

Vegetation

Description

Vegetation can aid air quality, act as a passive cooling measure and improve the local ecosystem. Maintaining vegetation throughout climatic events is important for ecology.

Key Pointers

- Vegetation maintenance can be carried out by students, a caretaker, an external party, etc., which helps build a community.
- Introducing new vegetation to the local ecosystem may have challenges.
- Appointing a landscaper/specialist to aid in the maintenance of vegetation can be beneficial.

Case Study

Cobram Kindergarten, VIC, has a lawn retreat garden where children can play and explore in a safe environment. The natural lawn features endemic grass plants to provide a curious bush-style space for the students.



Source: [Lawn retreat garden - Cobram Kindergarten - Learnscapes](#)

Tree Canopy

Description

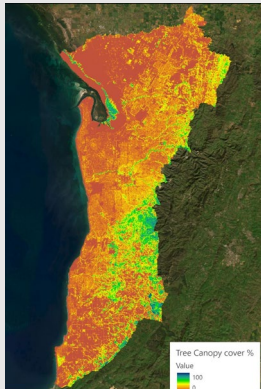
Tree canopies provide a nature-based solution to shading whilst providing vegetation to the landscape. They offer carbon sequestration and a passive cooling strategy.

Key Pointers

- Tree canopies aid the aesthetic of the local environment, blending in with the vast amount of ecology within the landscape.
- In a school environment, tree canopies allow students to stay cooler in the shade during recreational time.
- Tree canopies provide a habitat for flora and fauna.

Case Study

Adelaide recognises the importance of tree canopies for shading and cooling the local environment. Their goal is to achieve **30% tree coverage** across metropolitan Adelaide, they are currently at **17%**.



Source: [New data shows extent of Adelaide's tree canopy](#) | Green Adelaide

Drought Resistant Vegetation

Description

Many native plants are naturally drought-resistant. The use of these plants is low-maintenance, and the enhanced greenery can sustain the feel of nature during periods of drought.

Key Pointers

- Drought-resistant vegetation can be used as resources for educational purposes.
- Encourages maintenance of native ecology.
- Using drought-resistant vegetation is a lean way to reduce reliance upon mechanical systems, which would otherwise release carbon emissions.

Case Study

The Queensland Government has published advice on selecting drought-resistant vegetation online.

Examples of plants to include which will tolerate dry conditions and are also native to Australia are:

- Acacia
- Cordyline
- Correa
- Grevillea
- Westringia



Source: [Plant selection | Environment, land and water | Queensland Government \(www.qld.gov.au\)](#)

Green Roof / Wall

Description

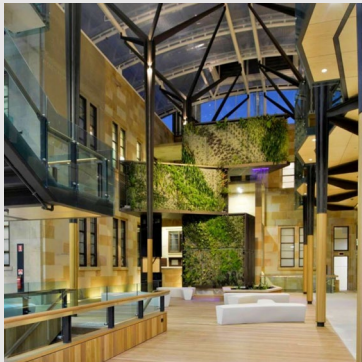
Green roofs and walls are known to improve air quality, aid biodiversity, particularly in urban areas and densely increase the amount of vegetation.

Key Pointers

- Green surfaces aid the aesthetic of the local environment, blending in with the vast amount of ecology within the landscape.
- Green roofs/walls also aid water filtering, which can be particularly beneficial to pair with water treatment systems.
- The appointment of an external consultant to identify feasible areas for such features can be beneficial.

Case Study

UQ Global Change Institute, QLD



The building features a 70m² green wall within its learning space. The green wall acts as an air infiltration system to clean and purify the air for the occupants.

Source: [The Greenwall Company - UQ Global Change Institute Building Greenwall](#) | [Green Roofs Australasia](#)

Communal Gardens

Description

Communal gardens offer the opportunity for crops and learning of flora. In a school environment, a garden can contribute to daily education and provide an activity/experiment to students.

