



# Unit 2A

## Circular Economy – The Business case for Resource Efficiency

### 1 Introduction

Unit 2A outlines the business case for resource efficiency. It highlights the cost of resource/material use in manufacturing and the associated environmental impacts in terms of CO<sub>2</sub> emissions and climate change. It focuses on the benefits that businesses could gain from using resources efficiently, while providing guidance through a resource value map for businesses wanting to implement resource efficiency in their processes. Some case studies are introduced to demonstrate practicality.

The student should be clear on the business case for resource efficiency. They should understand the benefit of resource efficiency for businesses and impact of over consumption.

In this context, the student should be able to demonstrate the following level of knowledge, skills and competency:

Level	Knowledge	Skills	Competence
Level 4	Students should be able to remember what resource efficiency means from the previous units (Unit 1A), and its importance in development.	Ability to identify the benefits of resource efficiency to businesses and the steps to value maps.	Students to demonstrate understanding by appreciating the application of resources efficiency in case studies provided and the ability to provide a case study of their own that demonstrate the benefits of resource efficiency.

### 2 Learning Outcomes

The learning outcomes of Unit 2A are for the students to understand:

1. Key benefits to why the resource efficiency is advantageous to businesses
2. The importance of understanding the internal cost of “materials” in the production process.
3. Approaches to undertaking resource efficiency mapping
4. Process improvement examples provided in the case studies



### 3 Lesson Plan

The following table can be used as a template for structuring the training programme:

Method	Description	Suggested duration in minutes (total minutes)
<b>Brainstorming session</b>	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: <ul style="list-style-type: none"> <li>- What do you understand by the term ‘business case’?</li> <li>- What is resource efficiency?</li> <li>- Why is it important?</li> </ul>	15
<b>Presentation by trainer using PPT</b>	Introduction	60
	Cost Structure in the German Manufacturing Industry in 2014.	
	Why increase resource efficiency?	
	Reducing Greenhouse Gas emissions through resource efficiency	
	Discussion: Students should be allowed to brainstorm and provide their answers.	
	Scenarios for Resource Efficiency Analysis	
	Developing a Resource Value Map	
	Case Studies	
	Summary	
<b>Assessment</b>	Quiz	15

### 4 Quiz Exercise

**Q. No.i. Why should companies undertake resource efficiency?**

- Ans:
- B: To reduce dependence on the raw material markets
  - C: To lower manufacturing costs
  - D: To improve competitiveness
  - E: To develop a stronger corporate image

**Q. No.ii. What steps are in a Resource Value Map?**

- Ans:
- A: Develop an improvement strategies definition
  - C: Establish the goals and boundary definitions for the process
  - D: Develop a resource value map
  - F: Collect data and classification system