



Unit 10A

The Circular Economy in the Transport Sector

Transport – Vehicle and Transportation

CE Innovations in Vehicle Components

1 Introduction

Unit 10A provides resources for vocational trainers seeking to incorporate the circular economy into their courses in the Transport Sector, focusing on vehicles and transportation. This unit explores the importance of repair and reconditioning within the automotive industry, focusing on the concepts of product life-extension and resource recovery and applying these principles of circular economy to the product design of the automotive industry and mechanics.

2 Learning Outcomes

Knowledge	Understand the importance of repair and reconditioning as part of the circular economy and the role auto engineers/mechanics have in promoting this
Skills	Identify circular economy approaches and opportunities within the vehicle manufacturing and repair industry
Competencies	Apply circular economy principles to end of life vehicles and to end of life tyres
EQF Level	This content is mainly suitable for EQF Level 4

3 Lesson Plan

Method	Description	Suggested duration in minutes (total minutes)
Brainstorming session	Brainstorming where you as a trainer write down definitions, notions and connotations ought to be used for future discussions and references. You can continue the brainstorming session with the following questions if needed:	15



	<ul style="list-style-type: none"> Discuss how the concepts of life extension and resource recovery might be implemented within your workplace. What would be the benefits and difficulties? 	
Presentation by trainer using PPT	Overview	30
	Unit Learning Objectives	
	Material Components of a Car	
	Discussion Points	
	ELV Directive	
	Case Study – Renault	
	Discussion Points	
	Tyres – Overview	
	Case Study - Marangoni	
	Discussion Points	
	Case Study - Ecopneus	
Discussion Points		
Assessment	Quiz	15

4 Quiz

- 1. The Landfill Directive aims to eliminate tyre landfill by promoting _____ as the first/best solution.**

Answer: Prevention – extending lifetime

- 2. What is the EU Recovery and Reuse Target?**

Answer: ≥ 95%

- 3. Renault has two main methods to promote the circular economy, which is not a method?**

Answer: Energy recovery

- 4. What is the most common recovery technique for tyres?**

Answer: Material recovery