
Overview

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.

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Principles of energy efficiency in a food environment

Performance criteria

See

You must be able to:

IMPSF103S Promote energy efficiency in a food environment

Knowledge and understanding

You need to know and understand:

- K1 climate change legislation and how it controls organisational energy usage
- K2 government targets and legal requirements for carbon reduction and climate change and their implications in a food environment
- K3 how energy consumption impacts on climate change
- K4 the role of energy efficiency in achieving sustainability
- K5 the benefits of energy efficiency to the organisation
- K6 how energy efficiency can help reduce carbon emissions
- K7 how to use carbon footprints as a measure of energy efficiency
- K8 the principles of energy efficiency benchmarking as a method of identifying opportunities for improving energy efficiency
- K9 sources of low carbon energy including options for on-site energy generation
- K10 the benefits that low carbon energy offers
- K11 how to establish current levels of energy usage for all organisational activities
- K12 areas of energy usage and opportunities for improving energy efficiency
- K13 how to develop targets for energy efficiency
- K14 how to monitor and control energy efficiency
- K15 the barriers that can limit energy efficiency and the strategies that can be used to overcome these barriers
- K16 how process and product design can impact on energy efficiency
- K17 how effective process control and quality assurance can support energy efficiency
- K18 how to complete an organisational cost/benefit analysis in respect to energy efficiency measures
- K19 methods for promoting organisational energy efficiencies
- K20 how to monitor, control and maintain sustainable energy usage
- K21 how to define and allocate roles and responsibilities for all those involved in improving energy efficiency
- K22 how to identify training needs and organise staff training to support the more efficient use of energy
- K23 how to evaluate the impact of measures to improve energy efficiency

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