



Australian Government

Department of the Environment, Water, Heritage and the Arts

**Submission to the Senate Standing Committee on Environment,
Communication and the Arts**

Inquiry into the Energy Efficient Homes Package

Submission by:

**the Australian Government Department of Environment, Water,
Heritage and the Arts**

23 December 2009

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OVERVIEW

The Australian Government Department of the Environment, Water, Heritage and the Arts (the department) welcomes the opportunity to make a submission to the Senate Standing Committee on Environment, Communication and the Arts for the purposes of its inquiry into the Energy Efficient Homes Package.

This submission focuses on the Home Insulation Program to address the terms of reference for the inquiry.

The Energy Efficient Homes Package

The Home Insulation Program (the program) is the larger component of the Energy Efficient Homes Package (the package). The package is one element of the government's \$42 billion *Nation Building—Economic Stimulus Plan*, which was a response to the global recession triggered by the global financial crisis.¹

The package was announced by the Prime Minister on 3 February 2009.² It aimed to:

- generate economic stimulus and support jobs for trades people and workers employed in the manufacturing, distribution and installation of residential ceiling insulation and solar hot water systems
- improve the energy efficiency, comfort, and value of homes
- help households save on their heating and cooling energy bills, and
- reduce greenhouse gas emissions.

It focused on two ways to improve the energy efficiency of Australian homes: installing insulation in ceilings and roofs of houses without adequate insulation, and replacing electric storage water heaters with solar hot water and heat pump systems (the Solar Hot Water Rebate, or rebate).

Ceiling insulation and solar hot water were selected because heating and cooling of living spaces and hot water heating are typically the two greatest energy users in most Australian homes.³

Insulation reduces heat gain and loss, making the home warmer in winter and cooler in summer. Solar and heat pump hot water systems significantly reduce energy consumption from water heating.

The package is not means tested. Householders can claim either insulation or solar hot water assistance for one address, but not both.⁴

¹ Information on the Nation Building Economic Stimulus Plan is available at:
<http://www.economicstimulusplan.gov.au/pages/default.aspx>

² Prime Minister, 03 February 2009, "Energy Efficient Homes - Ceiling Insulation in 2.7 Million Homes",
<http://www.pm.gov.au/node/5332>

³ Energy Use in the Australian Residential Sector 1986-2020, Australian Government, Department of the Environment, Water Heritage and the Arts, 2008,
<http://www.environment.gov.au/settlements/energyefficiency/buildings/publications/energyuse.html>

⁴ Detailed information, including program guidelines and other information for householders and installers, is available at: <http://www.environment.gov.au/energyefficiency/index.html>, or by calling 1800 808 571.

Delivery of the package was allocated to the department with an expectation of rapid roll-out.

The program and the rebate are demand driven and will continue until their completion date or until program funds are fully allocated, whichever occurs first. The Home Insulation Program was planned to be expensed by end December 2011 and the Solar Hot Water Rebate by June 2012.

The department is aware of the short to medium term nature of the stimulus measure and the importance of continuing to work closely with industry in the final phase of the package.

At 6 December 2009 ceiling insulation has been installed in over 800,000 Australian homes, and over 90,000 households have received assistance for solar or heat pump hot water systems. This exceeds the initial projection for take up rates for insulation assistance.

Assistance under the package to 6 December is over \$1.17 billion, with \$1.03 billion provided for insulation and almost \$145 million for hot water systems. The package is the most significant residential energy efficiency initiative in Australia to date.

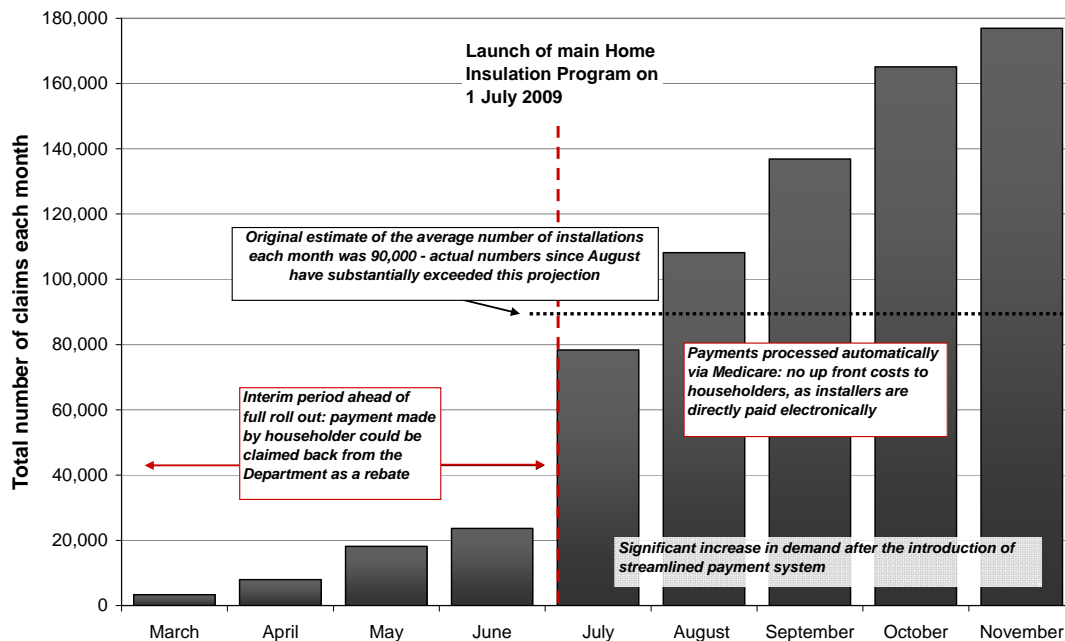
Strong householder demand generated economic and employment benefits for the insulation and solar hot water industries when the global economic slow down affected jobs and small businesses. Australian businesses and workers throughout the supply chain—including manufacturing, distribution, installation and allied sectors—have benefited.

The Home Insulation Program

The department moved quickly to put systems in place to achieve the program's aims as soon as possible after the 3 February announcement.

Figure 1 shows the roll-out during a period of industry ramp-up from February to the end of June, and the escalation in activity after payments were provided direct to installers from 1 July 2009 onwards.

Figure 1: Monthly Home Insulation Claims for March to November 2009



The department regularly consulted with industry, governments and standards bodies to address a range of identified implementation risks.

Historically the home insulation sector has had low skill requirements, training levels and barriers to new entrants. South Australia is the only state with licensing requirements for insulation installers.

However, employers in this field have always been required to meet state and territory workplace and occupational health and safety laws. Employers have clear obligations and a duty of care to their employees, contractors and sub-contractors to provide a safe work environment, safe systems of work and adequate training and supervision. This is particularly important for inexperienced workers.

In implementing the program, the department requires registered installers to hold insurance, follow strict guidelines (which required application of relevant Australian standards), use the training materials provided and meet competency requirements. For example, all installers are required to have minimum occupational health and safety qualifications. They must have either CPCCOHS1001A Work Safely in the Construction Industry or General Construction Induction White Card. The department has also put in place the first nationally accredited training program for installing ceiling insulation.

As the program is administrative in nature, the department has no regulatory powers to enforce compliance with laws. However, installers can be deregistered from the program if they breach the guidelines.

The department has put in place procedures to ensure close cooperation with federal, state and territory bodies. This has included referring cases where there is evidence that installers have breached state and territory workplace, occupational health and safety or fair trading laws to the relevant state and federal agencies.

The department does not allocate work to installers under the program. Householders are responsible for entering into a contractual relationship with installers on the basis that they are

satisfied with the services of an installer and the quoted price.⁵ Householders are responsible for ensuring they are satisfied with the completed installation and services prior to signing the householder section of the work order form. Installers sign the installer section of the work order form to certify that they have fully complied with the program guidelines and terms and conditions. Installers can then make a claim for the quoted cost of the installation by logging on to the program's online payment system.

The pace and scale of the program's roll-out is unparalleled for the delivery of an energy efficiency measure in Australia. At the time the program commenced, there was no precise mechanism for estimating demand levels and take-up under the program has significantly surpassed initial forecasts. This has required the department to maintain a responsive and flexible approach in addressing emerging issues and community concerns, particularly in dealing with a minority of unscrupulous operators.

Only installations by registered installers are eligible for assistance under the program guidelines. The Installer Provider Register was opened on 9 June 2009 and launched on 29 June 2009 so householders could choose an installer from the list. All registered installers must demonstrate minimum competencies, hold appropriate insurance and must comply with Australian Standards.

Recent guideline changes—publicising the deregistration of non-compliant installers from December 2009 and minimum training or skill requirements for all installers from 12 February 2010—take the industry to a level of professionalism well beyond that which existed before the program.

The department will continue to work co-operatively with state and territory agencies to help ensure the better practices identified and implemented through the program are embedded as long term outcomes for the industry.

