



Unit 13B

The Circular Economy in the Agriculture Sector

Adding value to organic waste

1 Introduction

Unit 13B provides resources for vocational trainers seeking to incorporate the circular economy into their courses in the Agriculture sector, focusing on the increasing amounts of organic waste being generated in the EU from agricultural processing. The unit aims to explore why great attention is paid today to the conversion of such waste streams to high-value products and energy and how agricultural organic waste is improving resource efficiency and solving environmental problems.

2 Learning Outcomes

Knowledge	Understand the need for and benefits to apply circular economy principles to the organic waste management in agriculture.
Skills	Identify circular economy principles in the organic waste management in agriculture.
Competencies	Apply circular economy principles in the organic waste management in the agricultural sector.
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: <ul style="list-style-type: none"> Discuss the importance of waste produced by the agricultural sector, focusing on the organic ones. According to the principles of Circular Economy, 	15



	which waste treatment methods might be the most sustainable ones?	
Presentation by trainer using PPT	Overview	30
	Unit Learning Objectives	
	Organic waste in farms	
	Different types of organic waste in farms	
	Organic waste and climate change	
	Finding value in organic waste	
	Anaerobic digestion	
	Case Study - Agrivert Services	
	Composting	
	Finding value in composting	
	Case Study – Fervosa	
	Biofuel from waste crop	
	Biomass from agricultural residues	
Discussion Points		
Assessment	Quiz	15

4 Quiz

1. Agricultural organic wastes include...

Answer: all the answers are correct (Crop residues and weeds; sawdust and forest waste; livestock waste)

2. Anaerobic digestion is...

Answer: The microbial degradation of organic matter in the absence of oxygen (O₂)

3. Composting is...

Answer: The biological decomposition of organic materials