

<b>Title</b>	<b>Draft a commitment strategy and scope a programme for resource efficiency</b>		
<b>Level</b>	<b>6</b>	<b>Credits</b>	<b>15</b>

<b>Purpose</b>	<p>This unit standard is for people who may be working as facility, energy and project managers, and resource efficiency consultants.</p> <p>People credited with this unit standard are able to: explain and discuss concepts relating to resource efficiency programmes; draft a strategy to gain organisational commitment to resource efficiency; and scope a resource efficiency programme for an organisation.</p>
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<b>Classification</b>	Zero Waste > Resource Efficiency
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<b>Available grade</b>	Achieved
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## Guidance Information

### 1 Recommended texts

The following International Organisation for Standardisation (Geneva) standards:

- ISO 14001:2015 *Environmental management systems – Requirements with guidance for use*;
- ISO 14004:2016 *Environmental management systems – General guidelines on implementation*;
- ISO 14031:2013 *Environmental management – Environmental performance evaluation – Guidelines*;
- ISO 14040:2006 *Environmental management – Life cycle assessment – Principles and framework*;
- ISO 14044:2006 *Environmental management – Life cycle assessment – Requirements and guidelines*;
- ISO 14050:2009 *Environmental management – Vocabulary*;
- ISO 19011:2011 *Guidelines for auditing management systems*.

Anderson, Ray *Mid-Course Correction: Toward a Sustainable Enterprise – The Interface Model* (USA: Chelsea Green, 2000).

Hawken, Paul *The Ecology of Commerce: A Declaration of Sustainability* (New York: HarperBusiness, 2010).

McShane, Steven, Olekalns, Mara and Travaglione, Tony *Organisational Behaviour on the Pacific Rim* (Australia: McGraw Hill, 2009).

### 2 Recommended websites

Ministry for the Environment – <http://www.mfe.govt.nz/>;

Sustainable Business Council – <http://www.sbc.org.nz/>;

WasteMINZ – <http://www.wasteminz.org.nz/>.

### 3 Definitions

*Design for the environment* considers the environmental impacts of a product over that product's entire life cycle – from raw material extraction to processing or manufacturing, to use and, finally, to its end of life.

*Full cost accounting* refers to accounting that recognises economic, environmental, health, and social costs of an action or decision.

*Organisation* refers to an entire business entity in the private or public sector or a business unit within the organisation.

*Product stewardship* refers to schemes requiring people and organisations involved in designing, producing, manufacturing, transporting, selling, using, collecting, recovering, and disposing of a product to share responsibility for the environmental impacts of that product arising at the end of the product's useful life.

*Resource efficiency programme* means a planned approach to implementing efficient use of resources, including energy and water, and minimising waste at a worksite.

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## Outcomes and performance criteria

### Outcome 1

Explain and discuss concepts relating to resource efficiency programmes.

### Performance criteria

- 1.1 The concept of design for the environment is explained in relation to incorporating its principles and benefits in a resource efficiency programme for an organisation.

**Range** principles may include – material selection, product design, process design, communication, distribution, reduction of impacts during production, end of life options, hazardous properties; benefits may include – eliminating toxic materials, minimum energy utilisation, minimal emissions, minimal waste, enhanced biodegradability; evidence is required of at least one principle and one benefit.

- 1.2 The concept of product stewardship is explained in relation to measures for achieving sustainable resource use.

**Range** explanation includes at least two of – priority product, non-priority product, regulatory measure, voluntary scheme, adequacy statement, political support, consultation, international trade obligation, education campaign; measures may include but are not limited to – sector action plan, industry-based objective, disposal ban, material control, ministerial power, take back scheme, deposit-refund scheme, labelling, recycling standard, product design; evidence of two measures is required.

- 1.3 The concept of life cycle assessment is explained in accordance with ISO14040:2006.

- 1.4 The concept of full cost accounting is explained and discussed in relation to its relevance for resource efficiency programmes.
- 1.5 The explanation of the waste hierarchy is illustrated with reference to requirements of a local and a regional authority.
- Range requirements – long-term council plan, waste minimisation, management plan.
- 1.6 The explanation of mass flow is illustrated with reference to its application to measuring the movement of liquid and gas.
- 1.7 The explanation of process flows compares their use in a resource efficiency context with their application for process engineering.
- 1.8 The discussion identifies sources for maintaining currency of information on resource efficiency.
- 1.9 The discussion identifies and illustrates the impact of the political environment on resource efficiency opportunities with reference to current issues and their impact on organisational resource efficiency policies.
- Range political environment may include – international, national, regional, local, organisational;  
current issues may include – sustainability, climate change, carbon footprint.

## Outcome 2

Draft a strategy to gain organisational commitment to resource efficiency.

### Performance criteria

- 2.1 The draft strategy expresses an overarching goal that matches the activities of the organisation and the requirements of any external drivers.
- Range external drivers may include but are not limited to – government policies, market demand, trade organisation, waste charges, industry awards.
- 2.2 The draft strategy expresses specific objectives that may be incorporated in an environmental policy for the organisation.
- Range at least three objectives.
- 2.3 The draft strategy is able to form the basis for amending or developing a resource efficiency policy for the organisation.

## Outcome 3

Scope a resource efficiency programme for an organisation.

**Performance criteria**

- 3.1 The activities of the organisation are scoped to determine the kinds of environmental, economic, and social issues it is likely to be facing; and what it has done or is doing in response to those issues.
- 3.2 The scoping exercise researches what similar businesses have done to improve their resource efficiency.
- 3.3 The scoping exercise evaluates internal and external resources available for the programme.

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<b>Planned review date</b>	31 December 2023
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**Status information and last date for assessment for superseded versions**

Process	Version	Date	Last Date for Assessment
Registration	1	17 June 2011	31 December 2015
Revision	2	21 November 2013	N/A
Rollover and Revision	3	28 June 2018	N/A

<b>Consent and Moderation Requirements (CMR) reference</b>	0014
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

**Comments on this unit standard**

Please contact MITO New Zealand Incorporated [info@mito.org.nz](mailto:info@mito.org.nz) if you wish to suggest changes to the content of this unit standard.