Key features of the 3 February 2009 Energy Efficient Homes Package

The package as announced by the Prime Minister on 3 February 2009 was detailed as:

- ***The Home Insulation Program.***⁶ *This \$2.7 billion program aimed to see insulation installed into an estimated 2.2 million Australian homes and expected to run from 3 February 2009 until 31 December 2011, or until the funds are expended.*
- ***Low Emission Assistance Plan for Renters.*** *Under the package, the level of assistance to landlords to install insulation in their rental properties increased from \$500 to up to \$1,000 per home. An estimated 500,000 rented homes were expected to benefit from the additional \$612.5 million funding provided, which was valid for the period 3 February 2009 until 30 June 2011.*
- ***The Solar Hot Water Rebate.*** *Under the package this rebate was increased from \$1,000 to \$1,600, effective 3 February 2009 until 30 June 2012. The funding of the rebate was increased by \$507 million to enable this higher level of assistance, and the previous means test was removed.*

⁵ To select their installer, householders access the installer provider register by visiting the program website or calling the free call hotline number. Householders can search the register by location or Australian business number.

⁶ For simplicity the term Home Insulation Program and the program are used throughout this document. However in the beginning, the program was called the Home Owner Insulation Program to reflect its target audience. It became known as the Home Insulation Program in September 2009 when landlords and tenants became eligible.

Implementation Phases of the Home Insulation Program

Phase 1 – 3 February to 30 June 2009

Interim rebate system and planning for the main roll-out on July 1

During this establishment phase the program was opened to eligible homeowners. Initial guidelines were released on 26 February 2009⁷ and contained information for homeowners to seek up to \$1,600 to install ceiling insulation. Homeowners were required to arrange a minimum of two quotes, pay their installer up front and seek a reimbursement by sending documentation to the department.

This rebate allowed early implementation of the stimulus measure a few weeks after its announcement. The guidelines and process for the rebates were guided by the department's experience in delivering the existing Solar Hot Water Rebate. The department processed the first rebate payments in March 2009.⁸

The department worked with the Department of Prime Minister and Cabinet and the Human Services portfolio to develop a partnership with Medicare Australia on program delivery services during the rebate arrangements. Medicare's services included a high volume delivery system that would be able to process claims in line with the projected demand for the launch of the program proper on 1 July 2009.

The department conducted risk analyses and put audit and compliance systems in place. It commissioned internal and external service providers for audit and compliance frameworks and plans. The department consulted with industry and relevant state authorities in scoping the risks of the program and addressing these through the guidelines.

The department identified a need for nationally consistent training for ceiling insulation installers and worked with the Department of Education, Employment and Workplace Relations and the Construction and Property Services Industry Skills Council (CPSISC) to boost industry skill levels, develop tailored training and set down installer requirements. Training and supporting materials focused on installer and householder safety and targeted new entrants and existing installers without formal training. The materials were made available to installers and training bodies ahead of the 1 July commencement of the main phase of the program.

This work has led to CPSISC's development of a national unit of competency for installing ceiling insulation. This did not exist before the program.

This work involved extensive consultation and input from all major industry associations, technical regulatory agencies, and other training organisations. It brought together existing units relevant for laying insulation and developed a range of new training and resource materials. From August, installers and householders were also able to refer to the installer Pocket Book.⁹ This publicly available book summarises the key information used in training. It

⁷ All program guidelines are available at:

<http://www.environment.gov.au/energyefficiency/insulation/installers/publications/index.html#guidelines>

⁸ Two rebate programs were in operation. Eligible owner-occupiers could apply for up to \$1600 in ceiling insulation assistance under the then-named Home-Owner Insulation Program, and eligible landlords and tenants could apply for up to \$1000 in ceiling insulation assistance under the Low Emission Assistance Plan for Renters.

⁹ The Pocket Book for insulation installers is a resource for insulation installers that summarises the key elements of training. It covers the identification and management of the full range of hazards and risks encountered in a

includes information and warnings about, for example the risks of stapling insulation and how to safely install around down lights. It covers hazards such as working in confined spaces, heights and heat stress. As with the other training materials, it was released ahead of the 1 July commencement of the main phase of the program.

Phase 2 – 1 July to 31 August 2009

Launch of the program proper and increasing demand

From 1 July 2009 households were required to select from a list of registered installers. They were able to have insulation installed without any up-front costs if the total cost was within the then \$1,600 (and now \$1,200) limit.¹⁰

Medicare's claim processing system enabled the processing of high claim volumes. Payments released by the department more than tripled between June and July 2009. The Medicare high volume delivery system enabled the processing of claims to accommodate the projected demand in the main phase of the program.

Using Medicare's infrastructure, the fully electronic delivery model provided for fast payment turnaround times, paperless transactions and 24-hour access for installers to log on and submit claims. This enabled the insulation industry to ramp up and employ new staff with certainty of cash flow as well as rapid take up of the assistance.

The Medicare system was capable of handling increased demand and continued to perform as activity increased. Medicare also maintains the Installer Provider Register and manages an installer hotline. Medicare also gives weekly reports to the Department and daily downloads for compliance monitoring.

Phase 3 – 1 September to 31 October 2009

Program amalgamation and improved compliance

One of the components of the original package was the Low Emission Assistance Plan for Renters (LEAPR). LEAPR provided \$1,000 of assistance for insulation in rental properties. However, take up was relatively slow and it was discontinued on 1 September 2009. Guidelines for the new program from September included landlords and tenants as well as owner-occupiers as being eligible for assistance of up to \$1,600 for insulation installation.

On 1 September a pricing table was for the first time included in the guidelines. This was based on information collected from claims processing on the average costs per square metre of laying common types of insulation. The table was welcomed by industry and provided additional information for householders to evaluate quotes on a reasonable cost basis. The pricing table helped filter out the small number of unscrupulous quotes affecting the market.

The department had discussions with the relevant industry skills councils, and formally initiated a review by industry and other stakeholders of the program training materials on 27 October 2009. The department then enhanced safety measures by updating the training materials and updated the reference Pocket Book—the revised version of which was uploaded on the program's website in November.

ceiling space. The book has been mailed out to insulation installers and is available online free of charge at: <http://www.environment.gov.au/energyefficiency/insulation/installers/publications/pocket-book.html>

¹⁰ Since 1 November 2009.

Phase 4 – 1 November to present

Recalibrating assistance and improved safety and compliance

On 2 November 2009 the government reduced the maximum available assistance per dwelling from \$1,600 to \$1,200.

In response to desktop audits of insulation companies and roof inspections, the department intensified its efforts on safety and compliance.

From 2 November 2009, the department introduced a ban on metal fasteners for foil insulation to further reduce electrical safety risks and additional requirements for down light covers or guards to further reduce the risk of fires.

On 1 December 2009 further safety and consumer measures were introduced, including a mandatory risk assessment of the site by installers and a requirement for them to agree to the publication of their names if deregistered for non-compliance.

The department also reintroduced the requirement for householders to obtain two quotes and a physical site inspection before insulation could be installed.

Additionally, from 12 February 2010 training requirements will apply to all installers, not just job supervisors.

Key features of the current Energy Efficient Homes Package

The current components of the package are:

- the \$2.45 billion Home Insulation Program which provides up to \$1,200 for eligible householders, including owner-occupiers, landlords and tenants.
- the \$727 million Solar Hot Water Rebate, which provides \$1,600 for installing a solar hot water system or \$1,000 for installing a heat pump hot water system, to replace an electric storage hot water system in around 420,000 eligible homes.¹¹

¹¹ The Solar Hot Water Rebate was changed on 4 September 2009 to reduce the rebate for heat pump hot water systems to \$1000.

The Federal Government's Energy Efficient Homes Package—Home Insulation Program

Section 1 (i)

Ceiling and wall insulation in Australian homes, by state, and the scope of the Building Code of Australia

Terms of Reference item 1(i) The level of ceiling and wall insulation in Australian residences, state by state, prior to the announcement of the Energy Efficient Homes Package and the adequacy of the Building Code to ensure comprehensive roll out in future.

Available information in February 2009 showed almost 40 per cent of Australian homes did not have or did not know if they had insulation. Installation in existing building stock is not covered by the Building Code of Australia, which only applies to new constructions and major extensions to existing stock (approximately 150,000 dwellings in the 2008–09 financial year, or less than two per cent of Australia's total residential stock¹²). Whilst the thermal performance of the walls and floors of a house are important, the roof or ceiling space is considered the most effective location for insulation, and the program provides assistance for this.

Insulation levels in Australian homes

Before the package was announced, the most reliable information on insulation in Australian homes was available from the Australian Bureau of Statistics (ABS) survey *Environmental Issues, Energy Use and Conservation March 2008*.¹³

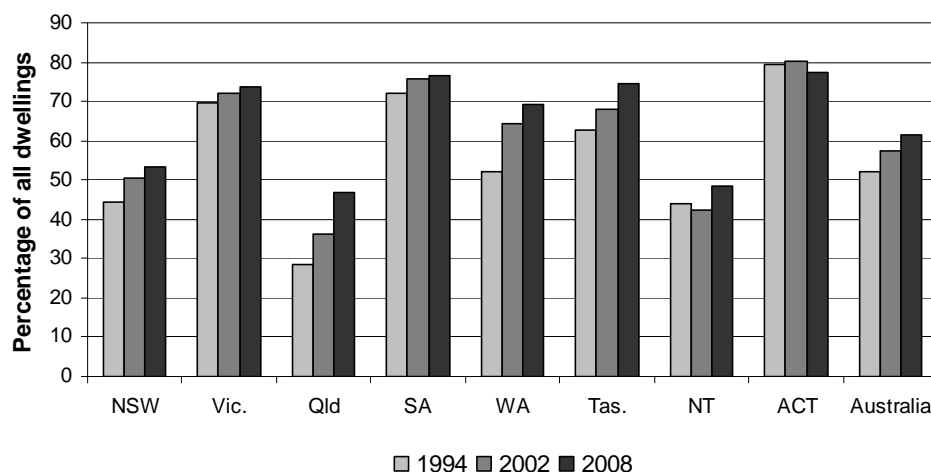
According to this survey, of the 8.24 million households in Australia 39 per cent (or almost 3.2 million) did not have or did not know if they had insulation. Some may have had insulation or may not have been suitable to have it installed (for example, multi-storey dwellings). As a result the actual number of dwellings requiring insulation before to the program is likely to have been lower than 3.2 million.

