



Insulation and cool roofs

Reducing energy consumption is good for business and the environment

Insulation can improve the internal comfort of a farm, food processing, manufacturing or commercial building and eliminate up to 80 per cent of heating and cooling losses. Ceilings, floors and walls can be insulated.

Cool roofs are reflective surfaces designed to reflect more solar radiation and absorb less heat than a standard roof. Paint, sheets, tiles or shingles in white or a light colour form the reflective layer. A cool roof can make a building more comfortable in hot weather and reduce the need for cooling, which saves energy.

Both insulation and cool roofs improve staff comfort, safety and productivity, and in farm sheds, they can also improve the health and productivity of livestock. Insulation and cool roofs can be installed on new builds or retrofitted.

If you're thinking about insulation or cool roofs for your buildings, they are a smart energy efficiency strategy, saving you money and supporting the environment.

Here are some useful resources to help you work out whether these options are right for you:

Learn from others — case studies

There are no independent local studies of insulation and cool roofs in the Australian agricultural or food processing sectors, but case studies about their use in other building types, as well as overseas examples, support their value as an energy efficiency option.

Read how an insulation manufacturer got a Green Star rating for its manufacturing facility, in this [case study from the Australian Institute of Refrigeration, Air conditioning and Heating](#).

See this [City of Melbourne study](#) showing how cool roofs can improve summer comfort in un-conditioned sheds and warehouses but may make them colder in winter.

Learn how insulation helped create this low carbon emission Melbourne hotel, in this [case study from 1200 Buildings](#).

Look at the sidewall and ceiling insulation improvements a US company made, in this [case study by the Maryland Energy Administration](#).

Act now — fact sheets, guides and tools

Look at [Dairy Australia's discussion of thermal efficient design for dairies](#).

Improved building insulation can reduce demand for HVAC services. Learn more at [Energy Exchange](#).

Explore this University of Massachusetts Amherst [Center for Agriculture, Food and the Environment's guide to insulation](#), to learn from the US example.

Look at this comparison of sidewall insulation types for poultry houses, from [The Poultry Site](#). And get more on [poultry house insulation from this Poultry World article](#).

If you run milk vats, try using this [milk vat insulation savings calculator from EECA Business](#).

Know your options — more help and ideas

Victorian Energy Saver provides tools and information to help Victorian Businesses save energy and money.

- [access and understanding energy data](#)
- learn about [energy retail offers and contracts](#)
- get government assistance through [business grants, training and support](#)

- access [discount energy saving products from the Victorian Energy Upgrades program](#) e.g. upgrades to lighting, refrigeration fans, hot water and custom upgrades
 - explore renewable energy options with [Saving with Solar](#).
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Page last updated: 31/07/18

To contact Victorian Energy Saver, visit victorianenergysaver.vic.gov.au/contact

We acknowledge and respect Victorian Traditional Owners as the original custodians of Victoria's land and waters, their unique ability to care for Country and deep spiritual connection to it. We honour Elders past and present whose knowledge and wisdom has ensured the continuation of culture and traditional practices.



We are committed to genuinely partner, and meaningfully engage, with Victoria's Traditional Owners and Aboriginal communities to support the protection of Country, the maintenance of spiritual and cultural practices and their broader aspirations in the 21st century and beyond.

