) in Urban Environment Cleaning, Collection and Recycling
EQF Level (if applicable)	VET - Certificate of Professional Competence
Proficiency level *(foundation/basic, intermediate, advanced, high specialized level)*	Intermediate
Expected learning outcomes *(By the end of this course, the learners will acquire …….)*	By the end of this training, the learners will master urban cleaning, waste collection, and waste treatment and recovery techniques
Methodologies	800 hours of theoretical courses + 456 hours internship in companies
Mode of Learning *(Blended, online, onsite)*	Alternating of face-to-face courses and internship periods in companies
Assessment *(ex. test)*	Final evaluations (marks out of 20) defined by the French national education system detailed here: • Professional Unit 1: Cleaning and urban cleanliness techniques (coefficient 4) + Environmental Health Prevention (coefficient 1) • Professional Unit 2 : Waste collection techniques (coefficient 3) • Professional Unit 3: Waste treatment/valorization techniques (coefficient 4) • General Unit 1: French, History-Geography, civic education (coefficient 3) • General Unit 2: Mathematics, physical and chemical sciences (coefficient 2)
Certification and recognition	Certificate of Professional Competence, level 3 in France, Europass Digital Credentials Certificate upon the request
Targets	Job seekers with low level of education
Delivery Language/s	French

Modules of the training initiative

Module N.	Title of the Module/s	Learning/training hours (total)
MODULE 1	Cleaning and urban cleanliness techniques Environmental Health Prevention	105h theory + 140h internship 35h theory
MODULE 2	Waste collection techniques	91h theory + 140h internship
MODULE 3	Waste treatment/valorization techniques	105h theory + 140h internship
MODULE 4	French, History-Geography, civic education	105h
MODULE 5	Mathematics, physical and chemical sciences	70h
MODULE 6	Truck permit Passing of safe driving aptitude certificate First aid at work training	196h
MODULE 7	Tailored accompaniment	98h

Module's detailed description

MODULE 1	
Title of the module: Cleaning and urban cleanliness techniques & Environmental Health Prevention	
Main objectives of the module	
• Master the techniques of cleaning and urban cleanliness • Identify technical and professional expectations in this sector • Master and put into application the rules of hygiene and safety	
Contents/subjects of the module	
• Regulations • Description of the daily tasks in the targeted job • Manual cleaning techniques • Mechanized cleaning techniques • Hygiene and safety rules	
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.)*
Have a clear understanding of the main regulations and norms framing the sector of waste management	Respect main regulations and norms in waste management during internships
Describe manual cleaning techniques as well as mechanized cleaning techniques	Practice manual cleaning techniques as well as mechanized cleaning techniques
Have a clear understanding of the main hygiene and safety	Describe and respect main hygiene and safety rules and apply them daily

Achievements

Module: ***Cleaning and urban cleanliness techniques & Environmental Health Prevention***		
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 different cleaning techniques, manual and mechanize Relations with users	Carry out the cleaning of a street or other public space using appropriate cleaning techniques	Choosing and critiquing your I.P.E. (individual protection equipment) and work materials

MODULE 2	
Title of the module: Waste collection techniques	
Main objectives of the module	
• Same as Module 1 • Master the techniques of cleaning and urban cleanliness • Identify technical and professional expectations in this sector • Master and put into application the rules of hygiene and safety	
Contents/subjects of the module	
• Regulations • Different types of waste • Door-to-door collection • Voluntary drop-off point collection • The functioning of the waste collection centers	
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.)*
Have a clear understanding of the main regulations in waste management sector Know the main types of wastes produced in France Have a clear understanding of the process of a waste collection center	List and describe the main regulations framing the waste management sector Identify and differentiate the different types of wastes treated in collection centers Describe the different steps of the process in a waste collection center

Achievements

Module: *Waste collection techniques*		
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 different collection techniques; The different collection vehicles and containers.	Carry out a waste collection round in pairs; Explain what they are doing and why they are doing it.	Respecting safety rules during a collection round.

MODULE 3	
Title of the module: Waste treatment/valorization techniques	
Main objectives of the module	
• Same as Module 1 • Master the techniques of cleaning and urban cleanliness • Identify technical and professional expectations in this sector • Master and put into application the rules of hygiene and safety	
Contents/subjects of the module	
• Waste sorting techniques and the operation of sorting centers • Different ways of waste recovery • The 11 waste treatment channels in France	
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 that there are different sorting techniques according to the types of sorting centers Know the main waste treatment channels in France	Practice waste sorting techniques during internships Describe the different processes for waste recovery List and differentiate the main waste treatment channels in France

Achievements

Module: ***Waste treatment/valorization techniques***		
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 different techniques of waste separation; The advantages and disadvantages of different types of waste recovery.	Explain the functioning of a sorting centre; Explain the different waste recovery methods; Directing users at the waste disposal centre.	Sorting all types of waste.

MODULE 4	
Title of the module: French, History-Geography, civic education	
Main objectives of the module	
• Read, write and understand basic French in a professional environment • Have basic notions of History and Geography for general culture • Have basic notions of civic education in France	
Contents/subjects of the module	
• Writing exercises: resume, cover letters, small reports on company visits • Lectures and exercises on basic notions of History and Geography for general culture • Lectures and exercises on basic notions of civic education in France	
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.)*
Read, write, and understand French in a professional environment.	Express himself correctly (speaking and writing) Be well understood by others Respect others and hierarchy

Achievements

Module: ***French, History-Geography, civic education***		
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:***
General knowledge of French History- Geography and civic education	Exchange in French with his colleagues and employer Write professional documents (reports…)	Write summaries and make short oral summaries in French, History-Geography, civic education

MODULE 5	
Title of the module: Mathematics, physical and chemical sciences	
Main objectives of the module	
Have basic knowledge in math, physics, and chemistry	
Contents/subjects of the module	
• Math exercises • Theory on waste materials properties	
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.)*
Have a clear understanding of the different material properties found in waste management Know the basic rules to calculate distances and costs	Calculate distances, costs Differentiate different waste materials

Achievements

Module: ***Mathematics, physical and chemical sciences***		
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:***
General knowledge of Mathematics, physical and chemical sciences	Write professional documents (reports…)	To differentiate materials in waste management To calculate distances and costs

MODULE 6	
Title of the module: Passing of professional certificate and permit	
Main objectives of the module	
• Validation of the Truck permit • Validation of safe driving aptitude certificate • Validation of first aid at work training	
Contents/subjects of the module	
• Passing the truck permit • Passing the safe driving aptitude certificate • 2 days of training on first aid at work	
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 traffic regulations applied to trucks Know rules and instructions to drive specific engines Know the main gestures, information to collect and numbers to contact for first aid	Drive safely respecting traffic regulations applied to trucks Drive safely specific engines React as expected facing an incident needing first aid

Achievements

Module: ***Passing of professional certificate and permit***		
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:***
Specificity Highway Code for trucks	Have the right gestures and reflexes in case of first aid needed	Drive and use safely trucks and engines in a professional environment

