

Certificate of Participation

Course

“Circular Economy Expert in Sustainable Plastic Product”

RAQUEL ORTEGA GARCÍA

has successfully completed Module 1: General Circular Economy level C-VET

Education with a duration of 0.75 ECTS (18.75 hours)

Date

Responsible of the entity
Entity

Signed by Circvet partners



Co-funded by the
Erasmus+ Programme
of the European Union

The information and views set out in this report are those of the authors and do not necessarily reflect the official opinion of the European Union. Neither the European Union institutions and bodies nor any person action on their behalf may be held responsible for the use which may be made of the information contained therein.

MODULE 1: GENERAL CIRCULAR ECONOMY

CONTENT

1. Presentation and definition of concepts related to the circular economy.
2. Circular Economy implementation strategies
3. Regulatory Framework and Circular Economy business models



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RAQUEL ORTEGA GARCÍA

has successfully completed Module 2: Eco-design and LCA level C-VET

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MODULE 2: ECO-DESIGN AND LCA

CONTENT

1. General aspects of eco-design: application to the plastic sector
2. Design guidelines of plastic packaging for minimum waste and efficient sorting
3. Life Cycle Sustainability Assessment principles and methods (LCA, SLCA, LCC)
4. Training with LCA software
5. Redesign based on LCA results.
6. Environmental product declaration, ecoindicators and certification
7. End of life scenarios



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MODULE 3: DIGITAL SKILLS

CONTENT

1. Blockchain applied to the traceability of materials
2. Digital manufacturing (DM)
3. Simulation/Motorization
4. LANS
5. Robotics/artificial intelligence
6. The Cloud
7. Internet of Things
8. Big Data Analysis
9. Cyber security
10. Augmented reality



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RAQUEL ORTEGA GARCÍA

has successfully completed Module 4: Recycling, Downcycling, Upcycling level C-VET
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MODULE 4: RECYCLING, DOWNCYCLING, UPCYCLING

CONTENT

1. Current situation in Europe and waste management in different industrial sector
2. Recycling technologies



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RAQUEL ORTEGA GARCÍA

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MODULE 5: MANUFACTURING PROCESSES

CONTENT

1. Manufacturing processes in the context of circular economy.
2. Recycled materials and composites to manufacturing processes.
3. Bio-based and/or biodegradable materials to manufacturing processes.



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RAQUEL ORTEGA GARCÍA

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MODULE 6: USERS AND USAGES

CONTENT

1. Introduction to ecolabels
2. Ecolabels in practice
3. General aspects related to understanding consumer needs with respect to sustainable products.
4. Consumer awareness
5. Consumer willingness to pay for sustainable products.
6. Communicating products' sustainability



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RAQUEL ORTEGA GARCÍA

has successfully completed Module 7: Recovery level C-VET

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MODULE 7: RECOVERY

CONTENT

1. Presentation and definition of concepts related to materials recovery and added values.
2. Introduction - Definition of concepts
3. Identifying Rs business opportunities
4. Strategies of eco-design and spare parts, design for disassembly and recyclability
5. Reverse logistics concept



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RAQUEL ORTEGA GARCÍA

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MODULE 8: ENTREPRENEURSHIP

CONTENT

1. Presentation and definition of concepts related to entrepreneurship and innovation.
2. New business development
3. Technology transfer and intellectual property rights

