



Great Outdoors

If home is our castle, garden is our haven. Here's our guide to creating a sustainable outdoor space.

Whether you're planning a party or just want to set up a relaxing outdoor nook in time for the warmer months, making the most of sustainable materials and gardening techniques offers a raft of benefits for your garden. A climate-friendly design will aid air quality, water management and passive design, not to mention boosting aesthetic appeal.

Landscape materials account for a fair chunk of the embodied energy in a backyard building project, so re-using existing site materials and sourcing recycled or locally produced goods will lower your eco-footprint. What's more, vertical walls and green roofs can help your home to soak up the benefits of the great outdoors. Here's how to create a sustainable outdoor space.

Timber tricks

Think outdoor space, and timber is often the first material that comes to mind for its natural aesthetic and wide array of applications in decking, pergolas, screens and furniture.

Identifying the origin of timber is the best way to make a sustainable choice. Look for certification by the Australian Forest Certification Scheme (AFCS) or Forest Stewardship Council (FSC) to ensure your timber is sourced from sustainably managed forests. The Greenpeace Good Wood guide recommends tallwood, spotted gum, grey ironbark, grey gum, turpentine and white mahogany as sustainable and durable Australian timbers.

Recycled decking boards are an eco-friendly and cost-effective choice, but as with new timber it pays to give some attention to its origin. "It can be risky to use recycled timber outdoors if it is not clear what it has been used for in the past and how it has been treated," says Nicola Cameron from Pepo Botanic Design.

"If the supplier can guarantee the timber it's a great option as recycled varieties are often sourced from the demolition of old buildings such as warehouses and factories, and have therefore had many years, potentially even decades, of seasoning, which makes the timber more stable."

This garden by Fiona Brockhoff Design features recycled timber as decking and permeable pathways of granitic sand.

Re-use and recycle

If you're keen to experiment with decking materials, there is an ever-increasing array of composite decking products available that look like wood but are typically a combination of wood particles and plastic.

Products like Ekodeck combine the strength of bamboo with the durability of recycled plastic. "It's made from FSC-certified bamboo and recycled plastic sourced from plastic bottles," says Neil Mathias from manufacturer Ekologix. "The two components combined make up over 90 per cent of the product – it's something like 48 per cent recycled HDPE plastic [number 2 on the triangle] and 45 per cent FSC-certified bamboo. The bamboo hasn't been watered down at all – it's 100 per cent straight from the plantation and hasn't been diluted from the contaminants."

Approximately 90 per cent of the board weight is made from wood flour – obtained from timber mills – and recycled plastic in Modwood's composite decking product. "The components that we use in terms of the wood shavings and HDPE are sourced from Australian waste," says the company's James Grandison. "The benefit is we're diverting these materials from landfill and we're creating a next generation in terms of usage."

Because manufacture of composite decking materials is very dense, it protects the product from water absorption, which aids durability. "Water is the food for bacteria so if you're not going to allow the food source to grow you're looking at a deck that could last a long time because it's not susceptible to rot, mould, decay and other sorts of attack that can happen as a result of the normal weathering process that occurs with timber," says Mathias. →

A permeable path

Pavers are an attractive, portable option to help reduce the size of your lawn or furnish a small outdoor space. Well-designed permeable paving allows water to soak into the soil, which provides water and air for plants on site rather than often clogged stormwater drains off site. Stone and recycled glass are popular choices.

Other recycled options include sandstone blocks – often used in old houses as footings – which can be cut to size or left as blocks for steps, while brick commons are easy to lay in different patterns. “A good look is to leave a brick out occasionally and plant scented herbs so as you brush past they release their scent,” says Cameron.

The rise of vertical gardens

When it comes to the plants in your newly designed outdoor space, a vertical garden offers more than a green aspect for space-challenged gardeners. In fact, it can help to insulate the inside of your home, keeping it up to 10 degrees cooler in summer.

“This is probably the best kept secret about vertical gardens,” says Stuart Tyler from Fytogreen. “If you put a thermometer where the foliage is on a hot day when the outside air temperature is 35 degrees, there’s a gap at the back between our vertical wall and the host wall of about 20–30 mm and the ambient temperature there is nine or 10 degrees cooler. So you’re getting the benefit of the host wall being insulated by the canopy.”

