



Interreg



EUROPEAN UNION

Danube Transnational Programme
MOVECO

Innovation Tools
Qualification programme
Training programme syllabus

MOVECO PROJECT

**Mobilising Institutional Learning for Better
Exploitation of Research and Innovation for the
Circular Economy**

Deliverable: 5.2.2 Training programme syllabus draft

Draft version:2

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Introduction

This course aims to make a breakthrough in the circular economy, starting from the essence of its operation, from its theoretical roots (school of thoughts) to its implementation in organizations – new business models (enterprises or public authorities).

Course outline: MOVECO qualification programme is organised around a series of themes, already described and approved:

The principles of circular economy	CCI BN
Schools of thinking (cradle to cradle, industrial ecology and design)	CCI BN
Fundamental Business Skills for Green Entrepreneurs	Biz Up
EU legislation package on Circular Economy	CCIS
- Different Business Models based on circular economy	Biz Up
New material pathways	Bay For

Course nature: This course approach will be theoretical and practical as well. Participants will explore, during an 18 hours accelerated learning programme, the need for system thinking having the opportunity to take relevant information from cradle-to cradle, biomimicry, performance economy, industrial ecology and so on). During the training programme we will look to circular economy principles, including ones described by new UK - Circular Economy Standard – 8001, exploring their use in different industries and business models, We will connect the Danube Region with EU legislation package on Circular Economy and the way companies/communities in our region can benefit, We will remind some important Fundamental Business Skills for Green Entrepreneurs and how them can be integrated on the close loops of circular economy and of course we will delve into practical applications that provide examples on how SMEs can think and introduce in their manufacturing system new materials.

It will be a three day journey that students will enjoy as the course will explore study cases on circular economic and innovative thinking, and will provide them with materials, study cases, videos that shows an alternative approach to classical sustainability of companies, cities and communities.

The external links found in this course will help you get more information about topics you are interested in for more information for those interested.

At the end of each module, course participants are invited by email to provide us with active feedback on their own experiences, examples and suggestions for information gathering.

Whom we recommend the course:

- Business executives, entrepreneurs, developers, designers, professionals, environmental and environmental sustainability, corporate, responsible within public authorities, and people interested in coursework.

The length of the training

- 24 Hours accelerated learning - 18 hours training programme (6 hours/day) – the programme can be flexible defined by each partner based on the TG needs
 - 6 hours theory
 - 12 hours practical
 - 6 hours evaluation & debriefing / 1 hour for each module

Learning objectives

Our goal is to help SMEs and other stakeholders to learn about circular economy and the application into different economic sectors, as well as to provide students with a body of knowledge (based on principles and new innovative approaches) that will allow a mind-set change.

During the course the students will

- Identify the principles and ideas behind a Circular Economy
- Apply system thinking to explore new business models that leads to Circular Economy
- Discover the solutions provided by natural systems to human problems
- Define ways to create products that are easy to repair, remanufacture, recycle,

The content:

- **Learning materials** – at least one material/topic – will be linked together into the MOVECO training support. We can think by providing it in electronic format but as well in hard copy. For the qualification programme efficiency partners can consider translation

Each learning material will consist of:

- 1 page of introduction and learning objectives (**tell them what you are going to tell**)
- 10-15 pages of text for theory combined with graphs, pictures, charts, diagrams etc, including explanations for specific terms included (**tell them**)
- Exercises (at least 2 exercises/module)
- 1 assessment / module (at least 10 questions) (**tell them what you just said**)
- Study case
- Further reading list will be listed in the end of each module or in the end of material.

