

Policy Submission

Proposed Initiatives for a Sustainable Insulation Industry to Contribute to Australia's National Energy Efficiency Targets, Support Australian Manufacturers and Create Australian Jobs

June 2013

Abstract

Australia has the largest average house size in the world at 247 m² - 10% bigger than in the USA, while the average Australian house has a carbon footprint of 1100kgCO₂ per occupant per year accounting for around 30% of Australia's national energy use.

A sustainable domestic insulation industry has a central role to play in reducing energy consumption in the built environment and delivering the ultimate goal of Net Zero Emission Buildings.

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Executive Summary

Insulation Australasia (IA) is a product agnostic industry association representing Australian and New Zealand insulation manufacturers, wholesalers, importers, fabricators and installer organisations as a single voice to government, the public and the building and construction industry. It represents virtually all insulation product-types currently available in the Trans-Tasman region.

Its principal role is to restore confidence in the Insulation Industry and highlight to both Government and Society the central role insulation can play as the most cost-effective means of reducing energy consumption in the built environment.

This submission is aimed at cultivating discussion between the Insulation Industry and Government around a number of Insulation Australasia proposed initiatives.

Restoring Confidence in the Insulation Industry

It is in the national interest to restore consumer confidence in the insulation industry's ability to deliver measurable energy efficiency gains and energy cost savings. IA presents for discussion two (2) major initiatives aimed at restoring consumer confidence:

Adoption of an Insulation Industry Installer Training Platform

The nationwide roll-out of an insulation industry installer training platform developed through the Construction & Property Services Industry Skills Council (CPSISC) and delivered through accredited industry training organisations.

Industry Funded Insulation Installation Warrantee Guarantee Scheme

The introduction of an insulation industry-funded warrantee guarantee scheme supported by third party product certification and industry accredited insulation installer organisations.

Market Driven Energy Efficiency Initiatives

Insulation Australasia believes that regulatory supported market-based initiatives represent the most efficient manner in which to improve the energy efficiency of existing commercial and residential building stock. Insulation Australasia presents for discussion two (2) initiatives aimed at using market forces to drive energy efficiency improvements.

Improving Energy Efficiency of Small & Medium Enterprise Buildings

Support for initiatives aimed at improving the current poor energy efficiency nationwide of Australia's small & medium commercial buildings through the introduction of market driving initiatives such as Mandatory Disclosure of the Energy Efficiency of buildings on sale or lease.

Improving Existing Underperforming Residential Housing Stock

Support for initiatives aimed at improving the energy efficiency of existing residential housing stock through the national introduction of the Mandatory Disclosure of the Energy Efficiency of residential houses using a NatHERS-based tool for rating of dwellings on sale, in line with the ACT Government's Mandatory Disclosure Model.

1. Adoption of Insulation Industry Training Platform

- 1.1. The aftermath of the Commonwealth Home Insulation Program (HIP) caused long term structural damage to the insulation industry when hundreds of established firms were forced to leave the industry taking with them valuable experience much of which has not been replaced.
- 1.2. The resulting studies¹ into the shortcomings of the scheme highlighted the absence of adequate training in respect to the safe and correct installation of insulation.
- 1.3. Installing insulation correctly can be a complex task, which in Australia in the past has not been given the emphasis necessary to provide international best practice installation standards. Typically insulation is installed by the youngest, most inexperienced labour available on a building site - a situation that perpetuates both unsafe practices and poorly installed insulation products.
- 1.4. Poorly installed installation can reduce a building's energy efficiency by up to 50%², dramatically reducing both built environment energy efficiency & greenhouse gas emissions reductions.
- 1.5. Currently, in- situ home energy raters anecdotally report across Australia that up to 75% of new homes tested immediately after delivery by the builder fail to meet their claimed 5 or 6 Star energy rating.
- 1.6. Earlier this year the Construction & Property Services Industry Skills Council (CPSISC) recognised the need for a national training benchmark on which an accredited, nationwide insulation installation workforce could be based, when it agreed to fund the establishment of a training curriculum for the industry.
- 1.7. Once established this training platform can be used to underpin IA's proposed industry-funded installation warrantee guarantee scheme (refer item 2 following).
- 1.8. IA seeks Federal Government support in lobbying COAG for the adoption by States/Territories of the IA/CPSISC training platform, including tender support for accredited insulation installers on State and Federal building refurbishment tenders, which include the installation of insulation within the scope of works.