MODULE 7	
Title of the module: Tailored accompaniment	
Main objectives of the module	
• Define learners' professional project • Identify potential employers • Apply to job offers	
Contents/subjects of the module	
• Writing of a resume • Writing of cover letters • Methods to search and identify potential employers • Methods to send applications • Methods to conduct a job interview	
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.)*
Identify key information in a CV and cover letter Identify and use the right networks for job search Have the right posture during a job interview	Write a resume and a cover letter in French without mistakes Identify relevant employers for his job search Pass several job interviews at the end of the training

Achievements

Module: *Tailored accompaniment*		
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:***
Professional attitudes and behavior	Write a resume and a cover letter tailored to a job offer/employer	Answer with relevant answers during a job interview

TICHE ACADEMY TRAINING OFFER - *INTRODUCTION ON SUSTAINABLE DEVELOPMENT, CIRCULAR ECONOMY AND CSR*

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Template for the TICHE Academy training offer's detailed description

General Description of the training initiative

Training initiative (title) *(ex. Expert in an eco-design for circular economy in the Text Title and fashion industries)*	Introduction on Sustainable Development, Circular Economy and CSR
EQF Level (if applicable)	None
Proficiency level *(foundation/basic, intermediate, advanced, high specialized level)*	Foundation/basic
Expected learning outcomes *(By the end of this course, the learners will acquire …….)*	By the end of this course, the learners will: • Understand the challenges of Sustainable Development • Distinguish between the notions of circular economy, social economy and CSR • Identify the measures and actions of CSR for companies • Identify the impact of CSR on performance management
Methodologies	• Small group discussion and collective restitution • Debate • Flipped pedagogy: learner search for and analyze information before collective synthesis • Videos • Quiz and exercises
Mode of Learning *(Blended, online, onsite)*	Onsite Possibility online
Assessment *(ex. test)*	• Individual quiz at the beginning of each module • Individual and group exercises on specific themes • Final test: mix of questions and small case study
Certification and recognition	Europass Digital Credentials Certificate upon the request
Targets	• Students in VET (professional Licence – 3 years after high school)

Modules of the training initiative

Module N.	Title of the Module/s	Learning/training hours (total)
MODULE 1	Introduction and definition of Sustainable Development	3.5
MODULE 2	Circular Economy vs Linear Economy	3.5
MODULE 3	CSR definition and methodology	3.5
MODULE 4	CSR in performance management	3.5
MODULE 5	Final test	3.5

Module's detailed description

MODULE 1	
Title of the module: Introduction and definition of Sustainable Development	
Main objectives of the module	
• Define what is sustainable development • Identify its main 3 pillars • Understand when and at what occasion such definition was shared internationally • Identify main challenges that we face considering the 3 pillars: economy, environment and social	
Contents/subjects of the module	

• Sustainable development, what is it?
  ○ Origins of sustainable development
• Compatibility between economy and sustainable development issues
  ○ Parallel between sustainable development and natural cycles (water, air, carbon…)
  ○ Human impacts, environmental & social issues
  ○ Perspectives given by sustainable development	

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.)*
Have a clear understanding of Sustainable Development, its definition, main pillar Have a clear understanding on the main human impacts Understand the necessity of a change through a sustainable development	Define sustainable development and share a common definition with his peers Explain main human impacts considering the 3 pillars of sustainable development

Achievements

Module: Introduction and definition of Sustainable Development		
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 definition of sustainable development The principal impacts of our conventional model on the environment, the economy and social aspects The main challenges faced by society including companies in environmental, social, economic fields	Understanding the systemic workings of the circular economy	Identifying the dynamics and players in the circular economy

MODULE 2	
Title of the module: Circular Economy vs Linear Economy	
Main objectives of the module	
• Define Linear Economy and Circular Economy • Compare Linear Economy and Circular Economy • Define the notion of Life cycle for a product or service • Identify the main pillars of Circular Economy and give concrete examples for each	
Contents/subjects of the module	
• Exercise using videos to compare Linear/ Circular Economy • Identification of the 7 pillars of Circular Economy • Search for concrete examples to illustrate each pillar • Exercise to identify the main steps of Life Cycle of a product • Exercise to position its own company's practices into Linear or Circular Economy • Identification of main laws and local politics on Circular Economy and potential impacts on companies' practices	
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.)*
Have a clear understanding of Circular Economy, its definition, main pillars Know key examples of circular economy in practice	Distinguish Linear Economy from Circular Economy Define both economies List the 7 pillars constituting Circular Economy Identify concrete examples of practices in Circular Economy Identify main laws, norms and local politics concerning Circular Economy that can influence companies' practices

Achievements

Module: Circular Economy vs Linear Economy		
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 definition of circular economy and linear economy The main pillars that constitute a circular economy and their transposition at national, regional scale The main laws, norms and politics linked to circular economy that can impact their company	Understanding the systemic workings of the linear and circular economy	Identifying the dynamics and players in the linear and circular economy

MODULE 3
Title of the module: CSR definition and methodology
Main objectives of the module
• Define the notion of CSR • Define stakeholders • Identify CSR strategy in a company • Briefly describe the norm ISO 26000 • Distinguish Greenwashing practices vs CSR practices • Identify main steps of a CSR approach in companies
Contents/subjects of the module
• Short debate on the notion of “responsibility” for companies • Search for a common definition of CSR and key words: voluntary approach, stakeholders, sustainable development, positive impacts… • Focus on stakeholders • Group exercise on the “ideal company” • Research information on the norm ISO 26000 • Examples of greenwashing practices vs real CSR engagement • Exercise on the identification of the main steps to implement a CSR approach • Focus on each step of the process • Collective exercise on impacts of CSR strategy

• Individual small case study • Main CSR Indicators

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.)*
Have a clear understanding of CSR, its definition Know key examples of CSR in practice Identify the main steps to implement a CSR Strategy Know that ISO 26000 can be a tool for CSR in companies	Define CSR List examples of concrete CSR practices in their companies Present the main steps to implement a CSR approach in a company

Achievements

Module: CSR definition and methodology		
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 definition of CSR The main steps that each company need to follow to implement of CSR approach The norm ISO 26000 is a tool for companies on CSR	Identify a CSR method to apply to a given context	Realize a basic diagnostic on CSR practices in their companies

MODULE 4	
Title of the module: CSR in performance management	
Main objectives of the module	
• Define a complete cost • Define externality and impact • Give examples of positive and negative externalities	
Contents/subjects of the module	
• Definition of complete costs • CSR as an investment more than a cost for the company • Exercise on positive and negative externalities • Difference between externality and impact • Synthesis on: CSR, a performance lever? • Short quiz on CSR	
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 benefits of a long-term CSR strategy for the company and its stakeholders Be aware of the notion of positive and negative externalities	Define the concept of externality and compare it to the definition of impact Identify relevant examples of CSR practices in their companies

Achievements

Module: CSR in performance 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:***
The definition of externality That implementing a long- term CSR strategy can have a positive impact on company's performance	Identify impacts and externalities of its own company	Realize a basic diagnostic on CSR practices in their companies

