



Module 1

Introduction

Circular Economy in Construction



24
partners

12
countries

Date of Event

*Author/ **Institute***

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The aim of the programme is to increase the learners' knowledge of circular economy principles, techniques and practices applied to construction.

This improved knowledge will allow construction workers to apply their existing skills, so that relevant green circular techniques and standards are achieved.



Programme Objectives



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1. Understand how the key circular economy policy drivers impact on each profession in the construction industry
2. List and describe the key phases, principles and methods related to life cycle assessment and costings to support circular economy in the construction sector
3. Identify best practice in a number of common construction methods and systems relevant to life cycle assessments and be able to recognise work practices that fall below this standard.
4. Describe some key challenges of implementing circular economy projects and how to apply specific solutions to meet those challenges
5. Outline the guidelines set out for the EU Construction and Demolition Waste management protocol with particular reference to minimising the quantities of other resources being used
6. Understand why there is need to talk and discuss with other trades in order to achieve circular buildings through collaborative teamwork



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Programme Content



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- EU and National Drive
- Intro to Circular Economy
- Circular Economy and construction
- Building materials and systems
- Life cycle assessment
- Life Cycle Costing
- Collaboration and Communication
- Waste and water management
- LEAN and modular construction
- Health and safety
- Green procurement
- Using building circularity tools
- Environmental Product Declarations



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Introductions



Introduce yourself



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Introduce Yourself



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You can use your phone or tablet and connect to:

- Slido.com

Or

- use the QR Code XXXXXXXX

slido

In this exercise we would like you to download the QRCode App and use the QR Code



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Introduce Yourself



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- State Full Name
- Use 3 words to describe your type of work
- What do you hope to get out of this course?

Use whiteboard/Slido and type away.



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How do I scan a QR code without an App on my mobile phone?

Open the camera and focus it at QR-code.

1. Press and hold the Home button
2. Tap the magnifying glass icon to scan QR Code
3. Tap the pop up notification
4. Welcome to Slido.

slido



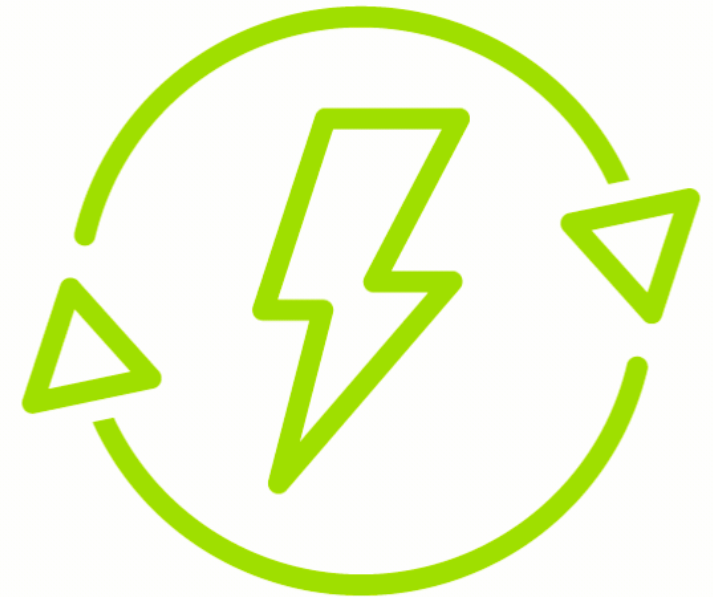
The Circular Economy Programme will be delivered in a blended format: **Online theory and face to face practical work**

Online – self directed learning (everything can be done at home)

Read the slides, watch the videos and read the extra resources, then complete the quiz or online activity.

Face to Face - practical learning in class, on-site or at a workshop.

