# Australian Curriculum Mapping: 2040 – Exploring Energy – Years 5 & 6

## Year 5 Science

* Communicate ideas, explanations and processes using scientific representations in a variety of ways, including multi-modal texts [(ACSIS093)](https://www.australiancurriculum.edu.au/f-10-curriculum/science/?strand=Science+Understanding&strand=Science+as+a+Human+Endeavour&strand=Science+Inquiry+Skills&capability=ignore&priority=ignore&year=12005&elaborations=true&cd=ACSIS093&searchTerm=ACSIS093#dimension-content)

## Year 6 Science

* Electrical energy can be transferred and transformed in electrical circuits and can be generated from a range of sources [(ACSSU097)](https://www.australiancurriculum.edu.au/f-10-curriculum/science/?strand=Science+Understanding&strand=Science+as+a+Human+Endeavour&strand=Science+Inquiry+Skills&capability=ignore&priority=ignore&year=12006&elaborations=true&cd=ACSSU097&searchTerm=ACSSU097#dimension-content)
* Scientific knowledge is used to solve problems and inform personal and community decisions [(ACSHE100)](https://www.australiancurriculum.edu.au/f-10-curriculum/science/?strand=Science+Understanding&strand=Science+as+a+Human+Endeavour&strand=Science+Inquiry+Skills&capability=ignore&priority=ignore&year=12006&elaborations=true&cd=ACSHE100&searchTerm=ACSHE100#dimension-content)
* Communicate ideas, explanations and processes using scientific representations in a variety of ways, including multi-modal texts [(ACSIS110)](https://www.australiancurriculum.edu.au/f-10-curriculum/science/?strand=Science+Understanding&strand=Science+as+a+Human+Endeavour&strand=Science+Inquiry+Skills&capability=ignore&priority=ignore&year=12006&elaborations=true&cd=ACSIS110&searchTerm=ACSIS110#dimension-content)

## Years 5 & 6 Design and Technologies

* Examine how people in design and technologies occupations address competing considerations, including sustainability in the design of products, services, and environments for current and future use [(ACTDEK019)](https://www.australiancurriculum.edu.au/f-10-curriculum/technologies/design-and-technologies/?strand=Design+and+Technologies+Knowledge+and+Understanding&strand=Design+and+Technologies+Processes+and+Production+Skills&capability=ignore&priority=ignore&year=12975&elaborations=true&cd=ACTDEK019&searchTerm=ACTDEK019#dimension-content)

## Year 6 Economics and Business

* How the concept of opportunity cost involves choices about the alternative use of resources and the need to consider trade-offs [(ACHASSK149)](https://www.australiancurriculum.edu.au/f-10-curriculum/humanities-and-social-sciences/hass/?strand=Inquiry+and+skills&strand=Knowledge+and+Understanding&capability=ignore&priority=ignore&year=12102&elaborations=true&cd=ACHASSK149&searchTerm=ACHASSK149#dimension-content)

## Relevant parts of Year 5 Science achievement standards

* Students communicate their ideas and findings using multimodal texts.

## Relevant parts of Year 6 Science achievement standards

* Students analyse requirements for the transfer of electricity and describe how energy can be transformed from one form to another when generating electricity. They explain how scientific knowledge helps us to solve problems and inform decisions. Students construct multimodal texts to communicate ideas.

## Relevant parts of Years 5 & 6 Design and Technologies achievement standards

* Students explain how social, ethical, technical and sustainability considerations influence the design of solutions to meet a range of present and future needs.

## Relevant parts of Year 6 Economics and Business achievement standards

* Students recognise why choices about the allocation of resources involve trade-offs.

Syllabus outcomes: [ST3-4WS, ST3-6PW, ST3-7PW,](http://syllabus.bostes.nsw.edu.au/science/science-k10/outcomes/) [ST3-14BE, ST3-15I, ST3-16P](http://syllabus.bostes.nsw.edu.au/science/science-k10/outcomes/)

General capabilities: [Critical and Creative Thinking](https://www.australiancurriculum.edu.au/f-10-curriculum/general-capabilities/)

Cross-curriculum priority: [Sustainability OI.6., OI.8](https://www.australiancurriculum.edu.au/f-10-curriculum/cross-curriculum-priorities/sustainability/)