MODULE 5	
Title of the module: Final test	
Main objectives of the module	
• Evaluate the learner on all notions seen in modules 1, 2 and 3	
Contents/subjects of the module	
• Questions on definitions, examples of practices, key words, methodology • Case study with specific questions (example with smartphone manufacturer)	
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.)*
Evaluate his knowledge and comprehension of the training	Define and identify circular practices

Achievements

Module: Final test		
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 definition of circular dynamics	Identify impacts and externalities	Realize a basic diagnostic on CSR practices

TICHE ACADEMY TRAINING OFFER -
CERTIFICATE OF PROFESSIONAL QUALIFICATION
"OPERATOR OF MANUAL WASTE SORTING"

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Template for the TICHE Academy training offer's detailed description

General Description of the training initiative

Training initiative (title) *(ex. Expert in an eco-design for circular economy in the Tex Title and fashion industries)*	Certificate of Professional Qualification "Operator of manual waste sorting"
EQF Level (if applicable)	None
Proficiency level *(foundation/basic, intermediate, advanced, high specialized level)*	Basic
Expected learning outcomes *(By the end of this course, the learners will acquire …….)*	Under the responsibility of a team leader, the manual sorting operator carries out handling, reception, sorting, packaging and simple transformation of raw materials intended for recycling.
Methodologies	Alternating periods of classes in the center and immersions in companies or validation of acquired knowledge in companies.
Mode of Learning *(Blended, online, onsite)*	The totality of the interventions is done face to face, with a lot of verbal exchanges and oral expression.
Assessment *(ex. test)*	The CPQ being a recognition of know-how, the evaluation of these skills is done in the company by an external auditor.
Certification and recognition	CPQ, Europass Digital Credentials Certificate upon the request
Targets	Employees or job seekers wishing to have their know-how recognized.
Delivery Language/s	French.

Modules of the training initiative

Module N.	Title of the Module/s	Learning/training hours (total)
MODULE 1	Communication and Professional Environment	64 hours (adaptable)
MODULE 2	Quality, health, safety, environment	128 hours (adaptable)
MODULE 3	Products and production process	427 hours (adaptable)
MODULE 4	Personalized accompaniment	46 hours (adaptable)

Module's detailed description

MODULE 1	
Title of the module: Communication and professional environment	
Main objectives of the module	
• To have an overview of the professional world and of this sector of activity • Know how to search and analyze information • Know how to transmit information • Know the main elements of the regulations	
Contents/subjects of the module	
• MODULE 1: The job of Manual Sorting Operator and its professional environment (14h) • MODULE 2: Documentary resources and written communication (7h) • MODULE 3: Oral information transmission and professional relations (7h) • MODULE 4: Basics of environmental regulations (3h) • MODULE 5: Legal and regulatory environment of the field of activity (3h x 11 fields, i.e., 33h)	
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 codes and expectations of this professional environment, • Know the basics of labour law, • To have the basic reference points on waste regulations.	• Research companies in the sector, • Recognize basic labour law breaches in a company, • Define the different branches of the sector.

Achievements

Module: Communication and professional environment		
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 basics of waste regulations, Information that must be displayed regarding work rules.	Identify serious breaches of labour law in the company, Identify reliable companies that provide jobs Know how to contact the company of your choice.	Choosing a career path, a profession.

MODULE 2	
Title of the module: Quality, health, safety, environment	
Main objectives of the module	
• Know all the safety and hygiene rules necessary for any activity • To be able to be a force of proposal as regards safety • Integrate the traceability of interventions in a Quality approach	
Contents/subjects of the module	
• MODULE 1: General safety rules in companies (3h) • MODULE 2: Specific safety rules according to the activity sector (7 x 11 sectors, i.e. 77 hours) • MODULE 3: Organization and hygiene at the workplace (3h) • MODULE 4: Working conditions and health and safety (7h) • MODULE 5: The basics of the quality approach (3h) • MODULE 6: Quality control; Quality applied to the activity sector (35h)	
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.)*
To know the fundamental principles of safety in the workplace; To know the 6 basic Personal Protective Equipment and their characteristics; To know the 9 product danger pictograms.	Identify safety violations in any circumstances; To be a force of proposal in the field of Health and Safety in his team.

Achievements

Module: Quality, health, safety, environment		
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:***

Basic knowledge of health, safety and environment regulations	Present a list of collective and individual protective equipment; List the fundamental principles of safety in the workplace.	Ensure your own safety; Notify his/her manager of any breach of safety; Ensure cleanliness at the end of the day.

MODULE 3	
Title of the module: Products and production process	
Main objectives of the module	
• To master the different types of waste • Have an overview of the different waste treatment methods • Know the 11-waste sorting and recovery methods • Master the techniques of manual and automated waste sorting • Know the techniques of packaging, storage and removal in a sorting center	
Contents/subjects of the module	
• MODULE 1: General information on materials and products • MODULE 2: Specific characteristics of materials and products by sector (ferrous and non-ferrous metals; end-of-life vehicles; wood and pallets; paper and cardboard; glass; plastics; texTitles; tires; green waste; WEEE; building waste • MODULE 3: Basics of waste treatment and recovery processes and techniques • MODULE 4: Professional manual sorting techniques • MODULE 5: Professional reception techniques • MODULE 6: Professional techniques of preparation, transformation and treatment of waste • MODULE 7: Professional techniques of packaging and storage • MODULE 8: Tools, installation and maintenance	
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.)*
Master the technical vocabulary inherent in this sector of activity; Have a global vision of the life of a waste product; Know how a sorting center works.	Recognize the different materials that make up waste (=the nature of waste); Present all the ways of recovering waste.

Achievements

Module: Products and production process		
Knowledge *(Means the body of facts, principles, theories*	***Skills*** *(Means the ability to apply knowledge and use*	***Competencies*** *(Means the proven ability to use knowledge,*

and practices that is related to a field of work or study. It is described as theoretical and/or factual knowledge)	*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)*	*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 different ways of packaging waste.	Define the nature and fate of all types of waste.	To sort waste of any kind manually; Describe the process of a mechanized and manual sorting center.

MODULE 4	
Title of the module: Personalized accompaniment	
Main objectives of the module	
• Define your professional project • Work on personal shortcomings • Prepare for employment	
Contents/subjects of the module	
• Reflection on the personal path • Orientation of internship choices • Assistance in finding an internship and professional project • Job search techniques (digital CV, interview presentation)	
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.)*
Identify key information in a CV and cover letter Identify and use the right networks for job search Have the right posture during a job interview	Write a resume and a cover letter in French without mistakes Identify relevant employers for his job search Pass several job interviews at the end of the training

Achievements

Module: Personalized accompaniment		
Knowledge	***Skills***	***Competencies***
(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	*(Means the ability to apply knowledge and use know-how to complete tasks and solve problems. They are described as cognitive*	*(Means the proven ability to use knowledge, skills and personal, social and methodological abilities in work or study situations and in*

factual knowledge)	*(logical, intuitive, and creative thinking) or practical (involving manual dexterity and the use of methods, materials, tools and instruments)*	*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 Basics of Computer and Digital Techniques	Preparing for and attending a job interview; Writing a CV and a covering letter.	Explain your skills and knowledge.