- **Trainers material** – a Ppt. material will be developed base on the content of learning material for each topic

- Learning instruments

- Best practices in the Danube Region for the following domains: WEEE, PPW, ELV, B&A, eco innovation connected to the application. Partners will use the
 - ppt material, handouts
 - Videos
 - Exercises
 - Quizzes

Target groups: Business support organization, Higher Education and Research, SMEs (

It becomes very clear that many individuals are now using a wide selection of web-based resources, tools, and services to learn in new ways, and in doing so they have become highly independent continuous learners. They can be named Modern professional learners

Module I. EU legislation package on Circular Economy

- A. Module duration – 3 hours (1 h lecture, 2 hours practical exercises)
- B. Trainer competencies -
- C. Topic introduction/module overview
- D. Module learning objectives
 - a. To understand..
 - b. To learn
 - c. To recognize
- E. Module material 10 -15 written material
- F. Essential /optional reading
- G. Training methods
 - a. Lecture
 - b. Best practice analysis
 - c. Facilitated discussions
 - d. Simulation /exercises
 - e. Working in small groups /small projects
 - f. Mind mapping
 - g. Canvas discussions
 - h. Videos
- H. Assessment / debriefing – 1 hour
- I. Instructional plan – an instrument for trainer will be fully completed by each module responsible based on different module section. An example is provided below

Module II: The principles of Circular Economy (UK SR 8001/2017)

- A. Module duration – 3 hours (1 h lecture, 2 hours practical exercises)
- B. Trainer competencies -
- C. Topic introduction/module overview
- D. Module learning objectives
 - a. To understand..
 - b. To learn
 - c. To recognize
- E. Module material - 10 to 15 pages
 - SA8001 principles of Circular Economy
 - A.2.1 System thinking
 - A.2.2 Innovation
 - A.2.3 Stewardship
 - A.2.4 Collaboration
 - A.2.5 Value optimization
 - A.2.6 Transparency
 - Three principles introduced by Ellen Mc Arthur Foundation
 - Preserve and enhance natural capital
 - Principle 2: Optimise resource yields
 - Principle 3: Foster system effectiveness
- F. Essential /optional reading
- G. Training methods
 - a. Lecture
 - b. Best practice analysis
 - c. Facilitated discussions
 - d. Simulation /exercises
 - e. Working in small groups /small projects
 - f. Mind mapping
 - g. Canvas discussions (Canvas provides an integrated system for class discussions, allowing both instructors and students to start and contribute to as many discussion topics as desired. Discussions allows for interactive communication between two or more people; users can participate in a conversation with an entire class or group. Discussion topics can be a focused or threaded discussion. Focused discussions are relatively short-lived interactions, while threaded discussions allow replies within replies and may last for a longer period of time. Focused discussions only allow for two levels

of nesting, the original post and subsequent replies. Threaded discussions allow for infinite levels of nesting.

h. Videos

H. Assessment

Module III Schools of thoughts

A. Module duration – 3 hours (1 h lecture, 2 hours practical exercises)

B. Topic introduction/module overview

C. Module learning objectives

a. To understand..

b. To learn

c. To recognize

D. Module material 10 -15 written material

3.1 Cradle to cradle - The fundamental difference is that the quality level of the raw materials is preserved over several product life cycles will be preserved, and only quality chemicals are used.

3.2 Performance economy –

3.3 Biomimicry- Utilizarea celor mai bune soluții ale naturii, ca inovație tehnologică

3.4 Industrial Ecology

3.5 Natural Capitalism

3.6 Blue economy

3.7 Regenerative design

E. Essential /optional reading

F. Training methods

a. Lecture

- b. Best practice analysis
 - c. Facilitated discussions
 - d. Simulation /exercises
 - e. Working in small groups /small projects
 - f. Mind mapping
 - g. Canvas discussions.
 - h. Videos
- G. Assessment / debriefing – 1 hour
- H. Instructional plan – an instrument for trainer will be dully completed by each module responsible based on different module section. An example is provided bellow

