40601 Apply principles of kaitiakitanga and circular economy in a personal, community, or workplace environment

Kaupae Level	3
Whiwhinga Credit	10
Whāinga Purpose	This skill standard is intended for people who are already working in a resource recovery environment including resource recovery facilities, construction, demolition or manufacturing worksites. It may also be undertaken by people working in other industries or contexts where applicable.
	This skill standard provides an overview of the roles and responsibilities of kaitiakitanga and the relationship between resource use, environmental impacts and circular economy. People credited with this skill standard will be able to apply the principles of kaitiakitanga and circular economy in a personal, community, or workplace environment.
	This skill standard aligns with the New Zealand Certificate in Resource Recovery (Level 3) with strands in Organic Materials Processing, Recovery and Recycling, and Metal Recycling [Ref: 2744] and may be used in qualifications and micro-credentials at Level 3 and above in other disciplines.

Hua o te ako me Paearu aromatawai | Learning outcomes and assessment criteria

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria		
 Explain roles and responsibilities relating to the principles of kaitiakitanga and waste minimisation. 	 Identify examples of kaitiakitanga in practice in a personal, whānau, or community environment. 		
	 Identify roles and responsibilities relating to kaitiakitanga in the workplace. 		
	c. Explain the role and responsibility of individuals, community, industry, and government for waste minimisation and the impact of their actions.		
	d. Explain the precautionary principle and its application in decision-making processes.		

Hua o te ako Learning outcomes		Paearu aromatawai Assessment criteria			
2.	 Examine the relationship between resource use, environment impacts and circular economy. 		a. Describe circular economy in terms of environmental, social, cultural, and economic contexts.		
		b.	Describe the changing relationship over time between resource use and human consumption in terms of environmental impacts.		
		C.	Explain the value of ecosystem services and co- benefits to human well-being and the economy.		
		d.	Describe the life cycle of a product in terms of resource use and environmental impact.		
3.	Describe behavioural change theory and its application in promoting sustainable	a. Desc	Describe three behavioural change theories.		
	resource use.	b.	Identify underlying factors which influence behaviour relating to resource consumption and waste generation.		
		C.	Describe behavioural change methods in relation to promoting sustainable resource use.		
			Reflect on personal and collective behaviours towards resource consumption and waste management and identify opportunities for improvement.		
4.	Apply kaitiakitanga and circular economy principles in a personal, community, or workplace environment.	a.	Identify opportunities to apply principles of kaitiakitanga and circular economy in a personal, community, or workplace environment.		
		b.	Research potential environmental, social, cultural and/or economic benefits of applying principles of kaitiakitanga and circular economy.		
		C.	Participate in an initiative which applies principles of kaitiakitanga and circular economy in a personal, community, or workplace environment.		
			Reflect on personal and collective progress in applying principles of kaitiakitanga and circular economy, identify challenges and opportunities for further improvement.		

Pārongo aromatawai me te taumata paearu | Assessment information and grade criteria

Assessment specifications:

Evidence presented against assessment criterion 1c must include a minimum of one role and one responsibility each for individuals, community, industry, and government.

Evidence presented for assessment against this skill standard may include oral, visual, video, written and/or practical activities demonstrated in the workplace.

Evidence presented for assessment against this skill standard must be consistent with safe working practices and be in accordance with applicable service information, workplace procedures and legislative requirements.

Definitions

Ecosystem services refer to the processes by which the environment produces resources of value such as clean water, timber, scenic views, and pollination of native and agricultural plants.

Kaitiakitanga refers to the obligation arising from kin relationships, to act as kaitiaki (a guardian, a person obliged to exercise kaitiakitanga) of taonga. Kaitiakitanga relates to other Māori principles including whakapapa, mauri and mana.

Mauri literally meaning life force or life principle, acknowledges the need to respect and care for all things, both animate and inanimate objects (including: plants, rivers, mountains and people) based on the way in which all things on earth are inter-related and dependent on each other.

