



*Everyday
climate
choices*



Energy Focus and the Australian Curriculum

Sustainable Schools Program



ACT
Government

Small Steps. Smart Choices.

climatechoices.act.gov.au/schools-program

Energy Focus and the Australian Curriculum

Big understandings – Energy for a sustainable future

1. Energy is an essential resource
2. There are renewable and non-renewable energies
3. Human consumption has a major effect on energy resources
4. We can reduce our energy consumption and lessen the environmental impact
5. Sustainable practices will ensure energy for the future. Sustainable practices will extend our existing energy resources.

Learning about energy for a sustainable future

	Kindergarten	1	2	3	4	5	6
Science Chemical Sciences				A change of state between solid and liquid can be caused by adding or removing heat (ACSSU046)			Changes to materials can be reversible or irreversible (ACSSU095)
Science Physical sciences		Light and sound are produced by a range of sources and can be sensed (ACSSU020)	A push or pull affects how an object moves or changes shape (ACSSU033)	Heat can be produced in many ways and can move from one object to another (ACSSU049)	Forces can be exerted by one object on another through direct contact or from a distance (ACSSU076)	Light from a source forms shadows and can be absorbed, reflected and refracted (ACSSU080)	Electrical energy can be transferred and transformed in electrical circuits and can be generated from a range of sources (ACSSU097)
Science Earth & space sciences	Daily and seasonal changes in our environment affect everyday life (ACSSU004)	Observable changes occur in the sky and landscape (ACSS019)	Earth's resources are used in a variety of ways (ACSSU032)		Earth's surface changes over time as a result of natural processes and human activity (ACSSU075)	The Earth is part of a system of planets orbiting around a star (the sun) (ACSSU078)	Sudden geological changes and extreme weather events can affect the Earth's surface (ACSSU096)

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	Kindergarten	1	2	3	4	5	6
Science Use and influence of science		People use science in their daily lives, including when caring for their environment and living things (ACSHE022) & (ACSHE035)		Science knowledge helps people to understand the effect of their actions (ACSHE051) & (ACSHE062)		Scientific knowledge is used to solve problems and inform personal and community decisions (ACSHE083) & (ACSHE100)	
HASS History		Differences and similarities between students' daily lives and life during their parents' and grandparents' childhoods (ACHASSK030)	How changing technology affected people's lives (at home and in the ways they worked, travelled, communicated and played in the past) (ACHASSK046)			The nature of convict or colonial presence, including the factors that influenced patterns of development, aspects of the daily life of the inhabitants (including Aboriginal Peoples and Torres Strait Islander Peoples) and how the environment changed (ACHASSK107)	

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	Kindergarten	1	2	3	4	5	6
HASS Geography					<p>The importance of environments, including natural vegetation, to animals and people (ACHASSK088)</p> <p>The custodial responsibility Aboriginal and Torres Strait Islander Peoples have for Country/ Place, and how this influences views about sustainability (ACHASSK089)</p> <p>The use and management of natural resources and waste, and different views on how to do this sustainably (ACHASSK090)</p>	<p>The influence of people, including Aboriginal and Torres Strait Islander Peoples, on the environmental characteristics of Australian places (ACHASS112)</p> <p>The environmental and human influences on the location and characteristics or a place and the management of spaces within them (ACHASS113)</p> <p>The impact of bushfires or floods on environments and communities and how people can respond (ACHASSK114)</p>	

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	Kindergarten	1	2	3	4	5	6
HASS Economics and Business						<p>The difference between needs and wants and why choices need to be made about how limited resources are used (ACHASSK119)</p> <p>Types of resources (natural, human, capital) and the ways societies use them to satisfy the needs and wants of present and future generations (ACHASSK120)</p> <p>Influences on consumer choices and methods that can be used to help make informed personal consumer and financial choices (ACHASSK 121)</p>	<p>How the concept of opportunity cost involves choices about the alternative use of resources and the need to consider trade-offs (ACHASSK 149)</p> <p>The effect that consumer and financial decisions can have on the individual, the broader community and the environment (ACHASSK150)</p>