TICHE ACADEMY TRAINING OFFER -
COLLECTIVE OPERATIONAL PREPARATION FOR EMPLOYMENT (POEC - PRÉPARATION OPÉRATIONNELLE À L'EMPLOI COLLECTIVE IN FRENCH) WASTE MANAGEMENT AND VALORISATION

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Template for the TICHE Academy training offer's detailed description

General Description of the training initiative

Training initiative (title) *(ex. Expert in an eco-design for circular economy in the texTitle and fashion industries)*	Collective operational preparation for employment (POEC - Préparation opérationnelle à l'emploi collective in french) WASTE MANAGEMENT AND VALORISATION 392h total From 24/04/2023 to 13/07/2023
EQF Level (if applicable)	None
Proficiency level *(foundation/basic, intermediate, advanced, high specialized level)*	Public: Job seekers Pre-requisite: understand spoken French
Expected learning outcomes *(By the end of this course, the learners will acquire …….)*	FIXED-TERM CONTRACT / PERMANENT CONTRACT / PROFESSIONALIZATION CONTRACT / APPRENTICESHIP CONTRACT
Methodologies	Alternating face-to-face teaching, immersion in companies, field surveys, group soft-skills challenges (Ze Game method).
Mode of Learning *(Blended, online, onsite)*	In class, visit of companies and technical platforms, internship in a company
Assessment *(ex. test)*	We will not use summative evaluation (grade out of 20), but formative evaluation (measurement of the acquisition of expected skills), at mid-term and at the end of the course.
Certification and recognition	Europass Digital Credentials Certificate upon the request
Targets	Job seekers
Delivery Language/s	French

Modules of the training initiative

Module N.	Title of the Module/s	Learning/training hours (total)
MODULE 1	Expertise in waste management and recovery (hard skills): urban cleaning and sanitation, collection, sorting and recovery of solid waste, sanitation.	147 hours
MODULE 2	Challenges and creation of a SOFT SKILLS CV	70 hours
MODULE 3	SPORT and SOFT SKILLS	70 hours at the beginning of the course and 35 hours spread out over the rest of the course.
MODULE 4	Immersion in a company	2 X 35 hours

Module's detailed description

MODULE 1	
Title of the module: Expertise in waste management and recovery	
Main objectives of the module	
• Know the various trades of solid and liquid waste management. • Know the general functioning and the main techniques of the following fields: Urban Cleaning, Collection, Treatment and Valorization of solid waste, Wastewater Treatment.	
Contents/subjects of the module	
• The main points of regulation • The different sectors of activity • The different types of pollution and waste • Techniques of cleaning, collection, sorting and recovery of solid waste • Wastewater treatment processes	
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.)*
Knowing where you want to go, in direct employment or through further training.	Master the professional vocabulary and simple techniques of the different waste sectors.

Achievements

Module: Expertise in waste management and recovery		
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 vocabulary, regulations, and techniques: Cleaning, Collection, Sorting and recovery of waste, General notions of the functioning of wastewater treatment.	Recognize the different types of waste, Know the fate and destination of all types of waste, Define the method of recovery of any type of waste, Know what job they want to do.	Passing a job interview by being technically credible, Find the structures that can hire him/her.

MODULE 2
Title of the module: Challenges and creation of a SOFT SKILLS CV
Main objectives of the module
• Investigate soft skills. • Develop effective communication skills (spoken and written). • Develop effective presentation skills. • Become self-confident individuals by mastering interpersonal skills, team management skills, and leadership skills. • Develop all-round personalities with a mature outlook to function effectively in different circumstances. • Take part effectively in various selection procedures adopted by the recruiters.
Contents/subjects of the module
• Challenges are used to determine what soft skills you master to mention them in your resume. • Soft skills such as communication, teamwork, creativity, adaptability, problem-solving, work ethic, critical thinking and conflict management are developed and honed over time.

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.)*
Have a soft skill resume. Explain his strengths giving examples. Interact with each other. Be more confident.	Master Soft skills.

Achievements

Module: Challenges and creation of a SOFT SKILLS CV		
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:***
Good communication and interpersonal skills, Leadership,	How well you interact and treat others is crucial for career success. Trust develops through Positive interactions and	Soft skills training is to improve soft skills, the person must be open to feedback and make decisions to change behaviors.

• Problem solving, • Work ethic, • Teamwork. These are characteristics that can be carried over to any position.	relationships, and productivity increases in environments where soft skills flourish.	Training can provide tips and strategies for developing better practices, such as active listening and empathizing with others. And practicing can strengthen areas where deficiencies exist.

MODULE 3 *(not produced by IRFEDD)*	
Title of the module: SPORT and SOFT SKILLS	
Main objectives of the module	
• Remobilizing through sport • Knowing the types of jobs and professional practices and how they are changing	
Contents/subjects of the module	
• General physical conditions • Operationality at work • Managing emotions, conflict and stress • Self-knowledge • Mental preparation • Sports practice	
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.)*
Managing your professional practice Maintaining a high level of fitness for professional practice	Job surveys in the field Group soft-skills challenges Practicing sport

Achievements

Module: SPORT and SOFT SKILLS		
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:***

Knowing the types of jobs and professional practices and how they are changing	Managing your professional practice	Maintaining a high level of fitness for professional practice

MODULE 4	
Title of the module: Immersion in a company	
Main objectives of the module	
• Investigate information and communicate. • Identify waste and products to be sorted. • Understand process for garbage collection. • Perform waste collection and waste manual sort. • Be familiar with recycle different garbage materials. • Sewage treatment. • Environmental protection.	
Contents/subjects of the module	
An immersion period is a period during which a new employee becomes familiar with a company's culture, values, processes, and operations. The purpose of an immersion period is to help the new employee quickly acclimate to the company and their new role, so that they can become productive and contribute to the organization's success as soon as possible. During an immersion period, the new employee may have the opportunity to meet with coworkers, supervisors, and other stakeholders, to gain a better understanding of the company's expectations, workflows, and communication channels. By taking the time to properly onboard new employees, companies can improve retention rates, increase employee engagement, and foster a positive work environment.	
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.)*
• Intellectual skills: This type of learning outcome enables the learner to understand rules, concepts, or procedures. • Cognitive strategy: In this type, the learner uses his or her thinking abilities to make strategies and organize, learn, think, and behave. • Verbal information. • Motor skills. • Attitude.	Identify: • The 5 waste techniques: refuse, reduce, reuse, repurpose, and then recycle. • Recycling Policy: (How does the company deal with the different types of residential waste? Do they offer assorted bins or mixed bins for disposal? How do they handle non-recyclable waste?) • Experience. • Company Capacity to handle the volume of waste production in an area. • Services offered. • Customer Service.

Achievements

Module: *Title*		
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:***
Students receive a “behind the scenes” look at organizations and the variety of careers that exist within them.	Work immersion enables the students to acquire and develop the skills of teamwork, communication, attendance and punctuality, productivity and resilience, initiative and proactivity, judgment and decision-making, dependability and reliability, attitude, and professionalism.	Specifically, the students can: gain relevant and practical skills under the guidance of experts and workers; appreciate the importance and application of the principles and theories taught in school; enhance their technical knowledge and skills; enrich their skills in communications and human relations; develop good work habits, attitudes, appreciation, and respect for work. These prepare them to meet the needs and challenges of employment or higher education.

