Improve
FOOD & DRINK SKILLS COUNCIL

3081 Principles of energy efficiency in a food environment		
SQA Unit Code		**H3GM 04**
Level 3	**SCQF Level 7**	**SCQF Credit value 4**

Unit Summary
This unit is about understanding the principles of efficient energy usage in food manufacture or supply. It includes understanding climate change and the processes that can be used to monitor and control energy efficiency, including those used to reduce carbon usage.

This unit applies to you if you are a manager, technologist or consultant who has responsibility for improving energy efficiency in a food environment. It is expected that you will work as part of a team to develop and implement the systems.

In order to be assessed as competent you must demonstrate to your assessor that you can consistently perform to the requirements set out below. Your performance evidence must include at least one observation by your assessor.

Evidence of knowledge and understanding should be collected during observation of performance in the workplace. Where it cannot be collected by observing performance, other assessment methods should be used.

You need to know and understand:

1. Climate change legislation and how it controls organisational energy usage
2. Government targets and legal requirements for carbon reduction and climate change and their implications in a food environment
3. How energy consumption impacts on climate change
4. The role of energy efficiency in achieving sustainability
5. The benefits of energy efficiency to the organisation
6. How energy efficiency can help reduce carbon emissions
7. How to use carbon footprints as a measure of energy efficiency
8. The principles of energy efficiency benchmarking as a method of identifying opportunities for improving energy efficiency
9. Sources of low carbon energy including options for on-site energy generation
10. The benefits that low carbon energy offers
11. How to establish current levels of energy usage for all organisational activities
12. Areas of energy usage and opportunities for improving energy efficiency
13. How to develop targets for energy efficiency
14. How to monitor and control energy efficiency
15. The barriers that can limit energy efficiency and the strategies that can be used to overcome these barriers
16. How process and product design can impact on energy efficiency
17. How effective process control and quality assurance can support energy efficiency
18. How to complete an organisational cost/benefit analysis in respect to energy efficiency

measures 19. Methods for promoting organisational energy efficiencies 20. How to monitor, control and maintain sustainable energy usage 21. How to define and allocate roles and responsibilities for all those involved in improving energy efficiency 22. How to identify training needs and organise staff training to support the more efficient use of energy 23. How to evaluate the impact of measures to improve energy efficiency
Evidence of performance may employ examples of the following assessment: • observation • written and oral questioning; • evidence from company systems (e.g. Food Safety Management System) • reviewing the outcomes of work • checking any records of documents completed • checking accounts of work that the candidate or others have written