

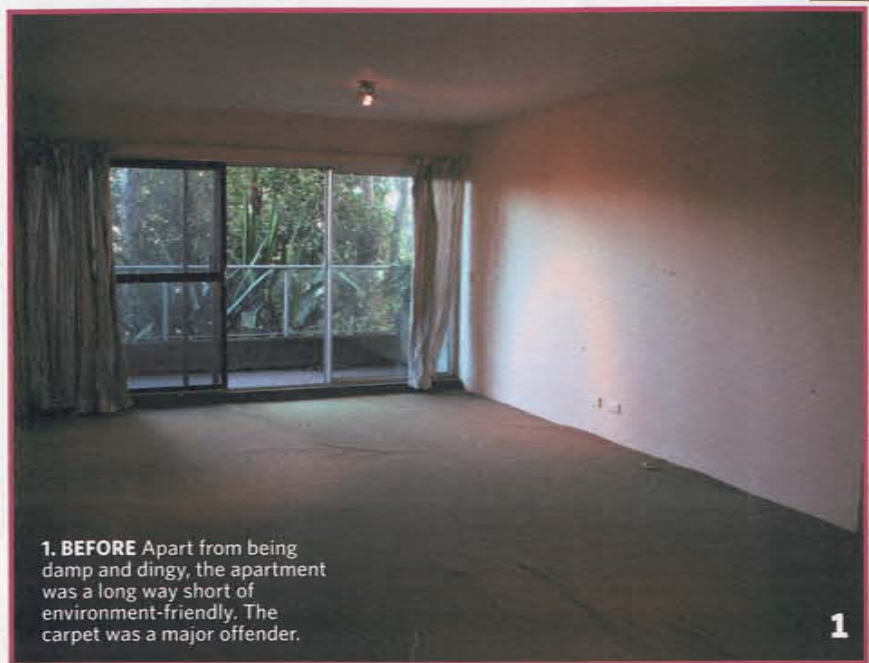
## Feeling boxed in by an old apartment? An eco-renovation made this Sydney unit more liveable on every level.

**V**egie patch, water tanks, solar panels and shade trees, funky awnings, even chooks: with a house, there's a smorgasbord of ways to express your green leanings. But how could you go about renovating an apartment with the aim of creating a stylish space that's uplifting to inhabit, yet gentle on the planet?

Such was the challenge facing one of Australia's main environmental groups — the Australian Conservation Foundation — when they decided to renovate an apartment they'd been bequeathed five years ago. The unit, situated at McMahon's Point, overlooks the action and glamour of Sydney Harbour. Inside, however, lurked a grim scene: dated, dank and downright dreary.

When the tenants moved on, the perfect opportunity to research and manage a green renovation presented itself. The idea was to boost eco-performance and rental revenue, while providing a valuable educational resource. »

# From little things...



**1. BEFORE** Apart from being damp and dingy, the apartment was a long way short of environment-friendly. The carpet was a major offender.

1 2



**2. AFTER** Compressed bamboo flooring does not require on-site sanding and dressing. Unlike carpet, it does not need to be steam cleaned or vacuumed, either.

**1. BEFORE** In terms of both style and energy efficiency, the original kitchen was outmoded.

**2. AFTER** Eco-friendly particle board, which is low in formaldehyde, was used for the cabinets. The benchtop is made from Quarella, which comprises 95 per cent recycled materials; natural gas was not available, so an induction cooktop was installed.



» "We wanted to show that you can achieve strong environmental outcomes when renovating an apartment, then share this information," says Michael Fogarty, ACF general manager. A big eye-opener, he says, was the amount of research required. He hopes the time that was spent sifting through and weighing up alternatives will now simplify the task for others.

In many cases, says Fogarty, the environment-friendly options didn't involve additional expense. "It's a case of making the right choices — many people let the builder or salesperson decide." Also, he enthuses, there are unexpected windfalls — for example, the greenest option is typically also the healthiest.