The survey found Queensland and New South Wales had the lowest levels while Victoria, South Australia and the Australian Capital Territory were among the highest (Figure 2). The greatest number of installations under the program has occurred in New South Wales and Queensland.

¹² Australian Bureau of Statistics, *Building Activity, Australia, June 2009*, Cat. 8752.0

¹³ Australian Bureau of Statistics, *Environmental Issues, Energy Use and Conservation, March 2008*, Cat. 4602.0.55.001.

Figure 2 Insulation by state and territory, 1994 to 2008¹⁴



The department's *Your Home Technical Manual* states most winter heat loss and summer heat gain occurs in the roof or ceiling. Roof and ceiling insulation can save up to 45 per cent on energy consumption for heating and cooling.¹⁵

Of the Australian households with insulation, 98 per cent reported that their insulation was located in the ceiling or roof. As insulation can be installed in a number of locations in a house, 31 per cent reported they also had insulation in the wall cavities.

Table 1 Placement of insulation in households, by state and territory, 2008¹⁶

	NSW	Vic.	Qld.	SA	WA	Tas.	NT	ACT	Australia
<i>Total dwellings with insulation (000's)</i>	1,267.8	1,305.8	650.2	423.1	483.9	125.3	23.1	83.2	4,362.2
<i>Total number of dwellings (000's)</i>	2,706.9	2,056.5	1,615.1	647.4	826.8	201.6	61.0	128.4	8,243.6
<i>Proportion (%)</i>									
<i>Placement of insulation (a)</i>									
Roof/ceiling	97.2	98.7	95.9	99.4	99.3	97.8	98.6	97.9	98.0
Walls	33.4	38.8	23.4	32.4	8.0	32.0	19.2	43.7	30.7
Floor	1.5	1.3	*0.4	n.a.	n.a.	4.9	0.0	*4.3	1.1
Other/unsure	**0.3	n.a.	**0.3	0.0	n.a.	**0.5	n.a.	**0.9	*0.2

¹⁴ Source: ABS *Environmental Issues, Energy Use and Conservation, March 2008*, Cat. 4602.0.55.001.

Figure notes: in all states and territories except the ACT, the percentage of insulation has increased, which is expected. The anomaly in the ACT is likely due to a sampling error—the relative standard error in respondents who stated their dwellings had no insulation in 2008 was the largest of any state or territory.

¹⁵ Department of the Environment, Water, Heritage and the Arts, 'Chapter 4: Passive Design, 4.7 Insulation', *Your Home Technical Manual*, 4th edition 2008 <http://www.yourhome.gov.au/technical/pubs/fs47.pdf>. Principal authors: Caitlin McGee and Max Mosher, with contributing author Dick Clarke.

¹⁶ Source: ABS *Environmental Issues, Energy Use and Conservation, March 2008*, Cat. 4602.0.55.001.

Table notes: (a) = the percentage figures add up to more than 100 per cent as households can have insulation in several locations; n.a. = not available; * = estimate has a relative standard error of 25 to 50 per cent and should be used with caution; ** = estimate has a relative standard error of greater than 50 per cent and is not considered reliable.

Adequacy of the Building Code of Australia

In developing program guidelines the Department examined existing Australian Standards for insulation, together with energy efficiency provisions outlined in the 2009 version of the Building Code of Australia (the code).¹⁷

The code is developed by the Australian Building Codes Board (the board), which is a joint government initiative and includes building industry representatives. The code sets out national provisions for the construction of new housing and major extensions to existing homes as agreed to by each of the states and territories, which enact its provisions. It provides minimum energy efficiency and insulation levels in line with the climate zone where the home is located.

The department based the program requirements on the code after consultation with the broader insulation industry and the board. The program requirements were a simplified version of the R-value requirements in the 2009 version of the code. The R-value is defined as the thermal resistance of the insulation—generally, the higher the R-value, the better the thermal performance of the insulation. By focusing on retro fitting insulation into existing residential dwellings, the program brings eligible existing stock (not covered by the code) closer to the code's current requirements for new dwellings.

The Council of Australian Governments has agreed to further increase minimum energy efficiency standards under the code in 2010, subject to a regulatory impact assessment. Any enhancements for insulation in new homes will be considered as a matter of course for their relevance to the roll-out of the program to existing dwellings.

Section 1 (ii)

The administration of the program from a pricing, probity and efficiency perspective

Terms of Reference 1(ii) The administration of the program from a pricing, probity and efficiency perspective.

The department used sound project management to implement the program design, program features and delivery mechanisms. Decisions on the level of assistance to householders reflect the aims of the Nation Building—Economic Stimulus Plan and economic conditions at the time of implementation. Levels of assistance to households are discussed in Section 1 (ii)—A below.

The department worked with Medicare Australia, the Department of Education, Employment and Workplace Relations, insulation manufacturers and installers' industry bodies to design a delivery model for the rapid establishment of:

- an expanded insulation installation industry that supported a wide range of operational scale, including small business,
- online registration of installer businesses from 9 June 2009, and
- online claim and payment systems for efficient transactions with installer businesses from 1 July 2009.

¹⁷ The code is available for purchase via: <http://www.abcb.gov.au/>

Pricing

The department consulted with industry, trade bodies and other relevant stakeholders on pricing at each step. It mandated a minimum of two quotes for eligibility during the rebate phase to 30 June, and again from 1 December. It has always recommended householders seek multiple quotes to satisfy themselves that they are obtaining a reasonable price for the service. Claims data from Medicare Australia enables the department to monitor total costs charged and claims made by installers, which helps determine trends. The average claim value between 1 July and 6 December 2009 was \$1,389, below the original cap of \$1,600 for assistance.¹⁸ The program's information and compliance framework allow for compliance and audit actions where prices charged by individual installers show investigation is warranted.

Pricing data from Medicare Australia also allowed the department to publish guidance on reasonable pricing in the program guidelines. The guidelines require that installers must not charge above the upper price in the table without reasonable grounds, and must provide information on reasonable grounds in their quote. This may include where the house has a more technically difficult roof or ceiling, or is in a remote area.

Probity

The department has worked closely with industry including manufacturers and installers to ensure an extensive understanding of the products, methods and competition in the market. The department initiated a number of industry roundtables and consulted widely on key features of the program to minimise conflict of interest or perception of conflict of interest between sectors of the industry and program design. The department engaged probity and legal advice for major procurement processes and questions on the program delivery model where appropriate.

The market driven delivery model ensures probity principles are maintained. At 6 December 6,313 active installer companies were competing in the marketplace to service household demand generated by the program. Whilst the provision of the assistance has supported market expansion, the department does not have a direct role in the market.

Efficiency

The department moved quickly to establish reimbursement for households in the program's early stage (3 February 2009 to 30 June 2009). It then implemented the current delivery model in four months to be ready for the 1 July 2009 launch.

The department considers the high volume/relatively low payment per service has provided efficient delivery and value for money.

Following the householder rebate regime in phase 1, the department's selection of Medicare Australia as its delivery partner has improved the transactional efficiency of the program. Using Medicare's existing infrastructure meant there was no need to develop a costly purpose-built system that was unlikely to be delivered within the four month development phase. The Medicare system has ensured rapid payment turnaround times, with an average turnaround for claims payment of less than five days.

¹⁸ The value of the assistance is discussed in more detail in Section 1 (ii)–A.

Section 1 (ii)–A.

Determining the size of assistance

Terms of reference 1 (ii)–A. The basis on which the government determined the size of the rebate for ceiling insulation

The government initially capped assistance to households at \$1600 and reduced the amount to \$1200 per installation from 2 November 2009.

A range of factors affect the cost of installing ceiling insulation in Australian homes. These include:

- the size of the uninsulated area,
- the construction of the roof and ceiling, including whether it is “cathedral” or “raked” (see **glossary**), or where the roofing materials need to be lifted to gain appropriate access, making the work more technically difficult and expensive,
- the insulation requirements for the climate zone,
- whether the home is in a remote area, raising transport and service overheads,
- the types of insulation product or combination of products chosen by the householder, and
- the characteristics of supply, demand and services in various parts of Australia.