TICHE ACADEMY TRAINING OFFER -
A JOURNEY INTO THE CIRCULAR ECONOMY MODEL

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Template for the TICHE Academy training offer's detailed description

General Description of the training initiative

Training initiative (title) *(ex. Expert in an eco-design for circular economy in the text Title and fashion industries)*	A journey into the Circular Economy model
EQF Level (if applicable)	None
Proficiency level *(foundation/basic, intermediate, advanced, high specialized level)*	Basic, Intermediate
Expected learning outcomes *(By the end of this course, the learners will acquire …….)*	The expected learning outcomes are the following: • Understanding the concept of circular economy and its differences from the linear economic model. • Identifying the strategies and characteristics of the circular economy model, particularly its focus on maximizing the value of raw materials within the production system. • Evaluating the limitations of the current circular economy model and reflecting on its ability to address environmental pressures and social inequalities inherent in the current economic development model. • Recognizing the roles of various stakeholders, including policymakers, communities, and businesses, in the development and implementation of circular economy practices at the urban level. • Analyzing the responsibilities and actions of policymakers in stimulating demand, supply, and infrastructure for the circular economy. • Assessing the role of communities in fostering bottom-up approaches, knowledge creation, and dissemination of best practices for circular economy initiatives. • Understanding the characteristics of businesses oriented towards circular models, including shared consumption and production, and the potential shifts in company purpose towards community benefit rather than solely profit maximization. • Summarizing the roles of stakeholders and identifying barriers to the development and implementation of circular economy models at the urban level.
Methodologies	The work is the result of the research work of the circular economy department of the Wuppertal Institute and the ideas are expressed according to the knowledge of the researchers who realized the videos: Stefano Turrini and Giacomo Sebis
Mode of Learning *(Blended, online, onsite)*	Online

Assessment *(ex. test)*	Test or equivalent assessment
Certification and recognition	Europass Digital Credentials, upon the request
Targets	Students, Youngsters and Adults interested in the basics of Circular Economy Modell
Delivery Language/s	English

Modules of the training initiative

Module N.	Title of the Module/s	Learning/training hours (total)
MODULE 1	Video Lessons on the basis of Circular Economy model	8 Hours

Module's detailed description

MODULE 1
Title of the module: Video Lessons on the basis of Circular Economy model
Main objectives of the module
The course denominated "A journey into the Circular Economy model" contains seven lessons recorded, where it offers a detailed overview of the circular economy model. This new model, in recent years has received a lot of attention on the one hand, thanks to its ability to maximise the value of resources and materials present within the production system and on the other, by reducing the ecological impact compared to the linear economy model. During the course, three stakeholders responsible for the implementation of the circular economy model at the urban level are analysed: the policy-maker, the communities and the businesses. These actors play different roles and their interaction and building of a common vision, depends on the success in the development of the circular economy model at the urban level. However, the circular economy model appears to have important limitations both in terms of the physical characteristics of the material and the low percentage of circular rate materials currently available. Therefore, given the urgency of a transition to a sustainable economic development model, this cannot be considered as the only solution to the excessive ecological pressure and social inequality of the current system of economic development based on infinite economic growth. Nevertheless, the circular economy model plays a very important role in the ecological transition and for this reason its spread and implementation must be favored by all stakeholders.
Contents/subjects of the module

The Training initiative consist of 7 Video Lessons:

Video 1: Learn circular economy with TICHE - Introduction
This video offers an introduction to the work area of the Wuppertal Institute, the organization responsible for making the video. Subsequently, a description is also offered on the authors of the videos: Stefano Turrini and Giacomo Sebis. Finally, the objective of the TICHE project is described.

Video 2: Learn circular economy with TICHE - Overview on Circular Economy model
This video focuses on the differences between the linear and circular economy models. Here, on the one hand, it shows what the characteristics of the current linear economic model of the current economy are, based on the "take-make-dispose" strategy. On the other hand, the characteristics and strategies on which the circular economic model is based are described, i.e. on the maximisation of the value of the raw materials that are introduced into the production system.

Video 3: Learn circular economy with TICHE - Circular economy model and explore the future economic system
In this video, a more critical explanation of the Circular Economy model is offered, with the aim of completing the overview provided by Giacomo Sebis in the previous video. In fact, the limits of the circular model present today are explained, and a space for reflection is offered regarding the question whether the circular economy model alone can represent the solution to the environmental pressure and strong social inequalities present in the current model of economic development.

Video 4: Learn circular economy with TICHE - Roles of different stakeholders: Policy-maker
This video introduces the importance of the action of different stakeholders for the development and implementation of a circular model at an urban level. The first stakeholder analysed is the policy-maker, responsible for the top-down approach and in charge of three main phases: stimulating the demand, stimulating the supply and building the infrastructure to facilitate the development of a circular model.

Video 5: Learn circular economy with TICHE - Roles of different stakeholders: Communities
The second stakeholder analysis is the communities, responsible for the bottom-up approach. These are organisations that aim to bring together the different stakeholders involved in the development of the circular economy model on city level. In addition, they are responsible for the creation of knowledge and for the dissemination of best practices.

Video 6: Learn circular economy with TICHE - Roles of different stakeholders: Communities
The third stakeholder analysis is the businesses. Here, on the one hand, the characteristics of a business oriented towards a circular model are discussed, through shared consumption and production where the value of the raw materials already present in the production system is maximised. On the other hand, some of the most controversial elements are discussed, such as how the purpose of a company can changes, when the objective is not to maximise profits for investors but to maximise benefits for the community where it operates.

Video 7: Learn circular economy with TICHE - Conclusion
The last video summarises the different roles of the stakeholders analysed in the previous videos and discusses some final remarks. Furthermore, it offers an overview of what are the main barriers that stakeholders encounter during the development and implementation of a circular model at the urban level.

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.)*

1. Understand the concept of circular economy and distinguish it from the linear economic model. 2. Identify the strategies and characteristics of the circular economy model, with a focus on maximizing the value of raw materials in the production system. 3. Evaluate the limitations of the current circular economy model and its potential to address environmental pressures and social inequalities inherent in the current economic development model. 4. Recognize the roles of policymakers, communities, and businesses in the development and implementation of circular economy practices at the urban level. 5. Analyze the responsibilities and actions of policymakers in stimulating demand, supply, and infrastructure for the circular economy. 6. Assess the role of communities in promoting bottom-up approaches, creating knowledge, and disseminating best practices for circular economy initiatives. 7. Understand the characteristics of businesses oriented towards circular models, including shared consumption and production, and the shift in company purpose towards community benefit. 8. Summarize the roles of stakeholders and identify barriers to the development and implementation of circular economy models at the urban level.	1. Define circular economy and articulate its differences from the linear economic model. 2. Provide examples of strategies and characteristics of the circular economy model, demonstrating an understanding of how it maximizes the value of raw materials. 3. Critically analyze the limitations of the current circular economy model and its potential to address environmental and social challenges. 4. Describe the specific roles and contributions of policymakers, communities, and businesses in advancing circular economy practices. 5. Explain the key features of businesses oriented towards circular models and discuss their motivations for community benefit. 6. Summarize stakeholder roles in circular economy implementation and identify obstacles to its adoption at the urban level.