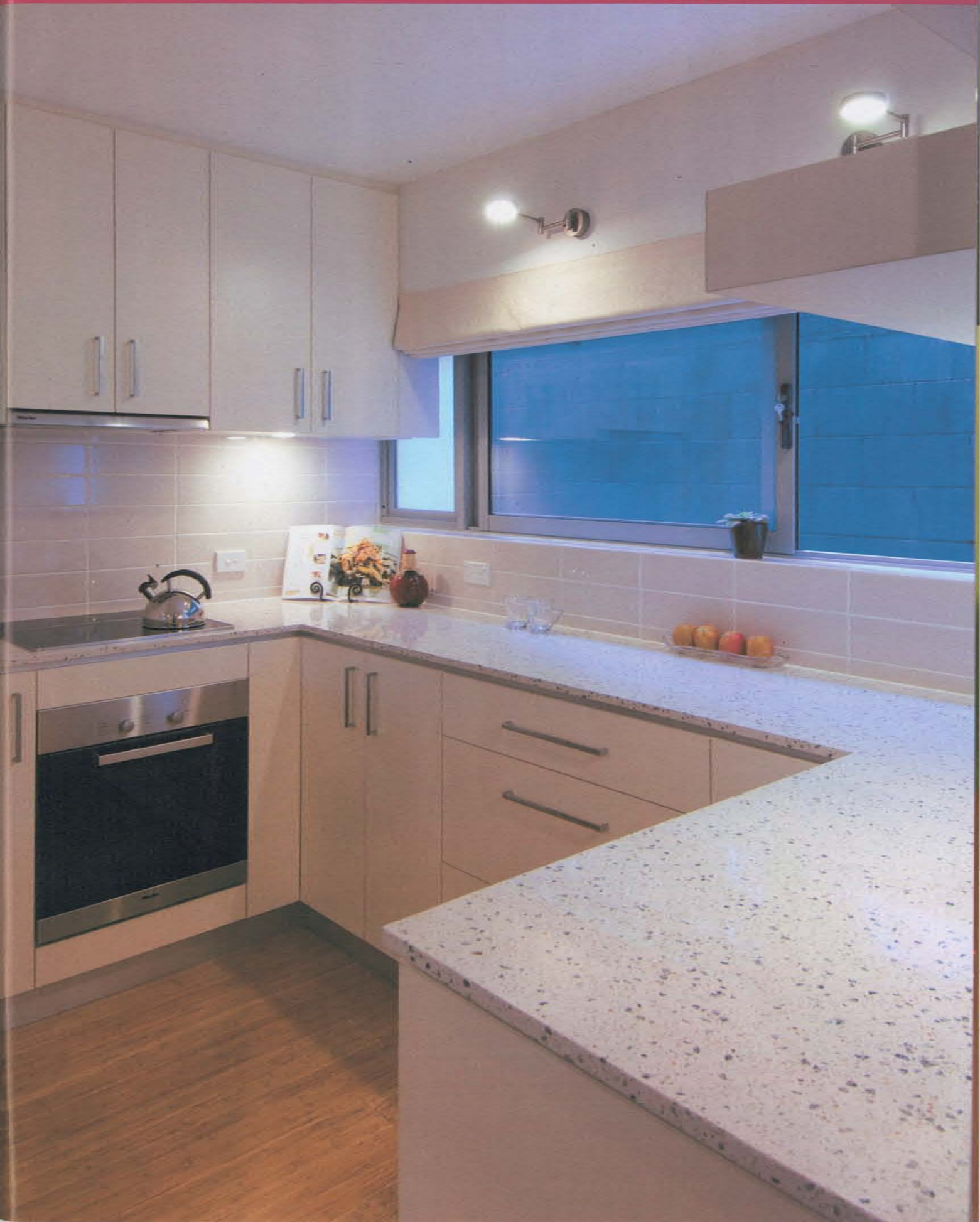
Tracy Graham from Envirotecure was called in to assist with the task of increasing natural light, reducing energy and water consumption and improving the air quality. Along the way "we aimed to create a space that »