Key Pointers

- The growth of crops can attract various animals, which can disrupt the local ecosystem. Therefore, caution must be taken to ensure the gardens are non-disruptive to the native ecosystem.
- Communal gardens can be open to the broader community too.
- Encourage the community to engage with nature and be present in outdoor spaces.

Case Study

Kurunda District State College, QLD



The school grows food gardens on-site and incorporates the activities into various lessons as part of the curriculum.

Source: [Kurunda District State College sustainability program \(education.qld.gov.au\)](https://www.education.qld.gov.au/kurunda-district-state-college-sustainability-program)

Local Ecosystem

Description

Sustaining the local ecosystem is vital to the flora and fauna. Disruption through human activity should be kept to a minimum, and where possible, alternative strategies to support the ecosystem should be implemented.

Key Pointers

- Consideration of the effect of introducing foreign vegetation is crucial.
- Observation of local geographical features can help identify appropriate processes.
- An external specialist can help recognize changes in the local ecosystem and advise on methods to prevent them.

Case Study

Larrakeyah Primary School, NT



The school has recognised that fruit bats are affecting the local mango industry. This has resulted in a scheme to protect the local mango industry by redirecting fruit bats to alternative food sources.

Source: [Australia's Most Sustainable Schools | 5-Star Sustainable Programs 2023](#) | [The Educator K/12 \(theeducatoronline.com\)](#)

Native Plants

Description

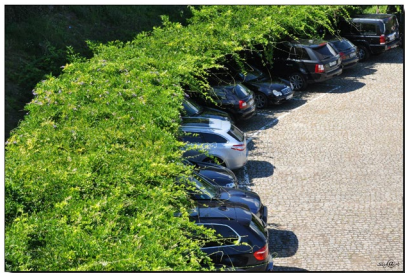
Native plants are crucial to local ecosystems. Their properties are rooted in maintaining ecology, and it is important that they are sustained despite development in the built environment.

Key Pointers

- Consideration of native plants plays a key part in acknowledgement to the country.
- Native plants built the foundation of the lands we stand on today. It is important to respect them.
- An external consultant can help create an action plan to ensure native plants are maintained.

Case Study

Santa Maria College, VIC



The college incorporated native plants into the soft landscaping of the proposed car parks. They aim to retain native trees in future developments.

Source: [Sustainability: Our Students Driving Change | LinkedIn](#)

Green Infrastructure

Description

Green infrastructure offers a resilient method of tackling wet weather. The results also aid the local air quality and act as a passive shading measure whilst complementing the aesthetic of the environment.

Key Pointers

- Green infrastructure can be as small as a row of trees or as large as acres of recreational ground.
- Green infrastructure can aid the aesthetic of the local environment in comparison to traditional grey infrastructure.
- It is particularly present in urban environments and cities to aid climate resilience and improve community spirit.

Case Study

Moreton Bay Council, QLD, recognises the importance of using green infrastructure in the built environment. Implementing these design strategies at the council level would encourage schools to adopt and utilise the methods. Grants would further encourage the incentives.



Source: [Green Infrastructure Strategy \(moretonbay.qld.gov.au\)](https://www.moretonbay.qld.gov.au/green-infrastructure-strategy)

Permeable Landscaping

Description

Permeable landscaping allows water to penetrate through the surface, preventing flooding. This is applicable to external school grounds, where a large proportion of hard landscaping is present in playgrounds and car parks.

Key Pointers

- Implementing permeable landscapes is cost-effective, particularly where flooding is an issue.
- The type of construction material should be assessed in terms of upfront carbon emissions—a specialist consultant would be able to provide an assessment to understand the impact.

Case Study

Adelaide recognises the importance of permeable surfaces to prevent surface water runoff and maintain local vegetation. Permeable surfaces, such as bare earth, grassed areas, and vegetation, make up 67% of metropolitan Adelaide.



Source: [New data shows extent of Adelaide's tree canopy | Green Adelaide](#)