



Australian Government

Department of Industry
Innovation, Science, Research
and Tertiary Education

SUPPLIER
ADVOCATE

BUILT ENVIRONMENT

IMPROVING THE BUILT ENVIRONMENT WITH WORLD CLASS CAPABILITIES

Commercial property owners have great incentives to develop and maintain an energy efficient and sustainable building stock. Australian innovative products and services are providing quality solutions to meet this need. Australian manufacturers and service providers are key partners in delivering a more sustainable future and there are many examples of SME business innovation successfully playing a part in major retrofits of our homes and cities.



Skycool is saving its customers thousands of dollars in energy use and achieving significant reductions in greenhouse gas emissions. Skycool not only eliminates solar gain through roofs but also acts like a heat pump removing internal heat.

EXTENDING THE CARBON SAVING

As a roof coating product, Skycool acts in two ways. It delivers high solar reflectance (85%) and high thermal emittance (>94%) meaning that not only does the coating reflect the solar heat but it also results in heat from the building being lost by radiation from the roof. The coating acts as a 'passive heat pump, cooling the roof and taking the building's interior temperature to a level below ambient.

Managing an ambient internal roof temperature is important as it not only plays a significant part in delivering a comfortable environment for occupants, but can also be an area of significant cost saving. Skycool's operating cost savings come from lowering this temperature, resulting in capital savings from the reduction of the chiller capacity needed to meet peak demands.

The reduction in the air conditioning cooling requirement has in cases also negated the need for additional air conditioning units, effectively creating an immediate positive return on capital investment.

LOCAL CAPABILITY

Skycool was invented in Australia and is manufactured in Hornsby, New South Wales. The company has been operating of over 12 years and has coated the roofs of many of Australia's iconic companies such as Melbourne and Perth international airports and both Woolworths' and Bunnings stores.



COOLING AUSTRALIA'S ROOFS

SkyCool was applied on a leading Australian supermarket chain store, where the customer achieved exception results and has since applied the product across a number of their buildings.

This particular chain store was seeking an innovative and effective way to reduce the energy output of their buildings. To prove the value and payback periods of its technology, Skycool and the customer agreed to undertake a trial in two of the customer's stores.

A trial store was selected, where HVAC energy was measured in the store prior to the SkyCool application, then for 12 months after. Using an independent trial, the payback period for the store was under two years based on 7 cents per kwh for electricity (which only took into account the actual energy bill savings). This payback period, when compared to other energy saving options, such as solar panels, is substantially less.

The customer, having experienced significant reduction in HVAC demand, has factored in the benefits of Skycool in its capital replacement plans for existing HVAC works and new store HVAC requirements.

BUILT ENVIRONMENT SUPPLIER ADVOCATE

Mr John Gaskin was appointed by the Australian Government as the Built Environment Supplier Advocate to provide leadership and coordination to improve industry competitiveness and link Australian built environment suppliers with opportunities.

For further information on the Supplier Advocate Program please visit: www.innovation.gov.au/SupplierAdvocates