The business models of companies also affect pricing. For example, some installers specialise in more technically complex installation services, while others may focus on straightforward installation jobs. With this in mind, the department has consistently recommended householders seek as many quotes as necessary to ensure they obtain the right insulation products and services for their needs. This recommendation is in the program guidelines, on the website and is also in advice from our call centre.

Industry estimates at the time of the announcement of the package indicated the cost of installation could range between \$660 and \$1,600 per dwelling. A study commissioned by the Insulation Council of Australia and New Zealand (ICANZ) in June 2007 estimated the cost of insulating an average home would be around \$1,200. However, factors such as installation of insulation in regional areas and variations in the nature of housing and the installations required can involve additional expenditure. Additionally, the study found that subsidies at the lower end of the spectrum were not likely to create enough demand for the program to achieve its goal of insulating enough households in the two year time frame.¹⁹ The above information represents the state of knowledge about the cost of installing insulation before the program began. Detailed pricing data on installing insulation into existing dwellings was not available prior to the outset of the program.

Assistance of up to \$1,600 provided the greatest scope for strong take-up by eligible households. This was designed to achieve maximum impact in line with the economic stimulus and employment objectives of the program. Subsequent to the success of the program in stimulating economic activity, on 1 November Minister Garrett announced the reduction of the assistance from \$1,600 to \$1,200, effective from 2 November. This change recalibrated the

¹⁹ Research conducted for the Insulation Council of Australia and New Zealand (ICANZ), June 2007, property of ICANZ, www.icanz.org.au

level of assistance in line with increasing consumer confidence as the economy continues to recover, reducing pressure on this sector of the market which had grown rapidly, while still ensuring adequate incentives for ongoing householder participation in the program.

Under the Low Emission Assistance Plan for Renters, from February 2009 the government had set assistance for eligible landlords and tenants at \$1,000. Due to lower than expected uptake rates,²⁰ the government decided to address the barriers to landlords in taking up insulation assistance and closed LEAPR. Landlords and tenants (with the permission of the owner) have been eligible for the higher assistance of the Home Insulation Program since 1 September.

Section 1 (ii)–B. Regulation of quoting and installation practices

Terms of Reference 1 (ii)–B. Regulation of quoting and installation practices

The department has worked closely with industry stakeholders, training bodies and state and territory agencies on industry quoting and installation practices since the program began.

The department has always recommended householders obtain several quotes to ensure they obtain the most appropriate product for their needs and value for money. Phase 1 of the program (3 February 2009 to 30 June 2009) required a householder to obtain two quotes before lodging an application for a rebate. This was removed for the full program launch on 1 July 2009 to allow the market and householders to interact without the involvement of the department. Figure 1 shows the rapid take-up of assistance over the period 1 July to 30 November 2009. On 1 December 2009 new guidelines required householders to obtain a minimum of two genuinely independent quotes (involving a physical site inspection by installers) before arranging an installation, to be eligible for payment.

In terms of installation practices, the department has worked closely with stakeholders including:

- representatives from industry,
- unions,
- training organisations,
- standards bodies,
- electrical and safety regulators, and
- other state and territory agencies.

The aim of this consultation was to bring together existing requirements (such as relevant Australian Standards) to develop new requirements that did not exist before the program.²¹

²⁰ Uptake of LEAPR between February and 30 June 2009 was only 3,526 households (as published in Department of Prime Minister and Cabinet, *Nation Building—Economic Stimulus Plan, Commonwealth Coordinator General's Progress Report 3 February to 30 June 2009*, page 48).

²¹ The relevant standards are AS/NZ 4859.1: 2002), installation of insulation (AS 3999–1992), and the Wiring Rules (AS/NZS 3000:2007).

From 1 July 2009 the requirements for all installers were that they must:

- be listed on the Installer Provider Register,
- agree to all terms and conditions of registration,
- meet minimum competency standards,
- hold specified insurance cover,
- have a valid Australian Business Number (ABN),
- comply with the guidelines, including relevant Australian Standards, and
- comply with laws and regulations in the relevant state or territory in which they operate.

Industry representatives have generally welcomed the positive impact the program has had on installation practices. ICANZ have also endorsed the more stringent auditing measures and increasing numbers of site inspections, in place from 1 September 2009.²²

The development and coverage of the training materials for the program are discussed in more detail in Sections 1 (iii)–B and 1 (iii)–F. The department’s compliance monitoring and enforcement regime on installation practices and procedures is discussed in the next section.

Section 1 (ii)–C.

Protection against rorting and abuse

Terms of Reference 1 (ii)–C. Protection against rorting and abuse of the rebate

To protect against rorting and abuse in the program, the department has put in place a range of measures to help ensure work completed under the program meets the requirements of safe and effective installation of insulation materials under the relevant Australian Standards.

The department’s compliance and audit measures were developed with the assistance of Ernst and Young (risk, audit and project management consultants), Medicare Australia, industry representatives and the department’s existing compliance and enforcement specialists, Protiviti.

The department also procured the services of PricewaterhouseCoopers to further develop and implement the compliance and audit system.

It was recognised that the system would need to be adaptive to meet future challenges. Compliance and audit activities have been progressively enhanced.

From 23 November 2009 a range of measures were put in place to further strengthen audit and compliance arrangements. These include an Energy Compliance Branch to enhance oversight of activities, and more stringent means of taking action against non-compliant installers.

The department ensures installers are compliant through the following processes.

²² ICANZ media release 30 October 2009 “Stick to the insulation facts,”
<http://www.icanz.org.au/news/sticktofacts>

Registration

- All companies or sole traders must agree to the terms and conditions of the program before they can register to participate. These specify installers may be 'named and shamed' if they fail to abide by the requirements.
- Companies must also provide evidence that all installers meet the required occupational health and safety competencies.
- From 12 February 2009, on-the-job supervision of untrained or unskilled employees is no longer permitted. Every single installer going into ceilings must have a demonstrated insulation specific competency, over and above their occupational health and safety certification.

Insurance certificate check

- When companies register they must provide copies of their valid insurance details. Companies are required to maintain up to date records of insurance with the department.

Pre-payment checks

- The department undertakes daily pre-payment checks based on a Computer Aided Audit Tool (CAAT) developed specifically for the program by the department's internal auditors, Protiviti. The CAAT analyses large volumes of installer and claims data collected by the Medicare system, and identifies any data anomalies or patterns, such as overly large or unrealistic claims by installers. These patterns reveal potentially non-compliant installers, and so inform the targeting of further audit activities.
- The department will suspend payments while the matter is investigated if suspicious circumstances are identified.

Post-payment checks

- Post-payment checks identify claim trends and allow the department to identify installers who attempt to claim in advance or who claim for complete streets or a large number of houses in one area.
- The department will suspend payments while the matter is investigated if suspicious circumstances are identified.
- This check has led to a number of Australian Federal Police investigations.

External intelligence

- The department receives intelligence from, for example, fire brigades, work safety authorities and offices of fair trading to focus compliance activities.
- The department also uses complaints for targeted activities. Data is received from the call centre, the website, email, the Minister's Office and the Commonwealth Ombudsman.
- Safety or fraud issues trigger a compliance response according to risk.
- Safety is the highest priority. Where information exists that a company poses a potential safety risk, the department contacts the company requesting them to show

cause within 48 hours as to why they should not be deregistered.²³ They will be deregistered from the program if a suitable explanation is not provided.

- Consumers making complaints about poor quality work are referred to state and territory offices of fair trading.
- As at 6 December 2009 the department has received 4,215 complaints out of a total of 807,682 installations. This is a complaint rate of approximately 0.5 per cent.

Desktop audits

- Desktop audits are targeted and random.
- Installers are asked to provide information about their registration and work practices. They are given seven days to compile and send this to the department.
- Failure to respond results in deregistration.
- As at 6 December 2009, 880 desktop audits have been undertaken.
- Where an audit identifies potentially fraudulent activities, the action is escalated to a fraud investigation (discussed below).

Field audits

- Field audits involve departmental officers attending an installer workplace and auditing insulation type and quality, work practices and quality assurance.
- If an audit identifies a potential safety risk, the department contacts the company requesting them to show cause within 48 hours as to why they should not be deregistered. If a suitable explanation is not provided, they will be deregistered from the program.
- Where an audit identifies potentially fraudulent activities, the action is escalated to a fraud investigation (discussed below).

Roof inspections

- Roof inspections involve an accredited inspector examining the quality of insulation installed. These inspections are targeted and random.
- Where roof inspections indicate non-compliance with the guidelines, the company is notified to make good the defects or risk deregistration.
- Where an inspection identifies a potential safety risk, the department contacts the company requesting them to show cause within 48 hours as to why they should not be deregistered. If a suitable explanation is not provided, they will be deregistered from the program.
- As at 6 December 2009, 7,962 roof inspections have been undertaken.
- The department will meet its target of 11,000 roof inspections by Christmas.

²³ Note that in instances where an actual fire or other serious safety incident has occurred, the time period for installers to “show cause” is only 24 hours, as per Installer Advice No. 18, issued on 11 December 2009, presented at Attachment B of this submission.

Fraud investigations

- Where there is evidence of potential fraud against the Commonwealth, the department will immediately suspend payment to the installer while the matter is being investigated.
- As at 6 December 2009, three fraud cases have been provided to the Australian Federal Police for investigation. These companies have been deregistered.

