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CIRCLE
The CIRCular Economy through Integrated LEarning

Unit 1A
Circular Economy – Core Issues

(Resource Intensive Economies)

1 Introduction

Unit 1A provides overview of resource intense consumption, following the industrial revolution in Europe and the United States. It shows how much resources are consumed over the years, the drivers for the over consumption and their impact on the environment for example, 98% of plastics used in production ends up as waste, causing environmental pollution and climate change. It also highlights the need for resource efficiency and sustainable consumption.

It is important for the learner to understand what resources are, the reasons for intense resource use and the impact on the environment.

In this context, the level of knowledge, skills and competence your students will be expected to show will be as follows

Level	Knowledge	Skills	Competence
Level 4	Learners should be able to understand what resources are and how they are important in development.	Ability to remember and recognise the drivers for the excessive use of resources.	Identify and apply resources intensity use in case study to any other resource intensive industries there are.

2 Learning Outcomes

The learning outcomes of Unit 1A are for the students to:

1. Be able to understand the historical importance of resource use and industrialization. For example, resources are needed to build shelters, just as resources are needed to produce mobile phones for effective communication.
2. Identify what natural resources are. For example, water, raw materials, coal, land, energy, etc
3. Understand the relationship between resource use, sustainable development, climate change. For example, intensive resource use is not sustainable, and will eventually lead to natural resources running out. This will result in pollution and climate change.

3 Lesson Plan

The following table can be used as a template for structuring a training programme at level 4

Method	Description	Suggested duration in minutes (total minutes)
Brainstorming session	Brainstorming where you as trainer write down definitions, notions and connotations to be used for future discussions and reference. You can continue the brainstorming session with your students with the following questions if needed: - What are resources, give examples - What could be the impact of resource overconsumption?	10
Presentation by trainer using PPT	Introduction	60
	The drivers for natural resource demand	
	Use of Natural resources within 1900 - 2015	
	Climate change	
	Discussion : (Students should be allowed to brainstorm and provide their answers.)	
	Plastic production case study	
	Resource Efficiency Definition	
	Decoupling Economic Activity from Resource Use	
	Sustainable Development (in support of resource efficiency)	
Assessment	Quiz	15

4 Quiz Exercise

Q. No.i. **How can we meet the growing demand for raw materials?**

Ans: Increasing Resource Efficiency

Q. No.ii. **Which factors count for making places of interest circular/sustainable?**

Ans: Communications, Management, Planning, Individual & Communities

Q. No.iii. **What drivers of increasing resource demand are listed below?**

Ans: B: Population growth

D: Enhanced industrial productivity

E: People moving to cities and new cities and towns being built globally