

This article was printed in The Age, Domain section on Sunday 24th June 2012.

Web link to Micheal Green's website for this and other articles is

<http://michaelbgreen.com.au/thermal-imaging-camera>

This is our local community group (BCCAG) pushing for action on climate change.

## Thermal imaging a good way to catch the chill

Michael Green  
June 24, 2012

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Last year, the Bayside Climate Change Action Group bought a thermal imaging camera, courtesy of a grant from their council. Volunteers have begun using it to provide free thermal efficiency assessments for local residents.

"The images are quite eye-catching and funky," says Cheryl May, from the group. "It's one thing to tell somebody there's probably a draught under their door, and another thing to show them an image where you can actually see it. The colour demonstrates that there is colder air coming in."

Some results were surprising. When one member took a snapshot of his ceiling, it revealed a strange bright spot. "He couldn't work out what it was," Ms May says. "It turned out to be a possum."

Elsewhere, the results have been more instructive - one resident, who had just completed a renovation, requested her builder return to fix the gappy insulation that they discovered with the camera.

"You can really see where the problems are," Ms May says. "You can point it at the ceiling and see where the insulation is, and where it's missing. You can see leaks coming from fridge seals. We're trying to educate people about the way heat loss occurs."

A thermal imaging camera works best when there's a big temperature difference between inside and outside. For each snapshot, it produces both a thermal image and a normal one. During winter, draughts, gaps and glazing show up in purplish-blue, contrasted with an orange-yellow glow in places where the building is better insulated.

The Bayside Climate Change Action Group aims to visit 50 local households with the camera before the end of the year. If you live outside the area, you could rent one or hire a professional to conduct your own report.

One of the group's volunteers, Danielle King, is an experienced sustainability assessor. She says many of the camera's findings are straightforward - it just helps to communicate common problems, such as the "Swiss cheese-effect" of halogen downlights (which must be clear of insulation, so as to reduce the risk of fire).

"If you get in bed and there are holes in your blanket, it doesn't keep you warm. It's exactly the same with ceiling insulation," she says.

But the camera reveals secrets too; especially about how your insulation has been installed in hard-to-see places.

"The beauty of the camera is that it can see through the walls, literally," she says.

"You also find a lot of construction gaps, where air leaks through skirting boards. You wouldn't pick those up otherwise and those heat losses can sometimes be quite high."

One house Ms King visited in Brighton had an average daily use of 40 kWh - well over double the state average.

"They had recently moved homes and their bills had gone up a huge amount in this new house," she says. Her report detailed many possible remedies, but the first thing she recommended was that they thoroughly seal draughts.

With winter upon us, the same advice applies to every household. And you don't need a thermal camera to find the gaps. Try holding an incense stick close to window frames, door frames and skirting boards, and watch how the smoke moves. You can use unspooled tape from old cassettes in the same way.

[michaelbgreen.com.au](http://michaelbgreen.com.au)

**LINKS** [bccag.org.au](http://bccag.org.au) [greenmoves.com.au](http://greenmoves.com.au)



Heat sensitive pictures let people see where their homes let in the cold. Photo: Illustration: Robin Cowcher.