Achievements

Module: ***A journey into the Circular Economy model***		
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:***
Understanding of circular economy concepts, including its definition, principles, and historical development. Familiarity with the differences between circular and linear	Ability to apply theoretical knowledge of circular economy principles to real- world scenarios and problems. Critical thinking skills in assessing the effectiveness and implications of circular economy	Adaptability in responding to evolving challenges and opportunities in the field of circular economy. Commitment to lifelong

economic models. Knowledge of strategies and characteristics of circular economy models, such as resource efficiency, waste minimization, and product life extension. Awareness of the limitations of current circular economy models and their potential to address environmental and social challenges. Understanding of the roles and responsibilities of various stakeholders in advancing circular economy practices, including policymakers, communities, and businesses.	strategies. Research skills to gather relevant information and data on circular economy practices and stakeholders.	

TICHE ACADEMY TRAINING OFFER -
PROJECT MANAGEMENT FOR ENVIRONMENTAL SUSTAINABILITY AND CIRCULAR ECONOMY

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Template for the TICHE Academy training offer's detailed description

General Description of the training initiative

Training initiative (title) *(ex. Expert in an eco-design for circular economy in the texTitle and fashion industries)*	**GREEN COMP** Project management for environmental sustainability and circular economy
EQF Level (if applicable)	Not applicable
Proficiency level *(foundation/basic, intermediate, advanced, high specialized level)*	Intermediate
Expected learning outcomes *(By the end of this course, the learners will acquire …….)*	The training offer made available has the aim of allowing graduates to enhance and enrich the knowledge and skills acquired as a result of their university career to act, in competitions and work organizations, on their specific training curricula by adopting and transferring new approaches and new knowledge necessary to complete and integrate "sectoral" knowledge and skills to activate and enable new consumption models, new community models and new business models and new markets to encourage an acceleration of the positive ecological transition.
Methodologies	Lessons, exercises, teamwork, brainstorming, case studies
Mode of Learning *(Blended, online, onsite)*	Online
Assessment *(ex. test)*	Test or equivalent assessment
Certification and recognition	Certificate of attendance, Europass Digital Credentials, upon the request
Targets	New graduates
Delivery Language/s	Italian

Modules of the training initiative

Module N.	Title of the Module/s	Learning/training hours (total)
MODULE 1	Project management per la sostenibilità ambientale e l'economia circolare/ Project management for environmental sustainability and circular economy	80 Hours

Module's detailed description

MODULE 1	
Title of the module: Project management for environmental sustainability and circular economy	
Main objectives of the module	
The project aims to provide essential management and managerial knowledge and skills to contribute to implementation of interventions to improve environmental sustainability and encourage the transition towards the circular economy.	
Contents/subjects of the module	
- Identify and correctly read the economic, environmental, and social sustainability indicators. - Apply project management techniques to the management of change projects, with particular reference to those connected to environmental/circular innovations; - Set a project budget; - Identify and evaluate the factors that can compromise the success of a project and implement procedures to avoid or minimize their impact through Risk Analysis and Risk management techniques and tools. - Apply project financing techniques and tools; - Predict and manage financial risks and identify procedures to avoid or minimize their impact. - Use tools and techniques aimed at the correct management and monitoring of a project; - Apply Project Sustainability Management techniques, focusing project planning on economic, social and environmental impact criteria	
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 inpractice.)*	**Assessment criteria:** **The learner can** *(ex. Define the concept of CE and provide relevant examples. Identify relevant supporting concepts related to CE.)*
Overall introduction on how to manage a project in the field of conception, management, monitoring and evaluation	Acquire skills in the field of conception, management, monitoring, evaluation of projects for the diffusion of a culture of sustainability, for the adoption of approaches and methodologies that favor the adoption of the circular economy paradigm and support the transition to an economy oriented towards sustainable production (from an economic, environmental and social point of view) and rational use of resources, to reduce the environmental impact of industrial production processes.

Achievements

Module: ***Title***		
Knowledge	***Skills***	***Competencies***

(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)	*(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)*	*(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:***
Understanding of circular economy concepts, including its definition, principles, and project management in the field of sustainability. Familiarity with the differences between circular and linear economic models.	Ability to apply theoretical knowledge of project management principles	Adaptability in responding to evolving challenges and opportunities in the field of circular economy.

TICHE ACADEMY TRAINING OFFER -
NEW BUSINESS MODELS AND NEW TECHNOLOGIES SUPPORTING THE TRANSITION TO CIRCULAR ECONOMY

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Template for the TICHE Academy training offer's detailed description

General Description of the training initiative

Training initiative (title) *(ex. Expert in an eco-design for circular economy in the text Title and fashion industries)*	**GREEN COMP-** New business models and new technologies supporting the transition to Circular Economy
EQF Level (if applicable)	Not applicable
Proficiency level *(foundation/basic, intermediate, advanced, high specialized level)*	Foundation/basic
Expected learning outcomes *(By the end of this course, the learners will acquire …….)*	The training offer made available has the aim of allowing graduates to enhance and enrich the knowledge and skills acquired as a result of their university career to act, in competitions and work organizations, on their specific training curricula by adopting and transferring new approaches and new knowledge necessary to complete and integrate "sectoral" knowledge and skills to activate and enable new consumption models, new community models and new business models and new markets to encourage an acceleration of the positive ecological transition.
Methodologies	Lessons, teamwork, exercises, case studies
Mode of Learning *(Blended, online, onsite)*	Online
Assessment *(ex. test)*	Test or equivalent assessment
Certification and recognition	Certificate of attendance, Europass Digital Credentials, upon the request
Targets	New graduates
Delivery Language/s	Italian

Modules of the training initiative

Module N.	Title of the Module/s	Learning/training hours (total)
MODULE 1	Nuovi business model e nuove tecnologie a supporto dell'economia circolare/ New business models and new technologies supporting the transition to Circular Economy	60 Hours

Module's detailed description

MODULE 1	
Title of the module: New business models and new technologies supporting the transition to Circular Economy	
Main objectives of the module	
The course aims to give an overall introduction into the circular economy value chain and relate circular economy practices to supply chains as well as provide some first basic steps on how circular economy principles can be implemented into new business models.	
Contents/subjects of the module	
• analyze business models and bring them to circular conversion; • understand the concept of Carbon footprint and Carbon neutrality • know the LCA approach in product / process evaluation; • know the fundamentals of eco-design; • Understanding the application of Industry 4.0 systems for the implementation of the Circular Economy and develop a broad and strategic vision that allows you to evaluate the potential of 4.0 technologies; • Know the practices for involving stakeholders and engagement in terms of industrial symbiosis; • Define specific improvement plans and establish measurable objectives, with concrete actions to detect the circularity of input and consumption of materials in production cycles; • Optimize the management of waste and industrial waste, knowing the management criteria in order to initiate recovery and reuse actions, with a focus on critical raw materials • Energy valorization of waste and waste	
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.)*
Overall introduction on how to manage new business models and how to implement them using circular economy	Analyze a business model and evaluate how to transform it into a circular business model with the help of new technologies