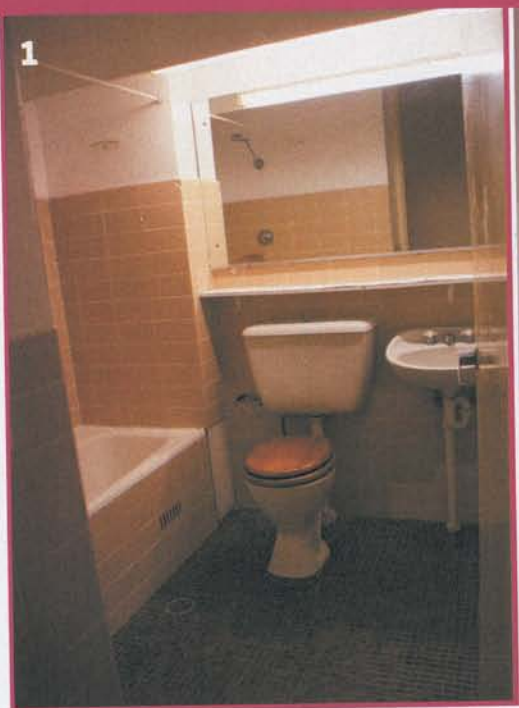
**3.** The Fisher & Paykel dishwasher features a single drawer with interchangeable racks. Its smaller size and corresponding low water use is a more efficient solution than running a conventional dishwasher half-empty.



**4.** An opening was made in the wall separating the kitchen from the dining area, allowing natural light to spill through.







**1. BEFORE** Brown on brown — not exactly inspiring.

**2. AFTER** Elegant water-efficient fittings characterise the revamped bathroom.

**3.** Floor tiles were retained to reduce resource use. An extraction fan minimises condensation to prevent the growth of mould on surfaces.



**ACF recommended sources of information:**

Good Environmental Choice [www.aela.org.au](http://www.aela.org.au)

Ecospecifier [www.ecospecifier.org](http://www.ecospecifier.org)

Your Home Technical Manual

[www.greenhouse.gov.au/yourhome/technical](http://www.greenhouse.gov.au/yourhome/technical)

» felt light and warm, in contrast to the dark, dingy atmosphere prior to renovation," she says.

To lift the gloom in the south-facing space, it was out with the musty carpet, and in with a fresh bamboo floor and upbeat paint colours to add elements of texture, warmth and depth. To coax natural light from the kitchen into the dining area, an opening was created in the shared wall, reducing the dependence on lights.

Materials were sourced primarily according to their non-toxicity and environmental friendliness, says Clare Donovan, ACF GreenHome Project Officer. She explains that reducing the presence of volatile organic compounds (VOCs) — toxic chemicals which are often released by new furnishings — was a priority in the design.

The durable compressed bamboo flooring, for instance, is less energy taxing than carpet as it doesn't require vacuuming, nor steam cleaning, which also saves on toxicity. Also, as non-toxic bamboo flooring is pre-finished, it doesn't require on-site sanding and dressing in

the way conventional wooden floorboards do. This greatly reduces the VOCs being released into the apartment.

In the kitchen, low-formaldehyde particle board and Quarella benchtops — made from 95 per cent recycled quartz, marble chips and fine aggregate — fitted the bill. Unlike natural stone, Quarella doesn't require high-VOC sealants, resulting in a further reduction of toxicity.

Natural gas wasn't available, so the aged combination cooktop was replaced with an induction cooktop and fan-forced, quadruple-glazed oven. To cut electricity usage further, the hot water system and pipes were insulated. Water consumption was minimised by using tapware and a toilet with the highest efficiency rating. A single-drawer »