2. Fundamental business skills for green entrepreneurship

- A. Module duration – 3 hours (1 h lecture, 2 hours practical exercises)
- B. Trainer competencies -
- C. Topic introduction/module overview
- D. Module learning objectives
 - a. To understand..
 - b. To learn
 - c. To recognize
- E. Module material 10 -15 written material
- F. Essential /optional reading
- G. Training methods
 - a. Lecture
 - b. Best Practice analysis
 - c. Facilitated discussions
 - d. Simulation /exercises
 - e. Working in small groups /small projects
 - f. Mind mapping
 - g. Canvas discussions
 - h. Videos
- H. Assessment / debriefing – 1 hour
- I. Instructional plan – an instrument for trainer will be dully completed by each module responsible based on different module section. An example is provided bellow

3. Business models based on Circular economy

- A. Module duration – 3 hours (1 h lecture, 2 hours practical exercises)
- B. Topic introduction/module overview
- D. Module learning objectives
 - a. To understand..
 - b. To learn
 - c. To recognize
- E. Module material 10 -15 written material
- F. Essential /optional reading
- G. Training methods
 - a. Lecture
 - b. Best practice analysis
 - c. Facilitated discussions
 - d. Simulation /exercises
 - e. Working in small groups /small projects
 - f. Mind mapping
 - g. Canvas discussions
 - h. Videos
- H. Assessment / debriefing – 1 hour
- I. Instructional plan – an instrument for trainer will be fully completed by each module responsible based on different module section. An example is provided below

4. New Material Pathways

- A. Module duration – 3 hours
- B. Topic introduction/module overview
- C. Module learning objectives
 - a. To understand..
 - b. To learn
 - c. To recognize
- D. Module material
- E. Essential /optional reading
- F. Training methods
 - a. Lecture
 - b. Best practice analysis
 - c. Facilitated discussions
 - d. Simulation /exercises
 - e. Working in small groups /small projects
 - f. Mind mapping
 - g. Canvas discussions
 - h. Videos
- G. Assessment
- H. Instructional plan – an instrument for trainer will be dully completed by each module responsible based on different module section. An example is provided bellow

MOVECO: Training programme instructional plan /module

Session number/title	Time (hours)	Learning objectives	Topics	activities	Materials
Why Circular Economy	3 h deliver 1 h evaluation and debriefing	Identify the principles and ideas behind a Circular Economy Define the real world challenges concerning circular economy Use the case studies to recognize the key elements of economic trends	Module introduction, Overview of the key principles of Circular Economy Economic trends Connection to School of thoughts Assesment	Introduction (10'') Course overview (5'') Lecture (45'') Practical 120'' Exercises Best practice Videos Discussions Assignment Evaluation 45'' Debriefing 15''	Moveco handbook 2 exercises PPt material Handouts – study cases Videos
CE system thinking	3 h deliver 1 h evaluation and debriefing	To understand the way to apply system thinking to explore new business models that leads to Circular Economy To learn how to use the natural system solutions as technological innovation within company To recognize the barriers for circular economy in general as well as at the company level	Module introduction, Overview of the schools of thoughts, Mind-sets changing Innovative thinking Connection to green entrepreneurs fundamental skills Assesment	Introduction (10'') Course overview (5'') Lecture (45'') Practical 120'' Exercises Best practice Videos Discussions Assignment Evaluation 45'' Debriefing 15''	Moveco handbook 2 exercises PPt material Handouts – study cases Videos
New Material Pathways	3	To start thinking in a circular rather than linear way about the way materials are used and products are designed, produced and used. To think about the end-of-life of a product differently – cascading use, re-use, repair, upcycling. Get ideas to re-think own processes and to develop new	Module introduction Products/Materials as examples for both linear and circular economy	Introduction to Module (10) Introduction of best practices Exercise: a) Dissection of each step with worksheets (template) – linear economy	2-5 best practices (more to choose from) Power point material Teacher kit (with more info and suggestions) Handouts (best practices) Links to videos and online resources

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		processes or adapt current ones.		b) Combination of each step with worksheets (template) – circular economy Discussion Quiz Evaluation and Debriefing	