Achievements

Module: ***New business models and new technologies supporting the transition to Circular Economy***		
Knowledge *(Means the body of facts, principles, theories*	***Skills*** *(Means the ability to apply knowledge and use*	***Competencies*** *(Means the proven ability to use knowledge,*

and practices that is related to a field of work or study. It is described as theoretical and/or factual knowledge)	*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)*	*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:***
Understanding of circular economy concepts, including its definition, principles, and historical development. Familiarity with the differences between circular and linear economic models. Knowledge of strategies and characteristics of circular economy models, such as resource efficiency, waste minimization, and product life extension.	Apply theoretical knowledge of circular economy principles to real-world scenarios and problems. Critical thinking skills in assessing the effectiveness and implications of circular economy strategies.	Adaptability in responding to evolving challenges and opportunities in the field of circular economy.

TICHE ACADEMY TRAINING OFFER -

WASTE-TO-ENERGY: A BRIEF REVIEW OF ACTUAL MATURE TECHNOLOGIES

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Template for the TICHE Academy training offer's detailed description

General Description of the training initiative

Training initiative (title) *(ex. Expert in an eco-design for circular economy in the text Title and fashion industries)*	Waste-to-energy: a brief review of actual mature technologies
EQF Level (if applicable)	None
Proficiency level *(foundation/basic, intermediate, advanced, high specialized level)*	Basic
Expected learning outcomes *(By the end of this course, the learners will acquire …….)*	By the end of this course on energy recovery from wastes within the circular economy framework, learners will acquire a comprehensive understanding of waste management principles, particularly focusing on waste hierarchy and its role in promoting sustainable practices. They will gain insights into the waste-to-energy supply chain, including waste treatment, biofuel production technologies, and energy utilization, enabling them to identify opportunities for converting waste into valuable energy resources. Furthermore, learners will develop critical thinking skills to assess the effectiveness of waste recovery strategies and evaluate biofuel production methods based on efficiency and environmental impact. They will also explore global perspectives on waste management, gaining awareness of international approaches and policies.
Methodologies	Lessons, case studies
Mode of Learning *(Blended, online, onsite)*	Online
Assessment *(ex. test)*	Test or equivalent assessment
Certification and recognition	Certificate of attendance, Europass Digital Credentials, upon the request
Targets	The target audience are circular economy novices, undergraduates and students that are interested in gaining some introductory knowledge about energy recovery from wastes and applied circularity and receive an overview about potential use cases.
Delivery Language/s	English

Modules of the training initiative

Module N.	Title of the Module/s	Learning/training hours (total)

MODULE 1	Waste-to-energy: a brief review of actual mature technologies	1 Hour

Module's detailed description

MODULE 1	
Title of the module: Waste-to-energy: a brief review of actual mature technologies	
Main objectives of the module	
Openly available educational offering to international and global audience to provide basic circular economy knowledge and showcase the efforts of the TICHE initiative.	
Contents/subjects of the module	
The video lesson deals with the energy recovery from wastes. The description starts from the waste recovery as a part of the EU waste hierarchy which has been theorized to drive the action that has to be made for waste management. Then, the waste-to-energy supply chain is presented in its three main parts: production and treatment of wastes, biofuel production technologies and energy exploitation by means of energy systems and biofuel users (such as mobility).	
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 waste hierarchy and its role in waste management. Explain the components of the waste-to- energy supply chain. Identify various technologies used in biofuel production. Discuss global perspectives on waste management and energy recovery. Apply critical thinking to assess the effectiveness of waste recovery strategies.	Describe the waste hierarchy model and explain its significance in sustainable waste practices. Diagram the waste-to-energy supply chain, labeling its main parts and their interconnections. Evaluate case studies or scenarios involving energy exploitation using biofuels for mobility.

Achievements

Module: Waste-to-energy: a brief review of actual mature technologies		
Knowledge	***Skills***	***Competencies***
(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)	*(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)*	*(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:***
Waste hierarchy and its role in waste management Waste-to-energy supply chain Production and treatment of wastes Biofuel production technologies Energy exploitation through biofuel users Global perspectives on waste management	Analytical skills Critical thinking Technical knowledge Communication skills	Ability to analyze and evaluate waste recovery processes Communication skills to explain energy recovery concepts Adaptability in applying waste- to-energy strategies Continuous learning to stay updated on energy recovery Responsibility in promoting sustainable waste practices

TICHE ACADEMY TRAINING OFFER -
CIRCULAR ECONOMY IN A NUTSHELL (PART 1 & 2) – EDUCATIONAL VIDEO SERIES

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Template for the TICHE Academy training offer's detailed description

General Description of the training initiative

Training initiative (title) *(ex. Expert in an eco-design for circular economy in the text Title and fashion industries)*	Circular Economy in a Nutshell (Part 1 & 2) – Educational Video Series
EQF Level (if applicable)	None
Proficiency level *(foundation/basic, intermediate, advanced, high specialized level)*	Basic
Expected learning outcomes *(By the end of this course, the learners will acquire …….)*	The main training modules are designed to cover key aspects of circular economy: **Module 1: Circular Economy in a Nutshell - Part 1: Revolutionizing Supply Chains** This module provides a comprehensive overview of circular economy concepts, focusing on how they transform supply chains to be more resilient and future-proof. Learners will gain a deep understanding of circular economy principles and their significance in sustainable business strategies. **Module 2: Circular Economy in a Nutshell - Part 2: Circularity in Action – Managing Circular Projects** In this module, learners will explore practical applications of circular economy principles in project management. They will learn how to implement circularity in project design, production, and end-of-life phases, contributing to the adoption of circular practices in industrial settings. **Expected Learning Outcomes:** By engaging with this course, learners will acquire: • A comprehensive understanding of circular economy concepts, including the circular value chain and its distinction from linear economic models. • Knowledge of how circular economy practices can be integrated into supply chain management to enhance resilience and sustainability. • Awareness of available tools and guidance for implementing circular economy principles in project management and industrial processes. • The ability to identify opportunities for applying circular practices within their professional contexts. • Skills in managing circular projects, including considerations for design, production, and end-of-life phases aligned with circularity principles. • Exposure to international perspectives on circular economy practices, contributing to a broader understanding of global sustainability efforts. • Capability to evaluate and respond to the demand for circular economy education and initiatives in their respective industries.
Methodologies	Lessons, case studies

Mode of Learning *(Blended, online, onsite)*	Online
Assessment *(ex. test)*	Test or equivalent assessment
Certification and recognition	Certificate of attendance, Europass Digital Credentials, upon the request
Targets	The target audience are circular economy novices, undergraduates and students that are interested in gaining some introductory knowledge about applied circularity and receive an overview about potential use cases.
Delivery Language/s	English