Mana implies authority, influence and prestige, which is bestowed upon an individual or group by others. An individual, whānau, hapū or iwi can exercise mana (rangatiratanga) in recognition of their accomplishments, expertise, knowledge, obligations or association to a person, people, place or thing.

Whakapapa refers to the kinship between all living things, past present and future. Whakapapa not only exists between people but between people and the environment.

Precautionary principle refers to making decisions and implementing measures on the side of caution where significant environmental damage may occur but the knowledge on the matter is incomplete.

Workplace procedures refer to organisation policies and procedures that are documented in memo, electronic, or manual format and available in the workplace. They may include but are not limited to – standard operating procedures, site specific procedures, site safety procedures, equipment operating procedures, quality assurance procedures, product quality specifications, manufacturer's requirements, references, approved codes of practice, housekeeping standards, environmental considerations, on-site briefings, supervisor's instructions, and procedures to comply with legislative and local body requirements relevant to the resource recovery industry.

Ngā momo whiwhinga | Grades available

Achieved.

Ihirangi waitohu | Indicative content

Roles and responsibilities

• Identification of the application of the precautionary principle in environmental policy of a local government, community organisation or business.

Resource use and environmental impacts

- Consideration of resource use at local, national or global level.
- Product life cycle including resource extraction, production, consumption, end-of-life management, recycling, and disposal.

Behavioural change

• Behavioural change theories such as Theory of Planned Behaviour, Social Cognitive Theory, Behavioural Economics, and Community-Based Social Marketing.

Application of kaitiakitanga and circular economy principles

- Workplace initiatives such as introduction of a cup library or waste audit.
- Initiatives in a personal or community context such as tree planting, working bee, pest management, assisting in strandings, clean up, or waste audit. For more actions refer to resource section below.

Rauemi | Resources

Legislation, regulations and industry guidelines relevant to this skill standard include but are not limited

to:

- Ministry for the Environment. (2023). Te rautaki para | Waste Strategy. Available from: <u>http://www.mfe.govt.nz</u>.
- Ministry for the Environment. Research into attitudes to waste and recycling. Available from: <u>http://www.mfe.govt.nz</u>.
- Ministry for the Environment. *He mahi ka taea e koe. What you can do.* Available from: http://www.mfe.govt.nz.
- Ministry for the Environment. *Show actions that help support the environment wherever you are.* Available from: <u>https://environment.govt.nz/what-you-can-do/take-action/</u>.
- BRANZ. (2020). Changing behaviour #1: Strategies for changing behaviour. Available from: <u>https://www.branz.co.nz/</u>.
- Ellen Macarthur Foundation. *Circular economy*. Available from: <u>https://www.ellenmacarthurfoundation.org/</u>.
- Juhi Shareef. (2020). *An Indigenous Māori View of Doughnut Economics*. Doughnut Economics Action Lab. Available from: <u>https://doughnuteconomics.org/</u>.

Any new, amended or replacement Acts, regulations, standards, codes of practice, guidelines, or authority requirements or conditions affecting this skill standard will take precedence for assessment purposes, pending review of this skill standard. Legislation can be accessed at: https://www.legislation.govt.nz.

Pārongo Whakaū Kounga | Quality assurance information

Ngā rōpū whakatau-paerewa Standard Setting Body	Hanga-Aro-Rau Manufacturing, Engineering and Logistics Workforce Development Council	
Whakaritenga Rārangi Paetae Aromatawai DASS classification	Service Sector > Resource Recovery > Resource Recovery Theory	
Ko te tohutoro ki ngā Whakaritenga i te Whakamanatanga me te Whakaōritenga CMR	0014	

Hātepe Process	Putanga Version	Rā whakaputa Review Date	Rā whakamutunga mō te aromatawai Last date for assessment	
Rēhitatanga Registration	1	24 April 2025	N/A	
Kōrero whakakapinga Replacement information	N/A			
Rā arotake Planned review date	31 December 2029			

Please contact Hanga-Aro-Rau Manufacturing, Engineering and Logistics Workforce Development at <u>gualifications@hangaarorau.nz</u> to suggest changes to the content of this skill standard.