2. Industry Funded Insulation Installation Insurance Scheme

- 2.1. IA is seeking Federal Government support for the introduction of an industry funded consumer insulation installation warrantee guarantee scheme, similar to the UK's successful Cavity Insulation Guarantee Agency (CIGA).
- 2.2. IA proposes that such a scheme can be industry funded, and not only provide consumer protection, but can be used as a mechanism to increase insulation industry standards in respect to both product and installation.
- 2.3. In the aftermath of the HIPS program and the increased focus on more complicated wall and cavity insulation retrofitting, such a scheme would also provide increased consumer confidence and public participation in energy efficiency initiatives.
- 2.4. IA proposes the establishment of an Australian Insulation Guarantee Agency (AIGA) financed by the insulation industry through a modest premium of less than 1% of the installed cost paid by scheme participants.
- 2.5. The Agency would only be accessible to industry accredited installer organisations using third party certified insulation products and, in the process, would help increase industry compliance.
- 2.6. Once the work is finished and final payment has been received, the AIGA-registered installer will apply to AIGA for a Warrantee Guarantee Certificate, a copy of which is sent directly to the property owner. The Warrantee Guarantee is also available to subsequent owners of the property & covers defects in materials or workmanship.
- 2.7. The guarantee would be used to underwrite the installer's warranty and to protect the consumer in the event that the installer is unable or unwilling to make rectification.
- 2.8. As only Certified Products and Accredited Installers could access the scheme, IA believes there would be a reduced risk of claim and that over time, as in the UK, the premium would be reduced.
- 2.9. However, for the scheme to be successful, States/Territories administrations must be convinced to support the scheme through the tender process requiring Insulation Contractors to register under the AIGA scheme.
- 2.10. The direct benefits for State/Territory regulators will be:
 - the resolution of all insulation consumer disputes by an independent scheme administrator
 - a guarantee that only certified insulation products and accredited installers are used in the project.
 - a no-cost guarantee that insulation is being correctly installed therefore ensuring that it is functioning in accordance with the manufacturer's claim & is installed to the manufacturer's requirements.

3. Improving Energy Efficiency of Small & Medium Enterprise Buildings

- 3.1. Of all energy consumed in the commercial property sector, 32% is consumed by Small & Medium Enterprises. This is almost 50% more than the energy consumed within Australia's large commercial property segment³.
- 3.2. It is estimated that there are approximately two (2) million small & medium enterprises in Australia⁴, most of which operate out of buildings constructed prior to the introduction of energy efficiency measures into the National Construction Code in 2003.
- 3.3. These buildings are generally poorly insulated with little or no wall insulation and only very basic levels of ceiling insulation, having been constructed at a time where there was little regulatory focus on energy efficiency. As a result these older buildings are comparatively energy inefficient and use excessive power for air conditioning in summer and heating in winter.
- 3.4. Energy efficiency upgrades in buildings are the most cost effective way for SME's to reduce energy demand and reduce operating costs.
- 3.5. IA advocates market driven initiatives such as the Mandatory Disclosure of the energy efficiency of small & medium commercial office space and retail buildings, as the most effective and efficient long-term mechanism to encourage the energy efficiency upgrading of buildings in this segment.
- 3.6. IA seeks Federal Government support to develop a market driven model that could underwrite a nationwide SME energy efficiency upgrade initiative, and involves utilities, lending institutions and supply-side energy efficiency participants including insulation, renewable energy and services.

