

<b>Title</b>	<b>Plan, prepare, and implement a zero waste product development project</b>		
<b>Level</b>	<b>6</b>	<b>Credits</b>	<b>60</b>

<b>Purpose</b>	<p>This unit standard is for leaders of projects for product development.</p> <p>People credited with this unit standard are able to: plan and prepare for, and implement a zero waste product development project.</p>
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<b>Classification</b>	Zero Waste > Zero Waste Theory and Practice
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<b>Available grade</b>	Achieved
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### Guidance Information

- References relevant to this unit standard include but are not limited to:  
Hazardous Substances and New Organisms Act 1996 (HSNO Act);  
*The New Zealand Waste Strategy: Reducing Harm, Improving Efficiency* 2010  
Ministry for the Environment, available at <http://www.mfe.govt.nz>;  
New Zealand Business Council for Sustainable Development information on product development and stewardship available on the Supply Chain website pages at <http://www.nzbcsc.org.nz>;  
AS/NZS ISO 14001:2016: *Environmental management systems – Requirements with guidance for use* available at <http://www.standards.co.nz>;  
Case studies for Target Zero at <http://www.ccc.govt.nz>.
- The initiative may be implemented in a community group, commercial, or industrial context.
- It is expected that candidates will have prior experience of project management before seeking credit for this unit standard.
- Definition  
*Product development* for this unit standard includes developing a new or existing product following the principles and practices of zero waste. The product itself may or may not be for the zero waste sector.

### Outcomes and performance criteria

#### Outcome 1

Plan and prepare for a zero waste product development project.

**Performance criteria**

- 1.1 Planning determines the scope by consultation with the stakeholders involved in the project.
- Range product development, marketing, process development, engineering, planning, packaging, distribution, purchasing, finance, customer services, health and safety, legal.
- 1.2 A project brief is prepared that outlines objectives and success criteria consistent with zero waste principles.
- Range principles – sustainability, resource efficiency, cleaner production.
- 1.3 Preparation researches design options that meet zero waste concepts of disassembly, and reuse of whole product or its parts.
- Range may include but is not limited to – product standardisation.
- 1.4 Preparation researches appropriateness of inputs to meet zero waste concepts for materials.
- Range non-toxic, local, recycled, sustainably harvested, sustainably produced, renewable.
- 1.5 Preparation researches process options that meet the zero waste principle of sustainability.
- Range energy conservation, reduction of rework and discards, reuse of scraps, recycling of consumables including but not limited to – chemicals, elimination of toxic substances.
- 1.6 Preparation researches certification options for relevance to the product and selects the option that meets specified objectives.
- Range certification may include but is not limited to – Enviro-mark, Biogro, ISO 14001, Environmental Choice New Zealand.
- 1.7 Preparation ensures that options are researched to determine marketing and packaging in accordance with zero waste principles.
- Range marketing – information provided with product, environmental impact of product, economic benefits, social benefits; packaging – minimising, reusing, returnable, transport requirements.
- 1.8 Preparation researches legislative requirements for the product to ensure compliance obligations are incorporated in the plan.
- Range may include but is not limited to – HSNO Act.

## Outcome 2

Implement a zero waste product development project.

### Performance criteria

- 2.1 Initial product sample meets key requirements stated in the brief.
- Range brief may include – amendment justified in relation to final outcome.
- 2.2 Implementation ensures that the initial sample is tested for pollutants and environmental performance.
- 2.3 Implementation ensures that sales are estimated in terms of volume, and market positioning is defined in terms of zero waste principles.
- 2.4 Implementation ensures that potential suppliers are assessed in terms of meeting environmental management criteria consistent with zero waste principles.
- 2.5 Implementation ensures that process development requirements are met in terms of production capacity and timing.
- 2.6 Implementation ensures that product packaging requirements are met in terms of sustainability.
- Range packaging – design, production, transportation.
- 2.7 Implementation ensures that the pricing analysis considers inputs, process, and packaging in terms of potential financial returns.
- 2.8 Safety clearances are confirmed in accordance with legislation.
- Range safety – inputs, process, packaging, transport.
- 2.9 Equipment is selected that meets time, cost, and process efficiency requirements in accordance with the project brief.
- Range selection may include but is not limited to – purchase, lease, adapt.
- 2.10 Implementation ensures that consumer test results met success criteria in accordance with the project brief.
- 2.11 Review of project confirms sustainability criteria have been met in accordance with the project brief.

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**This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.**

**Status information and last date for assessment for superseded versions**

Process	Version	Date	Last Date for Assessment
Registration	1	26 January 2007	31 December 2025
Rollover and Revision	2	28 March 2019	31 December 2025
Review	3	27 February 2025	31 December 2025

**Consent and Moderation Requirements (CMR) reference**

0014

This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.