Written confirmation of installation

- The department writes to every householder where a claim has been made to request feedback on their experience.
- Any potential matters of non-compliance are used in compliance and audit activities and may result in targeted audits, fraud investigations or written notice to the installer requesting them to 'show cause' as to why they should not be deregistered.

Over the period to 6 December 2009, approximately 220 companies had been deregistered by the department. A number of these were on the basis of non-provision of the required documentation, which was later provided, allowing some companies to resume participation under the program. However, this option is not open to those deregistered for reasons including safety issues, fraud allegations and other serious breaches. As at 6 December 2009, the outstanding number of companies (of the original 220) that have been deregistered for failing to abide by the program's terms and conditions was 183.

Details of penalties for non-compliance are in the *Installer Advisory Notice No.18* at **Attachment B**.

Section 1 (ii)–D

The program and insulation prices

Terms of Reference item 1 (ii)–D. The impact of the program in pushing up insulation prices

The insulation installation industry operates in a competitive market in which householders can obtain a number of quotes to ensure the best value for money. The assistance offered by the program has seen an increase in the number of installers, and hence competitors, in this market.²⁴

The department expected the introduction of the program would affect the supply and demand characteristics of the existing market, due to its scale and the increased demand for materials and services for households.

Many market factors affect pricing, and the department has received correspondence from installers about price fluctuations. It is expected there will always be some volatility in prices for insulation materials.

²⁴ The number of competitors in a market may differ on a region-by-region basis.

As noted in Section 1 (ii)–A, estimates of the costs of insulation ranged from \$660 to \$1,600 per installation. However, there were no comparable data available on the actual costs borne by householders before the program was introduced.

The cost of installing insulation has remained relatively steady over the course of the program, suggesting any spikes in product costs have represented isolated examples rather than general trends. As noted earlier, over the period of 1 July to 6 December 2009 the average claim value was \$1,389. This was below the original cap of \$1600 for assistance.

The department has worked with industry to develop a pricing table based on actual claims. The table was incorporated into the guidelines on 1 September 2009 so that householders could use this information to help them obtain the best value for money. The table provides information on the price per square metre for straightforward, average and complex/remote installations of the six most common insulation products.

Table 2 Insulation pricing table²⁵

Product Type	Straightforward Installation price per square metre	Average price per square metre	Complex or Remote Installation price per square metre
Cellulose	\$5.80	\$13.00	\$15.00
Glasswool	\$7.60	\$12.50	\$14.50
Natural Wool	\$10.00	\$16.00	\$18.40
Rock Wool	\$10.25	\$14.50	\$16.60
Polyester	\$11.70	\$16.00	\$18.40
Foil	\$10.00	\$10.00	\$11.50

When assistance was capped at \$1,200 there was a transition period of two weeks between 2 and 16 November. During this time installations arranged but not yet completed were eligible for \$1,600 provided work was completed by 16 November. Because the \$1,200 cap has been in place for a few weeks only, it is too early to see whether this is having an impact on the total installation costs.

Section 1 (ii)–E.

The level of imported insulation to meet demand

Terms of Reference 1 (ii)–E The level of imported insulation to meet demand

The department has monitored industry capacity to meet household demand generated by the program. This includes regular consultation with manufacturers and installers of the range of insulation products and reviewing other industry research. Monthly industry roundtable meetings with the major associations (listed at **Attachment A**) were held between February and June and again between August and November 2009.

Industry consultations early in the implementation phase of the program indicated that domestic supply capacity could be boosted to meet projected demand levels under the program. However, during the program's development, accurate estimates of the industry's ability to

²⁵ The program guidelines are at:

<http://www.environment.gov.au/energyefficiency/insulation/homeowners/guidelines.html>

absorb increased demand were not available across the full range of products, making comparisons difficult.

There has always been some level of imports in parts of the Australian insulation industry, allowing industry the flexibility to meet surges in demand. Given the labour intensive nature of insulation installation, the use of some imports under the program has allowed for more rapid growth of local employment and downstream economic benefits in allied sectors.

The department sought data on the level of imports and found that disaggregated information on glasswool batt imports (the main product installed under the program) is not available. These are classified by both Customs and the Australian Bureau of Statistics in an aggregated form with other glass fibre products. It is not possible to determine which sectors the material could be destined for, nor whether the material is potentially being installed under the program.

Industry supply analysis by the firm KPMG for the department showed the greatest risk of shortfalls in supply would occur in the early months of the program. The report predicted that as both imports and increased domestic supply came on stream, the supply chain would become more stable and efficient.

Program guidelines stipulate that imported products used under the Program must meet relevant Australian Standards as outlined in the response to section 1 (iii)–E below. To further strengthen this requirement and to assist householders and installers, the department will shortly publish an Approved Products List on the program website. This list will comprise all products certified against the Australian standards or tested successfully against the Australian standards.

Section 1 (ii)–F.

Ensuring value for money for taxpayers

Terms of Reference item 1 (ii)–F. Ensuring value for money for taxpayers

The program aims to provide value for money for Australian taxpayers on three levels.

As one component of the \$42 billion Economic Stimulus Plan, the program is a cost effective measure to stimulate the economy and support jobs over a short time period. Its design meant the stimulus to a range of businesses from small to large scale could be delivered quickly in a labour intensive sector that could rapidly expand. From 1 July 2009 the payment mechanism changed and enabled installers to claim assistance directly using an electronic funds transfer system managed by Medicare Australia. The program has played a commensurate role in mitigating the potential domestic economic and employment impacts of the global economic crisis.

Secondly, information provided to the department from industry indicated that insulation installation is labour intensive and that the bulk (over two thirds) of expenditure generates employment downstream in distribution, warehousing, installation and support services, with the potential for significant multiplier effects throughout the economy. The household sector is therefore an effective stimulus measure in terms of supporting domestic employment, notwithstanding some level of imported product over the life of the program.

The program provides value for money for taxpayers as ceiling insulation is an effective low-cost measure to achieve energy efficiency gains and therefore greenhouse gas abatement in the household sector.²⁶

Finally, the over 800,000 individual households participating in the program (as at 6 December 2009) could save an average of up to \$200 per year, with many forms of insulation providing these benefits for decades into the future. Actual savings vary depending on factors such as energy tariffs that apply in specific locations, climate, dwelling orientation and size, the building fabric, the size of the household, individual preferences and how often relevant appliances (such as heaters or coolers) are used.

Value for money in regard to departmental delivery cost is addressed in the next section.

Section 1 (ii)–G. Management of the program

Terms of reference item 1 (ii)–G. Waste, inefficiency and mismanagement within the program

Delivery of the program within its timeframe required the department to rapidly develop its program management systems to deliver large scale assistance for approximately two million households.

Payments began immediately to avoid any short-term suppression of demand before the full roll-out. A rebate system from 23 February 2009²⁷ enabled householders to claim back the value of any insulation they had installed between 3 February and the end of June 2009. At the same time this phase was being rolled out, a streamlined delivery model was developed in partnership with Medicare Australia. It was identified as the most suitable delivery partner because of its position as an agency with the information technology, payment systems and call centres needed for implementing the program. Through this partnership the department has been able to leverage off infrastructure and specialist capabilities, which enabled the program to be operational in a short time frame with no duplication of systems. Roll-out on the scale achieved would not have been possible without the services provided by Medicare.

The Department established a governance structure to support the effective oversight of the Program. The group was convened on 8 April 2009. It comprised representatives from the Department of Prime Minister and Cabinet, the Department of Education, Employment and Workplace Relations, Medicare Australia and the Australian Taxation Office. It had oversight of implementation, monitored risks and provided advice, support and external scrutiny on program design and delivery.

²⁶ McKinsey&Company, 2008, *An Australian Cost Curve for Greenhouse Gas Reduction*, page 13: “By 2030, a total of 60 Mt of carbon-reduction opportunities can be found in the building sector, all at low or negative cost. ... Australia’s relatively low level of insulation creates significant opportunities for increased energy efficiency in residential and commercial buildings.” <http://www.mckinsey.com/client-service/ccsi/costcurves.asp>

²⁷ The rebate payments were announced on 3 February, with applications for the rebate available from 23 February.

Section 1 (ii)–H.

Aims of the program as part of the stimulus plan

Terms of Reference item 1 (ii)–H. Ensuring the program achieves its stated aims as part of the government's stimulus package

Between 3 February and 6 December 2009 insulation was installed into 800,000 homes. As at 6 December 2009 over 6,313 active installer businesses were registered to take part. This number does not represent individual installers, but whole businesses, meaning the installer workforce is estimated at more than double the 6,313 installer businesses.

The program was designed to maximise efficiency for small business to deliver rapid uptake and stimulate employment in the relevant sectors. Using Medicare Australia as its service provider, the program has incorporated 24-hour online accessibility for installers to lodge their claims, paperless transactions, rapid pay turnaround times and hence the security of reliable cash flow, which is often a necessity for smaller businesses.

The program provides job opportunities in manufacturing, distribution and installation. In July 2009 a Memorandum of Understanding was signed between the Australian Government, industry and job service providers agreeing to work closely together to ensure job seekers are connected to training and job opportunities under the package.