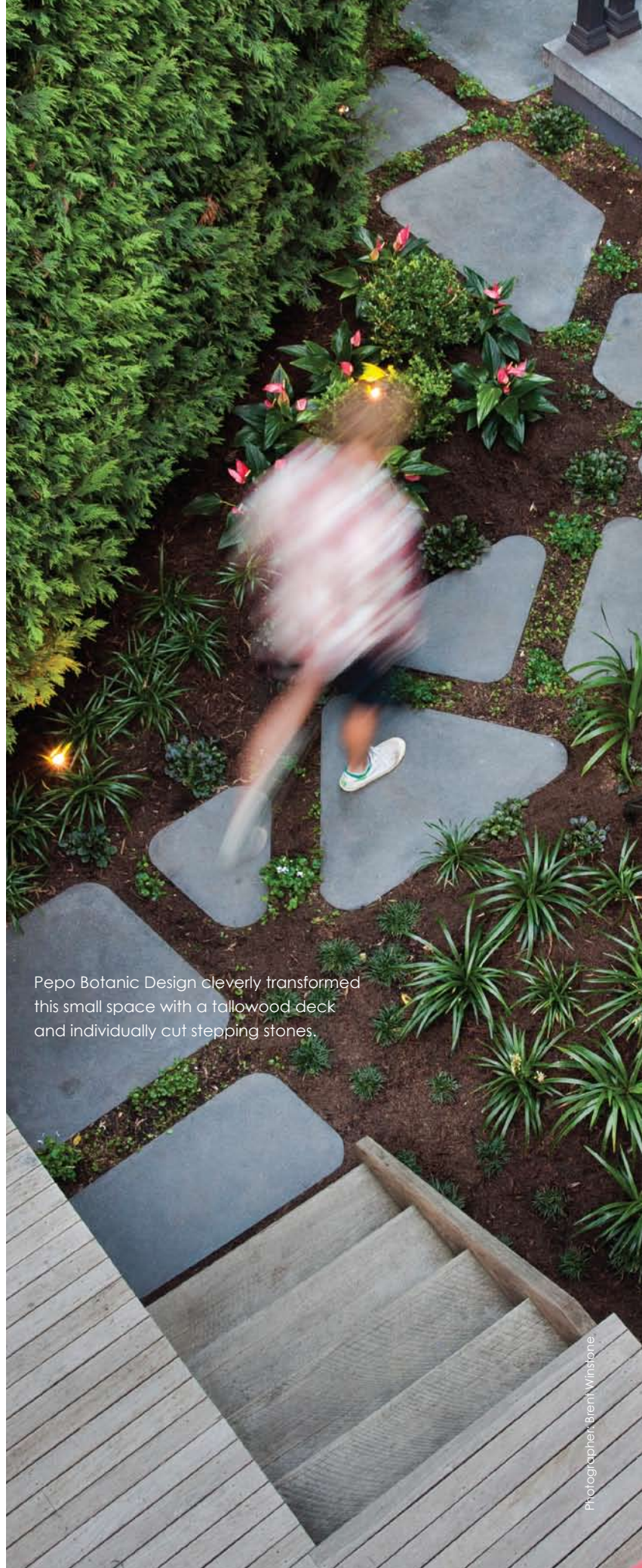
Vertical walls are best suited to dense, compact and low-growing plants that have a strong junction between root and foliage. Choose varieties that suit the aspect of your wall – sun-lovers for north, winter favourites for south and so on.

If you’re keen to take the garden insulation effect to the next level, green roofs can be installed on most suburban roofs, provided the roof has a maximum pitch of 45 degrees and it can bear the additional load of soil and plants, says Tyler. Research shows green roofs can reduce the amount of energy used to heat and cool a room by 48 per cent in summer and 13 per cent in winter.

At the other end of the spectrum, an increasingly popular low maintenance option is the green façade, where vines grow on climbing frames set against a wall. “This is another way to put gardens on a building with direct benefit,” says Tyler. “The canopy of the vine shadows the building and the cost is a lot less than vertical gardens.” Pre-grown vines are a great option for impatient gardeners.

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Pepo Botanic Design cleverly transformed this small space with a tallowood deck and individually cut stepping stones.

