

Energy Transformers - Curriculum Mapping

The following table lists specific outcomes from the Australian Curriculum with a description of each outcome and an example of how this outcome is achieved through Energy Transformers.

Outcome	Description	Example from Energy Transformers
ACHASSK120	Types of resources (natural, human, capital) and the ways societies use them to satisfy the needs and wants of present and future generations	Students consider the type of resources (e.g. coal, gas, or renewables) to be used to power the electricity grid and for energy use in public buildings. Students will also consider the way capital is used to satisfy the needs of present and future generations, for example deciding whether to spend \$100 billion over 10 years re-tooling the nation or to gradually implement green initiatives over the next 30 to 50 years.
ACHASSK150	The effect that consumer and financial decisions can have on the individual, the broader community, and the environment	Students consider how the use of induction stoves can result in healthier homes with less air pollution, and how choosing to eat less meat can help reduce greenhouse gas emissions. Students also consider the effects of investing money in climate friendly super funds.
ACHASSK149	How the concept of opportunity cost involves choices about the alternative use of resources and the need to consider trade-offs	Throughout the game, each option that is presented comes with an associated monetary cost. Students will need to consider how much they are spending on their choices and whether any trade-off need to be made.
ACSSU097	Electrical energy can be transferred and transformed in electrical circuits and can be generated from a range of sources	Students explore the use of wind turbines and solar panels to generate electricity and they consider how to best transport energy from where it is generated to where it is being used.
ACMSP147	Interpret and compare a range of data displays, including side-by-side column graphs for two categorical variables	Throughout the game, certain challenges involve making choices that result in different cost savings, greenhouse gas emission reductions and air pollution reductions. These savings and reductions are presented as side-by- side column graphs that students can practice interpreting and comparing.

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