The rapid program uptake has proven effective as a stimulus measure, with the majority of employment supported downstream from manufacturing, in distribution, warehousing, installation and support services.

Section 1 (ii)–I.

Advice from Australian manufacturers on projected demand

Terms of reference item 1 (ii)–I. The consultation and advice received from current manufacturers regarding their ability to meet the projected demand.

As discussed in the response to Section 1 (ii)–E above, the department consulted with Australian manufacturers (monthly meetings were held between February and June) on their existing capacity and ability to cater to increased demand. This included regular consultation with manufacturers and installers of the range of insulation products and other industry research (listed at **Attachment A**).

ICANZ reported on 10 March 2009 that:

“In recent times major companies like CSR Bradford and Fletcher Insulation, which supply around 70 per cent of the insulation sold in Australia, have invested in new plant and improved production processes to increase productivity and reduce their environmental footprint. These investments will now be utilised for this Government’s insulation program.”

And:

“Australia also has a very efficient and effective supply chain, all the way from manufacturing insulation to self-employed installers operating in local metropolitan

and regional communities. Additional semi-skilled and skilled trades' people can be quickly trained to meet new labour demand."²⁸

The department also consulted with a range of smaller manufacturers including those in the reflective foil, cellulose and polyester insulation sectors.

Industry consultations have shown that domestic manufacturers have benefited from the program by scaling up domestic production to meet some of the increased demand.

Some manufacturers expressed concerns that shortfalls and delays in the supply chain may eventuate while additional industry capacity came on stream, and indicated these gaps may have had to be met by imported product.

It is likely the program has leveraged additional investments in plant and operations. However, the stimulus focus of the program meant there was not a strong business case for new investments in domestic plant capacities. Access to imported product has allowed the domestic sector the flexibility to expand and grow the Australian workforce downstream of manufacture. This was essential to rapidly meet the surge in demand and the stimulus objectives of the program.

Section 1 (iii)–A.

Employment and investment in insulation production and manufacturing resulting from the program

Terms of Reference item 1 (iii)–A. An examination of the employment and investment in insulation production and manufacturing resulting from the program

As outlined in the *Nation Building—Economic Stimulus Progress Report (3 February to 30 June 2009)*,²⁹ the stimulus plan has already had a significant impact on the economy and is supporting up to an estimated 210,000 jobs overall.

The scale of the Home Insulation Program and the speed of uptake in the household sector suggest substantial increases in employment in the production, manufacture, retail and installation sectors.

The Department has worked closely with production and manufacturing industries to monitor the roll-out and market behaviour since the Program was announced on 3 February 2009. Manufacturers across the insulation sector rapidly expanded their operations to meet the strong demand from households. This industry continues to manage supply and demand for insulation, as they did prior to the program. Several factories were running 24 hours a day to meet the increased demand.

²⁸ Insulation Council of Australia and New Zealand (ICANZ), Media Release, 10/Mar/2009, "Fed's insulation plan will increase Australian jobs", <http://www.icanz.org.au/news/Fedplanjobs>

²⁹ Department of Prime Minister and Cabinet, *Nation Building—Economic Stimulus Plan Commonwealth Coordinator-General's Progress Report (3 February 2009 to 30 June 2009)* http://www.economicstimulusplan.gov.au/documents/pdf/ESP_Project_Report_August.pdf

Australian insulation manufacturers report they have directly benefited from demand generated by the program. Manufacturers have expanded their operations in a range of areas including increasing plant output and employing more people directly and indirectly to support their operations.

Specific examples of the increase in business generated to date by the program include:³⁰

- Support for over 60 jobs at one of CSR Bradford's plants that would otherwise have been lost. A further 568 jobs have been created which include a mix of sales, installer, manufacture and warehouse staff.
- Fletcher Insulation, another major supplier and manufacturer of insulation products, reported an increase in direct employment in the company of 17 per cent.
- Spotless, a major installer business, has reported growth of almost 50 per cent across their local installation subcontractor workforce.
- The Economic Stimulus Plan website displays a story about Western Australian insulation manufacturer Air-Cell, which has seen sales increase 43 per cent.³¹

The majority of insulation-related employment is generated downstream of manufacturing plants. ICANZ has indicated that "supplying and installing insulation is labour intensive and the vast majority of people are employed after manufacturing, in local metropolitan and regional areas."³² Jobs have been created in supply and installation, importation, distribution chains and allied sectors.

Because the program is demand driven, it is not possible to accurately predict when its total funds will be expended. However the department is cognisant that industry needs to prepare for the wind up of the program, so that industry players can determine the most appropriate exit strategies for their individual operations.

The Department of Education, Employment and Workplace Relations (DEEWR) worked closely with the department to develop appropriate training materials and build capacity within the industry.

DEEWR has advised that from 1 January 2010 to 30 June 2012, 2,000 places under the Australian Apprenticeships Access Program, and 2,000 places under the Language, Literacy and Numeracy Program will be provided for job seekers who were employed in the insulation installation industry.

These training places will assist those workers who have found temporary employment through the package to increase their skills, become more employable and increase their long term career development options.

³⁰ Information supplied via correspondence with relevant industry stakeholders.

³¹ Department of Prime Minister and Cabinet, "In Focus: Insulation reflected in boosted sales and jobs" *Nation Building—Economic Stimulus Plan* website, http://www.economicstimulusplan.gov.au/infocus/pages/if_011009_insulation.aspx

³² Insulation Council of Australia and New Zealand (ICANZ), Media Release, 10/Mar/2009, "Fed's insulation plan will increase Australian jobs", <http://www.icanz.org.au/news/Fedplanjobs>

Section 1 (iii)–B.

Advice relating to safety, including fire and electrocution risks

Terms of Reference item 1 (iii)–B. What advice was provided to the Government on safety matters, particularly in relation to fire and electrocution risks and to what degree the Government acted on this advice.

Working in ceilings of older homes poses risks that must be identified and controlled. Stakeholders discussed the issues of fire and electrical hazards during the development of the program’s training and guidance materials, and this advice was incorporated from the outset.

Comprehensive safety requirements have always been fundamental to the program. These requirements match existing standards and requirements for all workers in the construction industry. This includes mandatory minimum occupational health and safety training, workplaces operating in accordance with state and territory legislation, and practices governed by relevant Australian standards for laying thermal insulation and working around electrical wiring.

The department has acted to tighten program requirements and strengthen compliance activities in response to emerging issues, in particular the potential risks posed by a minority of unscrupulous installers. In some areas the program requirements are more stringent than the relevant Australian Standards.³³

Non-compliance with program requirements automatically results in the deregistration of installers.

A useful resource for installers is the *Construction Industry Pocket Book: Resource for Installers of Ceiling Insulation*. Produced for the department by the Construction and Property Services Skills Council (CPSISC), the book is a quick reference guide and summarises key training elements.

It has been available to all installers (and the public) since August and addresses the management of risks including: electrical risk, working at heights, confined spaces and temperature related hazards.

While investigations on workplace health and safety incidents are the responsibility of state and territory authorities, the department works closely with these agencies—as discussed below in Section 1 (iii)–F. (ii).

Advice received

A range of stakeholders provided technical and safety advice during the program’s design phase (between 3 February and 30 June 2009) and through the roll out from 1 July onwards. These organisations included:

- building and insulation industry associations,

³³ For example, the requirement for all down lights to be protected with an appropriate fire resistant cover under the program is more stringent than the relevant Australian Standard which advises the use of covers over down lights but does not mandate this practice in all cases.

- installers, training organisations,
- unions,
- standards bodies, and
- various state and territory technical, regulatory and consumer affairs agencies.

Technical consultants were also used where appropriate. Their advice and input was incorporated into a risk management strategy and drawn on in development and adjustment of the delivery model. Advice was received in relation to the guidelines, terms and conditions of registration, minimum competency requirements and the audit and compliance framework.

The department worked with DEEWR on implementation and developing the first national training framework for installers. The department contracted CPSISC to map existing units of competency to meet program requirements and develop support resources. Material was reviewed by a range of stakeholders including installation industry representatives and electrical regulation training organisations (see **Attachment A**).

These measures and obligations on installers did not exist previously. Industry has welcomed the measures as they strengthen capacity to safely and effectively install ceiling insulation, and increase industry professionalism.

Degree to which the government acted on the advice

All advice received has been considered and incorporated where appropriate into the design and implementation of the program. Safety advice has informed program guidelines, installer terms and conditions, minimum competency standards and training materials.

The training package was developed in time for the commencement of the program proper on 1 July 2009. Installers and training organisations were provided with the training package in time for the launch.

The training package directly addresses the safety issues raised by stakeholders. To work under the program all installers must have completed training in *CPCCOHS1001A Work Safely in the Construction Industry* or *General Construction Induction White Card*. This is a national requirement for all persons operating in the general construction industry and it focuses on health and safety in the workplace. Without this basic qualification, no person, including all employees, sub-contractors and others employed by an insulation installation company, is allowed to install insulation in a roof under the program.

The program's training resources contain extensive coverage of the full range of hazards and risks that exist in a roof space. The materials were developed by the CPSISC in consultation with industry, electrical regulators, and training bodies (see **Attachment A**), and the training is available to all installers from registered training organisations in all states and territories.

