



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **FDFRB4008A Set up sustainable baking operations**

**Release: 2**

## FDFRB4008A Set up sustainable baking operations

### Modification History

April 2012: Minor typographical corrections.

### Unit Descriptor

|                        |                                                                                                                                                                           |
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| <b>Unit descriptor</b> | This unit of competency covers the skills and knowledge required to examine the implications of sustainability on bakery operations and develop plans for sustainability. |
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### Application of the Unit

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| <b>Application of the unit</b> | <p>This unit targets the planning of key requirements in setting up a sustainable retail bakery business. It applies to the business owner/operator or senior baker and includes the development of a plan that identifies physical layout and facilities, production processes and movement of staff and resources with a view to maximising sustainability outcomes. It incorporates identifying and addressing the implications associated with the style of bakery and explores environmental impact and generation of waste.</p> <p>This unit may be applied to the set-up of a new operation or the assessment of the set-up of an existing operation. It requires access to the bakery business plan.</p> <p>It targets additional skills for bakery-specific sustainability practice beyond the unit MSAENV472B Implement and monitor environmentally sustainable work practices.</p> |
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### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

Not applicable.

## Employability Skills Information

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| <b>Employability skills</b> | This unit contains employability skills |
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

## Elements and Performance Criteria

| ELEMENT                                                            | PERFORMANCE CRITERIA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Conduct sustainability related research for the bakery business | 1.1 Industry information resources are identified and accessed to maintain bakery business knowledge<br>1.2 Sustainability related regulatory requirements, drivers and influences that impact on the baking industry are analysed and assessed for relevance to business operations<br>1.3 Information is assessed and used to inform a sustainability plan for the business<br>1.4 Bakery business plan is examined and implications for set-up identified and prioritised                                                                                                                                                                                                                                                                |
| 2. Analyse sustainability implications for bakery                  | 2.1 The style of bakery and key characteristics and operational implications are confirmed<br>2.2 Implications for layout, equipment, stock and staffing are identified and incorporated into set-up planning<br>2.3 Criteria for sustainability in bakery operation are determined and strategies for achieving sustainability identified                                                                                                                                                                                                                                                                                                                                                                                                  |
| 3. Develop layout plan for bakery                                  | 3.1 Production area is measured and documented, including identification of services, openings and fixed facilities<br>3.2 Production process is mapped and a layout plan developed to identify placement of equipment and processes<br>3.3 Service and/or distribution requirements are examined and mapped<br>3.4 Layout is assessed for its efficiency, occupational health and safety (OHS) and potential for environmental impact<br>3.5 Potential for generating waste through production and service/distribution process is identified<br>3.6 Opportunities to reduce waste and increase efficiencies are identified and incorporated into planning<br>3.7 Layout plan is finalised and checked to ensure accuracy and completeness |
| 4. Determine equipment requirements                                | 4.1 Range of products and services to be offered are confirmed<br>4.2 Production equipment, services and facilities, and storage and transfer equipment options required for business operations are identified<br>4.3 Presentation and display equipment requirements are identified and options assessed against décor and image objectives<br>4.4 Equipment options are researched and assessed for appropriateness in meeting business plan goals, targets and budgets<br>4.5 Equipment features are assessed for their efficiency in relation to waste and energy and resource consumption and options                                                                                                                                 |

| ELEMENT                                          | PERFORMANCE CRITERIA                                                                                                                                      |
|--------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                  | prioritised according to sustainability                                                                                                                   |
|                                                  | 4.6 Equipment is selected based on economic value, operational efficiency and environmental performance                                                   |
|                                                  | 4.7 Equipment schedule is itemised, costed and documented                                                                                                 |
| 5. Determine stock requirements                  | 5.1 Stock requirements for product range and quality criteria are identified and quantities estimated                                                     |
|                                                  | 5.2 Stock options are assessed for their economic value, quality and their impact on the environment resulting from production and distribution processes |
|                                                  | 5.3 Stock is specified based on economic value, quality and environmental performance                                                                     |
|                                                  | 5.4 Suppliers are researched and selected to support ongoing operations                                                                                   |
|                                                  | 5.5 Purchasing schedule is developed, costed and documented                                                                                               |
| 6. Determine human resource requirements         | 6.1 Activities and tasks required to operate bakery are identified                                                                                        |
|                                                  | 6.2 Number of staff required is determined and job roles documented                                                                                       |
|                                                  | 6.3 Costing implications of staff are calculated                                                                                                          |
| 7. Assess environmental sustainability of bakery | 7.1 Concept of carbon footprint is described and types of environmental impact of bakery operations are identified                                        |
|                                                  | 7.2 Opportunities for improving environmental performance of operations are identified                                                                    |
|                                                  | 7.3 Measures of environmental performance are identified                                                                                                  |
|                                                  | 7.4 Strategy for ongoing monitoring of environmental performance is developed and documented                                                              |

## Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

### Required skills include:

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#### Ability to:

- identify relevant information for bakery operation and assess information sources
- analyse bakery business plan
- compare products and services
- assess impact of trends and influences on bakery operations
- calculate costs associated with equipment, stock and human resources
- document plans
- conduct research
- analyse functions and processes within a retail bakery
- apply sustainability concepts to operations
- interpret information on environmental performance of products, services and equipment
- use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- work cooperatively within a culturally diverse workforce.