Modules of the training initiative

Module N.	Title of the Module/s	Learning/training hours (total)
MODULE 1	Circular Economy in a Nutshell (Part 1 & 2) – Educational Video Series	3 Hours

Module's detailed description

MODULE 1	
Title of the module: Circular Economy in a Nutshell (Part 1 & 2) – Educational Video Series	
Main objectives of the module	
The project's aim to develop educational video content about circular economy basics and the application in industrial ecosystems. The content was developed to be published online and serve as an educational offering to circular economy novices as well as showcase partly the efforts that the TICHE project consortium is pursuing in terms of knowledge dissemination focusing on an international audience. Furthermore, the project will test the demand for online video content in circular economy education.	
Contents/subjects of the module	
The produced videos aim to give an overall introduction into the circular economy value chain and relate circular economy practices to supply chains as well as provide some first basic steps on how circular economy principles can be implemented into project management. The objective is to introduce a set of basic circularity principles and provide an overview about available tools and guidance to start engaging deeper in the topic. **Main training block/modules:** • Circular Economy in a Nutshell - Part 1: How the Circular Economy revolutionizes resilient supply chains and future-proof strategies? • Circular Economy in a Nutshell - Part 2: Circularity in Action – Managing circular projects	
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*	**Assessment criteria:** **The learner can** *(ex. Define the concept of CE and provide relevant examples. Identify relevant supporting concepts related to CE.)*

of CE inpractice.)	
Understand the fundamental principles of circular economy and its value chain. Apply circular economy principles to supply chain management for enhanced sustainability and resilience. Identify tools and resources available for implementing circular economy practices in project management. Recognize opportunities for integrating circular practices into industrial processes. Evaluate global perspectives on circular economy practices and their impact on industrial ecosystems. Assess the demand for circular economy education and initiatives within professional contexts.	Demonstrate knowledge of circular economy concepts and describe how they differ from linear economic models in a written assessment or quiz. Analyze a given supply chain scenario and propose circular economy strategies to optimize resource use and reduce waste. Present a case study or scenario and identify potential areas for applying circular economy concepts to improve resource efficiency. Write a reflective essay discussing the international implications of circular economy adoption based on research and case studies.

Achievements

Module: Circular Economy in a Nutshell (Part 1 & 2) – Educational Video Series		
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:***
Principles and theories of circular economy Concepts of circular value chain Tools and resources for circular economy International perspectives on circular economy Circular economy practices in supply chain Circular design principles Waste management strategies	Analytical thinking Problem-solving Critical thinking	Ability to integrate circular economy principles into strategic decision- making for sustainability Demonstrate responsibility in promoting circular economy practices within professional contexts Continuous learning and adaptation to advancements in circular economy practices

TICHE ACADEMY TRAINING OFFER -
FOUNDATIONS OF GOOD DESIGN – EDUCATIONAL VIDEO SERIES

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TICHE Academy training offer's detailed description

General Description of the training initiative

Training initiative (title) *(ex. Expert in an eco-design for circular economy in the text Title and fashion industries)*	Foundations of Good Design
EQF Level (if applicable)	None
Proficiency level *(foundation/basic, intermediate, advanced, high specialized level)*	Basic introduction
Expected learning outcomes *(By the end of this course, the learners will acquire …….)*	Participants will be introduced to key aspects of anois's Foundations of Good Design, including the need to take a holistic, systems and strategic approach that aligns key Sustainability criteria for planet and people. The pilot will enable participants to lay the foundations for incorporating many different criteria into their design process and design briefs. These can be used to differentiate between different aspects of Good Design, including, Designing for Nature, Humans and Equitability, Circular Design and Regenerative Design, as well as Sufficiency and Future proofing by Design.
Methodologies	An innovative series of 8 short videos will be developed and delivered. This innovative and flexible approach will ensure longevity of the pilot following completion of the project. These short videos have been developed to complement the alternative pilots delivered by project partners, which include long form videos, blended learning and formal educational programs. Additional videos can be added in the future, as each of the Seven Good Design Principle can be explored individually through additional short videos which can be developed and released at a later stage, targeting areas of high demand. By releasing the eight videos, anois will gain insight into the suitability and interest in this new training delivery approach. Especially when many people have limited attention spans and limited time to take part in formalized or long form training programs.
Mode of Learning *(Blended, online, onsite)*	Online
Assessment *(ex. test)*	Test or equivalent assessment
Certification and recognition	Certificate of attendance, Europass Digital Credentials, upon the request
Targets	The course will be open to everyone with an interest in Design, sustainability, Circular Economy etc.
Delivery Language/s	English

Modules of the training initiative

Module N.	Title of the Module/s	Learning/training hours (total)
MODULE 1	Foundations of Good Design	1 Hour

Module's detailed description

MODULE 1	
Title of the module: Foundations of Good Design	
Main objectives of the module	
This innovative training pilot aims to provide a flexible introduction to Good Design for planet and people utilizing short form media content for those who do not have time to attend formal training programs or watch long form videos.	
Contents/subjects of the module	
Good design is so much more than just form and function. Its abouts our responsibility to create sustainable lifestyles. Where meeting the needs of everyone now, doesn't compromise, meeting everyone's needs in the future. Good Design is Nature, incorporating the true cost of breaching the planetary boundaries such as biodiversity and climate across the full lifecycle of a product. Good Design is Human, designing produces that are universally accessible, inclusive, and beautiful. Good Design is Equitable, removing exploitation across the full lifecycle, to create just, fair and healthy systems where cooperative systems can thrice and where public luxury becomes the norm. Good Design is Circular, making sure resources stay within closed loops, by ensuring they can be returned for reuse, remaking or eventually recovery. Good Design is Regenerative, understanding that everything is interconnected and co-dependent, so we need to bio-mimic the emergence and diversity of ecosystems all while ensuring natural resources have time and space to repair and replenish. Good Design is Sufficiency, designing to make private sufficiency feasible, viable and desirable and making sure we all have what we need. Good Design is Future proof, uses low-tech solutions to enable some things to stay the same through durability and timelessness. While also embracing emerging responsible technologies to ensure some things can evolve by being innovative and adaptable	
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.)*
Participants will gain insight into the holistic, systems and strategic approach that aligns key Sustainability criteria for planet and people and the need to incorporate these into the design process. That sustainability goes beyond Carbon Footprint.	Participants will be able to describe appropriate circular design strategies.

Module: Foundations of Good Design

Knowledge	***Skills***	***Competencies***
(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)	*(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)*	*(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 and dynamics of Good Design The importance of considering the full lifecycle of a product in Good Design The necessity of inclusivity and accessibility in design Circular economy principles and their application in design The concept of regenerative design and its application to allow natural resource replenishment	Apply Good Design principles to create sustainable lifestyles Design universally accessible, inclusive, products Implement circular design strategies to keep resources within closed loops	Take responsibility for incorporating Good Design principles into all stages of the design process Autonomously evaluate the sustainability of design choices and their long-term impact on both people and planet Promote and practice circular design principles within organizational and project contexts

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