The training materials include:

- *Insulation Installers Pocket Book*: Pocket-size reference source to key knowledge and skills for learners, available online free of charge from the Program website.
- *Assessment Guide*: Developed for Registered Training Organisations to assist in conducting formal assessment processes.
- *Delivery Guide*: Developed for trainers to provide some basic tools and guidance for delivery of the training program.

- *Learning Summary*: Brief summary of key knowledge areas for learners.
- *Recognition Application*: Developed for candidates to assess current competence and assist in formal recognition of competence.
- *Training Presentation Materials*: Developed for trainers to present key knowledge areas relating to the unit.

Specific management of fire and electrical hazards

All insulation used under the program must be installed safely in accordance with the relevant Australian Standards for insulation materials and their installation, including the *Wiring Rules* (AS 3000:2007) and *Thermal insulation of dwellings—bulk installations—installation requirements* (AS 3999–1992). These standards cover electrical and fire safety and provide advice on how to safely install insulation, including how to deal safely with ceiling appliances such as down lights. The training materials also include information on how to comply with these Australian Standards.

Importantly, installers must also comply with their state or territory electrical and work safe regulations.

Installers must fully comply with these essential safety requirements to be involved in the program. They must verify that every installation they perform meets these requirements by making a declaration on the Work Order Form. Failure to comply will result in installers being de-registered, and under state and territory legal provisions they may also face penalties including fines and imprisonment. As noted in Section 1 (ii)–C, as at 6 December, 183 installers have been deregistered by the department.

Additional safety measures

The department convened a meeting of training organisations, industry and regulators to review the training resources after a number of serious workplace health and safety incidents. The first meeting took place on 27 October 2009 and a second on 12 November 2009. The following commitments were made and actions agreed:

- ElectroComms, Energy Utilities and Industry Skills Council and CPSISC committed to undertake a further analysis of the training materials in relation to strengthening electrical safety.
- At the end of November the department mailed over 9,200 copies of the Pocket Book to registered training organisations to distribute to training participants. On 9 December the department mailed over 10,700 copies to Medicare for distribution to all companies on the Installer Provider Register. All installers have already received a link to the updated online version via email.
- Enhancements to the training program including:
 - o more information on site risk assessments,
 - o how to identify and control electrical and other hazards including identification of wiring types, and
 - o further improving accessibility of the information for learners with lower literacy levels.
- CPSISC also developed a new training standard for endorsement by the relevant national committee, and is working with the department and DEEWR to finalise it.

Electro-Comms and Energy Utilities Industry Skills Council, the Housing Industry Association, the Master Builders Association and other relevant organisations are also assisting in this process.

Minister Garrett announced additional safety precautions on 1 November 2009. These measures were designed to further strengthen existing requirements and were also consistent with Queensland's ministerial notice on ceiling insulation, which was announced on 1 November.³⁴ These new measures included:

- a ban on metal fasteners for foil insulation such as metal staples or nails,
- mandatory installation of covers over down lights and other ceiling appliances, which although commonly used, are not compulsory under the Australian Standards, and
- a targeted electrical safety inspection program of Queensland homes with foil insulation installed under the program.

In addition, from 1 December 2009, a mandatory formal risk assessment for every installation is also required before any work can commence.

Section 1 (iii)–C.

Extending the scheme to other energy efficiency products.

Terms of Reference item 1 (iii)–C. The costs and benefits of extending the scheme to include other energy efficiency products including wall and floor insulation, draft stoppers and window treatments

As outlined in the response to Section 1 (iv), the department has identified that ceiling insulation and solar or heat pump hot water systems are among the most cost effective measures for households to improve their energy efficiency, save on power bills and reduce greenhouse gas emissions. Other measures may also be effective, depending in the characteristics of individual homes. For example, the department's Green Loans initiative enables householders to access a loan of up to \$10,000 for solar, water saving and energy efficient products which will improve the environmental performance of their homes.³⁵

Green Loans also offers free home assessments for householders. These involve the physical inspection of major energy and water systems relating to thermal comfort, water heating, lighting, refrigeration, cooking, entertainment, water efficiency and waste management. This information is used to generate a tailored report listing the most effective changes for their home. It enables householders to weigh the costs and benefits of individual measures and determine the most effective actions. Qualification for a Green Loan does not affect a householder's eligibility for other assistance, including from the Energy Efficient Homes Package.

³⁴ The notice can be found at: <http://www.deir.qld.gov.au/electricalsafety/law/legislation/notice/installing-insulation/index.htm>

³⁵ The loan is interest free for a maximum of four years.

Section 1 (iii)–D.

Extending the scheme to small and medium business

Terms of Reference item 1 (iii)–D. The costs and benefits of changing or extending the scheme to make small and medium sized businesses eligible for installations;

Analysis of the costs and benefits of extending the scheme to cover other sectors such as small and medium sized businesses under this program has not been undertaken, as the program is focused on households.

As part of the stimulus package, small and medium businesses throughout the insulation supply chain benefit from the household demand for products and services generated by the program.

Section 1 (iii)–E.

Imported insulation products and Australian standards

Terms of Reference item 1 (iii)–E. The extent to which imported insulation products met Australian standards and the method used to make that determination

Program guidelines state all products must comply with the Australian Standard AS/NZS 4859.1: 2002 incorporating the amendment: *Materials to the thermal installation of residential buildings*. Advice to installers includes how compliance with the standard can be determined via product labelling and documentation.

To further strengthen this requirement and to assist householders and installers, the department will shortly publish an Approved Products List on the program website. This list will comprise all products certified against the Australian standards or tested successfully against the Australian standards.

The Department has agreements with each of the state and territory fair trading organisations and the ACCC to respond to information from householders about poor quality product.

It has a close relationship with accredited testing laboratories and the National Association of Testing Authorities (NATA) to ensure compliance with Australian standards.

The department also advises installers that NATA can confirm whether a product complies with the standard by assessing the documentation or claims about a product in relation to laboratory tests, calculations and accreditation.

While the resolution of most householder complaints is handled by state and territory fair trading authorities, the department also records information for administration, audit and enforcement under the program.

The Department has a compliance procedure to investigate complaints and allegations of inappropriate product use, and can deregister an installer when necessary. Section 1 (ii)–C discussed these procedures, including field audits to inspect installer workplaces and audit the type and quality of the insulation used and targeted and random roof inspections. If an audit or inspection identifies a potential safety risk, the department writes a letter to the company requesting them to show cause within 48 hours as to why they should not be deregistered. The company will be deregistered if a suitable explanation is not provided.

Departmental advice to householders and installers

As noted above, the department provides advice to installers on how to identify and check the claims of a product for compliance with testing bodies and manufacturers. This advice has taken the form of direct contact and installer advisory notices.

The department also advises householders that insulation must meet the relevant Australian Standard as part of the guidelines. Additional detailed information about types of insulation and their uses is presented in the Pocket Book, available from the Program website.

Section 1 (iii)–F.

Occupational health and safety

Terms of reference item 1 (iii)–F. What advice was provided to the Government on occupational health and safety matters, particularly in relation to training for installers; including:

- i. to what degree the Government acted on this advice; and*
- ii. identification and examination of fires and electrical incidents resulting from the Government's Home Insulation Program.*

The response to Section 1 (iii)–B above detailed the department's consultation with stakeholders to ensure the program benefited from the best available training and safety advice. In addition to the fire and electrocution advice already discussed, advice also covered:

- duty of care obligations,
- personal protective equipment,
- working safely at heights,
- risk management and hazard identification,
- identification of common hazards, including asbestos and other harmful dusts, tools and machinery, confined spaces, heat stress, heights and falling objects, and
- incidents and emergency response and reporting procedures.

Section 1 (iii)–F. (i)

The degree to which the government acted on the advice it was given

As also discussed in Section 1 (iii)–B, advice relating to workplace health and safety was incorporated into the training materials created by CPSISC for use by the registered training organisations that train installers under the program. Occupational health and safety requirements have also been a component of the program guidelines since the outset. The publicly available Pocket Book also contains clear and concise advice on occupational health and safety issues. It goes beyond fire and electrical risks and covers the complete range of issues highlighted in the response to Section 1 (iii)–F.

Section 1 (iii)–F. (ii)

Identification and examination of fires and electrical incidents resulting from the Government's Home Insulation Program.

Cooperation with relevant state and territory agencies

Agencies in each of the states and territories, such as fair trading and justice organisations, have responsibility for consumer affairs and administering legislation on insulation installation. Occupational health and safety legislation places obligations on insulation installers in regard to their workers, including providing a safe working environment, safe systems of work and adequate training and supervision commensurate with skills and experience.

The department is working closely with the states and territories and has established memoranda of understanding with each fair trading agency. These relationships facilitate information on complaints about issues like non-compliant installer practices and electrical and fire safety incidents. This information sharing ensures installers can be dealt with appropriately—for example, deregistration from the program or the investigation and prosecution of an installer by the relevant state or territory. It is important to note that the time involved in investigating and prosecuting breaches of relevant state or territory laws may exceed the timeframe of the program.