4. Improving Existing Underperforming Residential Housing Stock

- 4.1. A recent industry commissioned report on *The Value of Insulation-based Residential Energy Savings Measures by Energy Efficient Strategies*⁵ identified five (5) areas where insulation could positively improve the energy efficiency levels performance of existing residential building stock in a cost-effective way. The report estimates that:
 - there remains 1.32 million dwellings with uninsulated ceilings that were not addressed during the Commonwealth Home Insulation Program (HIP)
 - there are a further 2.1 million dwellings with under-insulated ceilings
 - there are 3.5 million dwellings constructed without wall insulation that can be upgraded using several different insulation solutions.
 - there are 700 thousand dwellings mostly in the southern States constructed without floor insulation that can now be upgraded using several different insulation solutions.
 - there are 500 thousand dwellings installed with ducted air-conditioning that require the ducted systems replaced with better sealed and insulated ducting.
- 4.2. In 2014, there exists a generational opportunity for Australian regulators to create by the end of 2020, via national retrofit programs for correctly installed insulation:
 - a substantially reduced national carbon footprint while delivering substantial energy cost savings to consumers
 - ten (10) thousand upstream & downstream new jobs (based on the insulation industry's current productivity rates) while creating associated new job skills e.g. certified insulation installers & bespoke thermal performance testers to accurately energy rate all buildings receiving government insulation incentives
- 4.3. The absence of wall insulation and inadequate levels of ceiling, floor and ducted insulation contributes significantly to peak energy loads and the overall consumption of energy in those States. It is fundamentally peak load capacity that is driving many Australian States towards additional, costly transmission capacity.
- 4.4. IA supports the introduction of market driving initiatives such as Mandatory Disclosure of the Energy Efficiency of residential dwellings to drive via commercial incentives, the energy efficiency upgrading.
- 4.5. Mandatory Disclosure was successfully introduced into the ACT residential market in 1999.
- 4.6. In 2008 the Department of the Environment, Water, Heritage and the Arts (DEWHA) commissioned the Australian Bureau of Statistics (ABS) to research the relationship between energy efficiency attributes (Star Ratings) and the sale price of detached houses sold in the ACT between 2005 and 2006.
- 4.7. This report⁶ found there to be a positive correlation between star ratings and higher sale prices in the ACT where Mandatory Disclosure had been implemented. The study reported an average increase in sale price for houses sold in 2006 was 1.91% for each 0.5 additional Energy Efficiency Star.
- 4.8. IA seeks Federal Government support for the establishment of an Industry/Government committee to review the successes of energy efficiency programs in Europe, the USA and New Zealand, and report back to the Minister with recommendations for energy efficiency programs to build on those overseas successes in an Australian context.

Source References

1. *Home Insulation Program': Commonwealth Auditor General - Audit Report No.12 2010–11 Performance Audit*
Review of the Administration of the Home Insulation Program': Allan Hawke 6 April 2010
Insulation Advisory Panel Report 2010; Ron Silberberg, Tony Arnel and Peter Tighe
The Commonwealth Senate Environment, Communications and the Arts References Committee - Energy Efficient Homes Package (ceiling insulation) Report: July 2010
2. *Victorian Government Sustainable Energy Info Facts Sheet 'Installing insulation'*
3. *Energetics Report - Energy use and energy efficiency opportunity data for commercial sector and small/medium businesses -Commissioned by Department of Climate Change and Energy Efficiency (2012)*
4. *Department of Innovation Industry Science and Research - Small Business Key Statistics 2011.*
5. *The value of insulation-based Residential Energy Savings Measures - by Energy Efficient Strategies, commissioned by the Insulation Council of Australia & New Zealand (ICANZ) - September 2012*
6. *Energy Efficiency and House Prices in the ACT - Australian Bureau of Statistics (ABS) Report 2 – Commissioned by the Department of the Environment, Water, Heritage and the Arts (DEWHA) 2008.*