

Achievement Standard

Subject Reference	Education for Sustainability 2.2		
Title	Explain how human activity in a biophysical environment has consequences for a sustainable future		
Level	2	Credits	4
		Assessment	Internal
Subfield	Science		
Domain	Environmental Sustainability		
Status	Registered	Status date	20 November 2014
Planned review date	31 December 2020	Date version published	17 November 2016

This achievement standard involves explaining how human activity in a biophysical environment has consequences for a sustainable future.

Achievement Criteria

Achievement	Achievement with Merit	Achievement with Excellence
<ul style="list-style-type: none"> Explain how human activity in a biophysical environment has consequences for a sustainable future. 	<ul style="list-style-type: none"> Explain in depth how human activity in a biophysical environment has consequences for a sustainable future. 	<ul style="list-style-type: none"> Comprehensively explain how human activity in a biophysical environment has consequences for a sustainable future.

Explanatory Notes

- This achievement standard is aligned with *The New Zealand Curriculum*, Learning Media, Ministry of Education, 2007, and is related to learning objective 7.1 in the *Teaching and Learning Guide for Education for Sustainability*, Ministry of Education, at <http://seniorsecondary.tki.org.nz>.

This standard is also derived from *Te Marautanga o Aotearoa*. For details of *Te Marautanga o Aotearoa* achievement objectives to which this standard relates, see the [Papa Whakaako](#) for the relevant learning area.

- Explain how human activity in a biophysical environment has consequences for a sustainable future* involves:
 - explaining the characteristics of a biophysical environment, including the ecological system and a physical system it interacts with. This will involve data collection and the use of measurement methods

- outlining the human activity being undertaken in the biophysical environment and investigating the consequences of the activity for the sustainability of the environment
- drawing conclusions about the consequences of the human activity for a sustainable future.

Explain in-depth how human activity in a biophysical environment has consequences for a sustainable future involves:

- drawing informed conclusions about why human activity in a biophysical environment has consequences for a sustainable future. Conclusions are based on a clear, logical argument and supported by evidence.

Comprehensively explain how human activity in a biophysical environment has consequences for a sustainable future involves:

- drawing insightful conclusions about the wider implications of how human activity in a biophysical environment has consequences for a sustainable future. The conclusions may include projections of future impacts and consideration of options for actions that show personal and social responsibility for a sustainable future.

- 3 *A sustainable future* requires the development of ways of thinking and acting to meet the needs of the present generation without compromising the ability of future generations (of all living things) to meet their own needs. In Aotearoa New Zealand, a sustainable future reflects, wherever possible, consideration of Māori concepts and values relating to the environment, which may vary between hapū and between iwi.
- 4 *Consequences* for a sustainable future are the result of human activity that promotes or disrupts the sustainability of an environment.
- 5 *A biophysical environment* relates to the interactions between a physical environment and the biological life forms within the environment. The biophysical environment could be a natural environment or a built environment, or some combination of the two. The physical environment may be a geological, atmospheric, hydrological or climatic system.
- 6 An *environment* refers to a definable area such as a stream, estuary, bush, urban community, national park, business, home or farm.
- 7 *Human activity* refers to activities that change the biophysical environment, for example: land use; industrial development; transport; housing; waste management; recreation; tourism; establishment of marine reserves; energy production and consumption; extractive industries such as fishing, mining or forestry; water use or introduction of exotic species.
- 8 Conditions of Assessment related to this achievement standard can be found at www.tki.org.nz/e/community/ncea/conditions-assessment.php.

Quality Assurance

- 1 Providers and Industry Training Organisations must have been granted consent to assess by NZQA before they can register credits from assessment against achievement standards.
- 2 Organisations with consent to assess and Industry Training Organisations assessing against achievement standards must engage with the moderation system that applies to those achievement standards.

Consent and Moderation Requirements (CMR) reference

0233