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	Kindergarten	1	2	3	4	5	6		
Design and Technologies Knowledge and Understanding	Identify how people design and produce familiar products, services and environments and consider sustainability to meet personal and local community needs (ACTCEK001)	Explore the characteristics and properties of materials and components that are used to produce designed solutions (ACTDEK004)		Recognise the role of people in design and technologies occupations and explore factors, including sustainability that impact on the design of products, services and environments to meet community needs (ACTCEK010)	Investigate food and fibre production and food technologies used in modern and traditional societies (ACTCEK012)	Investigate the suitability of materials, systems, components, tools and equipment for a range of purposes (ACTCEK013)	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 (ACTCEK019)	Investigate how and why food and fibre are produced in managed environments and prepared to enable people to grow and be healthy (ACTCEK021)	Investigate characteristics and properties of a range of materials, systems, components, tools and equipment and evaluate the impact of their use (ACTCEK023)
Design and Technologies Processes and Production Skills	Explore needs or opportunities for designing, and the technologies needed to realise designed solutions (ACTDEP005)	Use personal preferences to evaluate the success of design ideas, processes and solutions including their care for environment (ACTDEP008)		Critique needs or opportunities for designing and explore and test a variety of materials, components, tools and equipment and the techniques needed to produce designed solutions (ACTDEP014)	Evaluate design ideas, processes and solutions based on criteria for success developed with guidance and including care for the environment (ACTDEP017)		Critique needs or opportunities for designing, and investigate materials, components, tools, equipment and processes to achieve intended designed solutions (ACTDEP024)	Negotiate criteria for success that include sustainability to evaluate design ideas, processes and solutions (ACTDEP027)	
Digital Technologies Processes and Production Skills	Explore actions that help make the classroom a healthy safe and active place (ACPPS022)			Describe strategies to make the classroom and playground healthy, safe and active spaces (ACPPS040)			Explain how student solutions and existing information systems are sustainable and meet current and future local community needs (ACTDIP021)		

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Learning through water, waste, energy, biodiversity and sustainability

	Kindergarten	1	2	3	4	5	6
HASS Civics and Citizenship	Teachers select issues, rules, bylaws and laws related to water, waste, energy, biodiversity and sustainability as students learn about civic participation, democratic process and governance (see relevant content descriptions below).						
				<p>The importance of making decisions democratically (ACHASSK070)</p> <p>Who makes the rules, why rules are important and the consequences of rules not being followed (ACHASSK071)</p> <p>Why people participate within communities and how students can actively participate and contribute (ACHASSK072)</p>	<p>The role of local government and the decisions it makes on behalf of the community (ACHASSK091)</p>	<p>Why regulations and laws are enforced and the personnel involved (ACHASSK117)</p> <p>How people with shared beliefs and values work together to achieve a civic goal (ACHASSK118)</p>	<p>Where ideas for laws come from and how they become law (ACHASSK146)</p> <p>The obligations citizens may consider they have beyond their own national borders as active and informed global citizens (ACHASSK148)</p>
Science Nature and development of science	Teachers select events and phenomena related to water, waste, energy, biodiversity for students to observe and investigate as they are learning about scientific process (see relevant content descriptions below).						
	<p>Science involves observing, asking questions about, and describing changes in, objects and events (ACSHE013)</p>	<p>Science involves observing, asking questions about, and describing changes in, objects and events (ACSHE021) & (ACSHE034)</p>	<p>Science involves making predictions and describing patterns and relationships (ACSHE050) & (ACSHE061)</p>		<p>Science involves testing predictions by gathering data and using evidence to develop explanations of events and phenomena and reflects historical and cultural contributions (ACSHE081) & (ACSHE098)</p>		

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	Kindergarten	1	2	3	4	5	6
English	Teachers select texts, writing stimuli, vocabulary etc. related to water, waste, energy, biodiversity and sustainability as students are learning to read and view, write, speak and listen						
Mathematics	Teachers select problems for students to solve, items to measure, patterns to identify, data to organise, display, compare and analyse related to water, waste, energy, biodiversity and sustainability						
The Arts	Water, waste, energy, biodiversity and sustainability can provide thought-provoking contexts in which students can explore the nature of art making and responding						
Languages	Teachers select texts, writing stimuli, vocabulary etc. related to water, waste, energy, biodiversity and sustainability as students are learning to communicate and interact with others in other cultural contexts						