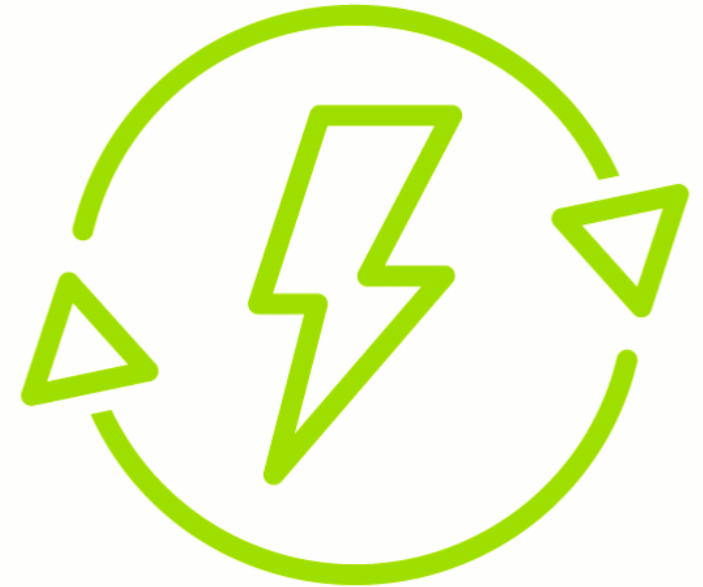
You are to read the information/PPTs and videos first, before attending class to prepare for the practical workshop or class.



Continuous assessment will involve the completion of online gamification quizzes and/or completion of individual or group practical work.

Group work includes one or more of the following:

Practical work, group discussions, group presentations or individual work.



Quizzes



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Kahoot!

Learning tool **Kahoot**

<https://kahoot.com/>

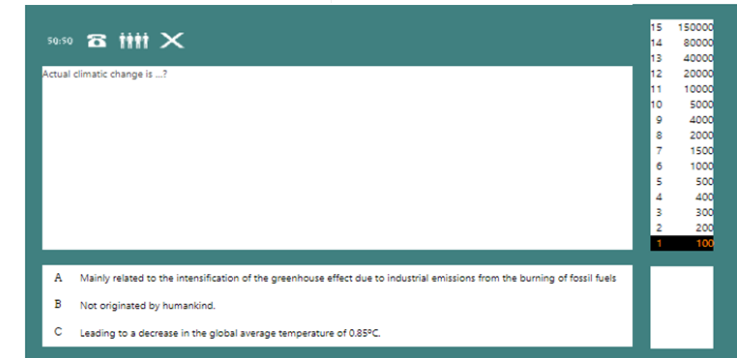
<https://kahoot.com/home/mobile-app/>



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moodle

Gamification Quizzes in Moodle



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Indicative Timetable



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Module Number	DESCRIPTOR	Delivery	Method of Assessment	Duration Hours
1	Induction			1.00
2	European & National Drive- (self directed) EU Circular Economy Principles Green Policies for construction National Regulations	online	quiz	1.00
3	Introduction to Circular Economy (self directed) Introduction to Sustainability Embodied Carbon in the built environment Principles of Circular Economy	online	quiz	1.00
4	Circular Economy and Construction Circular interventions Sustainable Development Goals Green Certification Schemes and circularity	online	quiz/activity	3.00



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Indicative Timetable



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5	Waste and Resource Management Waste Management Pre-demolition, pre-development audits Demolition, reuse, recycle, repurpose	Online/ blended	quiz/activity	3.00
6	Adaptable Materials and Systems Circular materials and systems in buildings Construction Techniques for Circular	Online/ blended	quiz/activity	2.00
7	Water Management Water Management Plan Water Management on site	Online/ blended	quiz/activity	2.00
8	LEAN and Modular Construction Lean Construction Modular Construction	Online/ site visit	quiz	1.00
9	Life Cycle Assessment Introduction to LCA LCA and Level(s) Building Certifications	online	quiz	2.00



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Indicative Timetable

10	Life Cycle Costing Introduction to LCC LCC Strategy	online	quiz	2.00
11	Collaboration and Communications- Collaboration Roles and Responsibilities Communication Tools	Online/ blended	activity	3.00
12	Green Procurement Introduction to GPP Tendering and Circular Procurement Certification and Eco Labels	Online/ blended	quiz/activity	2.00
13	Certification in Construction Environmental Product Declaration (EPD) Product Environmental Footprint (PEF) Ecolabels	Online/ blended	quiz/activity	1.00
14	Using Building Circularity Tools Building Circularity Tools (LCA & LCC) Calculation Methodology	Online/ blended	quiz/activity	3.00
OVERALL Total duration in hours (days)			28.00 hrs (4 days)	





Thank You

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