Climate Action

The rise of global temperatures caused by human activity has resulted in increasing sea levels and bushfire risks, and a decline of habitats for our Australian native species. This case study will focus on how Nature Parks is working towards climate neutrality and increased biodiversity through protecting native habitats including marine areas and fish species. Learn about climate change impacts on Millowl's (Phillip Island's) iconic Little Penguin and discover how Nature Parks world-renowned scientists and researchers are gathering critical data to inform conservation decisions.

Learning Objectives

- Managing climate change
- Risks and opportunities
- Biodiversity and development
- Sustainable development
- Research and conservation

Level: VCE, Tertiary, Environmental Science
Location: Penguin Parade Visitor Centre
Duration: 2 hours
Ranger to student ratio: 1:25
Price: $15.00 per student
Minimum Cost: $300.00
Equipment: Sun protection, closed shoes

Ranger facilitated session times are: 10:30am, 12:30pm and 3:00pm. Evening session times vary with the season. All ranger facilitated experiences are subject to availability.

We welcome your enquiry.
Phone: +61 3 5951 2802
Email: schoolbookings@penguins.org.au
More information visit: https://www.penguins.org.au/conservation/education/

VCE Environmental Science Study Design – 2022-2026

Unit 4 How Can climate change and the impacts of human energy use be managed?
Managing climate change
• The risks and opportunities associated with climate change for humans and ecological systems at a selected region or location: increase in range of exotic species; changes in length of plant growing seasons and animal breeding cycles; phenological changes for plant-pollinator interactions; increasing risks to coastal infrastructure from continuing sea level rise; reduction in agricultural production due to warmer and drier conditions
• Mitigation options for reducing net greenhouse emissions to slow climate change

• Adaptation options for building resilience to the effects of unavoidable climate change at a selected region or location
• Interconnections and tensions between factors that influence responsible decision-making around managing climate change: diverse stakeholder values, knowledge and priorities, regulatory frameworks that inform environmental management strategies, use and interpretation of historical and current scientific data, and application of new technologies.

Managing the impacts of human energy use

• Options for building a sustainable energy future that produces lower greenhouse gas emissions and supplies reliable and affordable energy services: improving resource efficiency; increasing the efficiency of energy conversion devices; replacing fossil fuels with non-fossil fuel energy sources; and reducing personal energy consumption
• Interconnections and tensions between factors that influence responsible decision-making around building a sustainable energy future, including diverse stakeholder values, knowledge and priorities, regulatory frameworks that inform environmental management strategies, use and interpretation of historical and current scientific data, and application of new technologies.

Outcome 3
Design and conduct a scientific investigation related to biodiversity, environmental management, climate change and/or energy use, and present an aim, methodology and method, results, discussion and a conclusion in a scientific poster.