### Required knowledge includes:

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#### Knowledge of:

- sources of bakery business and industry information
- equipment used in retail bakery
- product and service range within retail bakery operations
- concepts of process flow, waste and energy efficiency.

## Evidence Guide

### EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

|                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
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| Overview of assessment                                                                       | Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competency in this unit must be achieved in accordance with food safety standards and regulations.                                                                                                                                                                                                                                                                |
| Critical aspects for assessment and evidence required to demonstrate competency in this unit | <p>Evidence of ability to:</p> <ul style="list-style-type: none"> <li>determine stock, equipment and human resources required for bakery operation</li> <li>evaluate options for facilities and production operations</li> <li>map bakery processes</li> <li>identify sustainability issues for bakery and implications for operations</li> <li>identify opportunities for improvement</li> <li>develop sustainability plans that demonstrate an understanding of product and service flow and waste minimisation.</li> </ul> |
| Context of and specific resources for assessment                                             | <p>Assessment of this unit must occur in a real or simulated workplace. Such an environment must provide an opportunity for the assessee to:</p> <ul style="list-style-type: none"> <li>prepare or complete set-up plans given location and market information for bakery.</li> </ul>                                                                                                                                                                                                                                         |
| Method of assessment                                                                         | This unit should be assessed together with other units of competency relevant to the function or work role.                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Guidance information for assessment                                                          | To ensure consistency of performance, competency should be assessed on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.                                                                                                                                                                                                                                                                     |

## Range Statement

**RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

|                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Policies and procedures</b>                                   | Work is carried out according to company policies and procedures, regulatory and licensing requirements, legislative requirements, and industrial awards and agreements                                                                                                                                                                                                                                                                                                    |
| <b>Research</b>                                                  | <b>Research may include:</b> <ul style="list-style-type: none"> <li>• on-site visits</li> <li>• stakeholder engagement</li> <li>• trade publications</li> <li>• internet resources</li> <li>• engagement of professional services, such as solicitors, accountants, baking associations, business advisors, bakery operators, bakers, suppliers, and sustainability or lean manufacturing experts</li> </ul>                                                               |
| <b>Bakery businesses</b>                                         | Bakery businesses may include: <ul style="list-style-type: none"> <li>• country style bakery</li> <li>• café bakery</li> <li>• franchise</li> <li>• retail bakery</li> <li>• specialist bakery, such as sourdough</li> <li>• wholesale bakery</li> </ul>                                                                                                                                                                                                                   |
| <b>Implications</b>                                              | Implications may include: <ul style="list-style-type: none"> <li>• requirement to adhere to established criteria</li> <li>• scope of operation and product range</li> <li>• requirement for specific staffing expertise</li> <li>• time and process requirements for production</li> <li>• production methodologies</li> <li>• quality of ingredients</li> <li>• supply criteria</li> <li>• quantities and timelines for production</li> <li>• customer demands</li> </ul> |
| <b>Criteria for sustainability and environmental performance</b> | Criteria for sustainability and environmental performance may include: <ul style="list-style-type: none"> <li>• energy consumption</li> </ul>                                                                                                                                                                                                                                                                                                                              |

| <b>RANGE STATEMENT</b>    |                                                                                                                                                                                                                                                                                                                                                                                                 |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                           | <ul style="list-style-type: none"> <li>• water consumption</li> <li>• use of alternative energy sources</li> <li>• type and transportation of ingredients and materials</li> <li>• use of chemicals and treatments</li> <li>• waste treatment, disposal, recycling, re-use and wastewater treatment</li> <li>• resource consumption</li> <li>• process efficiencies</li> <li>• waste</li> </ul> |
| <b>Waste</b>              | <p>Waste may include:</p> <ul style="list-style-type: none"> <li>• excessive use of energy or material resources</li> <li>• overproduction</li> <li>• unnecessary movement of people, stock and product</li> <li>• unproductive time</li> <li>• faulty products or non-compliances with workplace standards</li> <li>• duplication</li> <li>• unnecessary costs</li> <li>• pollution</li> </ul> |
| <b>Stock requirements</b> | <p>Stock requirements may include:</p> <ul style="list-style-type: none"> <li>• ingredients</li> <li>• disposable supplies</li> <li>• water</li> <li>• cleaning agents</li> <li>• power</li> </ul>                                                                                                                                                                                              |

## Unit Sector(s)

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| <b>Unit sector</b> | Retail baking |
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