Fire and safety incidents

The department treats any reports of fire or safety incidents seriously and is working closely with emergency services and other state and territory authorities to establish which incidents have been related to this Program. Where there are safety incidents, the department writes to the installer requesting them to “show cause” as to why they should not be deregistered. If a satisfactory response is not produced within 24 hours the installer is automatically deregistered. Investigations by the relevant state authorities on fire and electrical incidents are currently under way and the department will take further action as more information becomes available.

Action by the department may include deregistration of installers, and recovery of money. Relevant state and territory agencies may also prosecute installers for breaches of relevant state and territory laws. Householders may be able to bring legal action against installers in relation to the contract between the householder and the installer. In addition it's possible that where appropriate installers could be prosecuted for fraud, or as a result of breaches of the Trade Practices Act 1974.

Additional measures to further strengthen safety

The obligations of installers under the program were detailed in Section 1 (ii)–C. The additional safety measures put in place from 2 November and 1 December are detailed in Section 1 (iii)–B. Briefly, the department moved quickly to implement more stringent safety requirements to the extent that several now exceed the relevant Australian standards.

Details of the department's work with the industry to help to build capacity, implement nationally recognised training standards and foster compliance with state and territory occupational health and safety laws are also presented in Section 1 (iii)–B above.

Section 1 (iv)

Effectiveness of the package in improving energy efficiency and reducing greenhouse gas emissions

Terms of Reference item 1 (iv) An analysis of the effectiveness of the package as a means to improve the efficiency of homes and reduce emissions of greenhouse gases, including comparison with alternative policy measures

Energy efficiency of existing Australian homes

The Department of Climate Change (DCC) has carriage of calculating Australia's emissions inventory. DCC estimates Australia's total emissions for the 2008–09 financial year were 544 million tonnes.³⁶ Australian households are estimated to be responsible for up to 20 per cent of total emissions.³⁷

The energy efficiency of residential building stock is a significant factor in Australia's capacity to reduce its greenhouse gas emissions. Comparisons undertaken at RMIT University's Centre for Design found that, for dwellings in equivalent climate zones, Australian homes are well below comparative international standards in terms of energy efficiency and greenhouse gas emissions.³⁸ Similarly, the introduction to *Your Home Technical Manual* states that "a great majority of Australians live in homes that work against the climate, rather than with it" and that "these homes are energy inefficient, too cold or too hot and comparatively expensive to run."³⁹

The two largest contributors to energy use in Australian homes are space heating and cooling and water heating. Space heating and cooling account for 38 per cent of home energy use and an estimated 20 per cent of all household emissions. Water heating accounts for 25 per cent of home energy use and an estimated 23 per cent of household emissions.⁴⁰

Regulation to drive higher levels of energy efficiency is in place and being further refined under the Building Code of Australia (the code). However the code applies to new homes and major extensions. These account for a small proportion of Australia's total housing stock (building activity accounts for less than two per cent of Australia's building stock per year⁴¹). Consequently, improvements to the energy efficiency of the majority of existing residential buildings are not covered by the code. The package has sought to address this gap by assisting householders to improve the efficiency of existing homes by targeting the two main sources of energy consumption in Australian homes—space heating and cooling, and water heating.

³⁶ Department of Climate Change, *Quarterly Update of Australia's National Greenhouse Gas Inventory—June Quarter 2009*, <http://www.climatechange.gov.au/climate-change/emissions.aspx>

³⁷ Department of Climate Change, *Reducing Australia's Carbon Emissions*, brochure released 19 August 2009, <http://www.climatechange.gov.au/publications/adaptation/reducing-carbon-emissions.aspx>

³⁸ Horne, R E, Hayles, C, Hes, D, Jensen, C, Opray, L, Wakefield, R, and Wasiluk, K., *International Comparison of Building Performance Standards*, Centre for Design, RMIT University, 2005, p. 5.

³⁹ *Your Home Technical Manual*, Department of the Environment, Water, Heritage and the Arts, 4th edition, 2008, introduction, <http://www.yourhome.gov.au/technical/index.html>

⁴⁰ The apparent discrepancy between energy use and emissions in these examples is because the percentage of greenhouse gas emissions from home energy use depends on the carbon intensity of the energy source. For example, the carbon intensity of electricity is much higher than that of natural gas or wood per unit of delivered energy. Therefore, although heating and cooling is the highest energy use in the home, as natural gas is typically used for heating, it is not the highest greenhouse gas emitter.

⁴¹ Australian Bureau of Statistics, *Building Activity, Australia, June 2009*, Cat.8752.0.

Determining the effectiveness of the Energy Efficient Homes Package

On 3 February 2009, when the government announced the package, preliminary estimates indicated that the combination of the Home Insulation Program, Low Emissions Assistance Plan for Renters and the Solar Hot Water Rebate would yield greenhouse gas savings of approximately 49.4 million tonnes of CO₂-e by 2020. This is an estimate over the period to 2020.

The Department of Climate Change (DCC) has responsibility for reporting on greenhouse gas abatement for Australian Government programs. DCC provided estimates in December 2009. These estimates of greenhouse gas abatement for the package are calculated as annual figures rather than as cumulative totals. Savings generated by the package are expected to be approximately 4.56 million tonnes CO₂-e in the year 2020. This is a one year only estimate.

The estimates above are forecasts and do not represent analysis of actual greenhouse abatement achieved under the program. It is appropriate to analyse the effectiveness of the program's energy and greenhouse gas abatement measures in the final evaluation.

Ceiling insulation is considered the most cost effective form of insulation and is relatively simple to install. The program has not yet been running for a year so any greenhouse gas reductions will not be seen in the emissions data produced by DCC. In addition, while future greenhouse gas and energy savings can be estimated using currently available data, the department expects individual householders receiving the assistance will see a range of results in actual energy and cost savings. This is due to factors such as the construction, design and orientation of the home, the climate zone where the home is located, the type of heating and cooling appliances used and the householder's individual preferences on the frequency and intensity of heating and cooling appliances.

Comparison with alternative measures

The full range of alternative policy measures is well documented in climate change literature. They encompass pricing, regulatory and information programs, and assistance measures such as rebate and funding programs. There is a wide range of measures at the federal, state and local levels that draw on these different approaches. The government made the decision for the package to focus on ceiling insulation and water heating.

Other measures to improve the energy efficiency of homes include more efficient lighting and appliances, double glazing, wall and floor insulation, window shading, draught proofing (weather stripping), coatings to reduce solar absorbance and roof mounted solar photo-voltaic systems.

Householders may find other measures such as these are cost effective given their situation and depending on the characteristics of the home and other issues.

The department delivers a range of programs to improve energy efficiency and drive greenhouse gas emissions reductions in households. For example, the Green Loans Program, the Green Start program for low income households (expected to be operational in early 2010), and Solar Cities. Information is available in the *Your Home Technical Manual*⁴² and the Living Greener website.⁴³

⁴² www.yourhome.gov.au

⁴³ www.livinggreener.gov.au

Section 2.

Management, efficiency and value for money

Terms of Reference item 2. Consideration of measures to reduce or eliminate waste and mismanagement, and to ensure value for money for the remainder of the program, noting the planned \$2.7 billion to be distributed under the program in total.

Just under \$1 billion of the \$2.45 billion program budget was expensed by the end of November 2009.

On 1 November the government announced the reduction in assistance from \$1,600 to \$1,200, recalibrating it in line with increasing consumer confidence as the economy continued to recover.

The outsourcing of specialist functions to appropriate providers ensured the administrative costs of program delivery were contained. These include the agreement with Medicare Australia, contracts with Datacom Connect Pty Ltd to manage the program call centre and PricewaterhouseCoopers for audit and compliance services. Medicare will continue processing installer registrations, distribution of information packs to installers, managing a payment call centre for installers and processing payments to installers.

The department will continue to review the design and delivery arrangements to maintain effectiveness and efficiency in expensing program funds, including in consultation with Prime Minister and Cabinet, Medicare Australia and DEEWR.

Section 3.

Other related matters

None identified.

REFERENCES

- Australian Building Codes Board, 2009, *Building Code of Australia 2009: Volume Two, Class 1 and Class 10 Buildings—Housing Provisions*, Canberra: Australian Building Codes Board, <http://www.abcb.gov.au/>
- Australian Bureau of Statistics, Building Activity, Australia, June 2009, Cat. 8752.0, www.abs.gov.au
- Australian Bureau of Statistics, *Environmental Issues, Energy Use and Conservation*, March 2008, Cat 4602.0.55.001, www.abs.gov.au
- Australian Government, 2009, *Your Home: Design for Lifestyle and the Future*, website, www.yourhome.gov.au
- Department of Climate Change, *Quarterly Update of Australia's National Greenhouse Gas Inventory—June Quarter 2009*, <http://www.climatechange.gov.au/climate-change/emissions.aspx>
- Department of Climate Change, *Reducing Australia's Carbon Emissions*, Brochure released 19 August 2009, <http://www.climatechange.gov.au/publications/adaptation/reducing-carbon-emissions.aspx>
- Department of Prime Minister and Cabinet, *Nation Building—Economic Stimulus Plan*, <http://www.economicstimulusplan.gov.au/pages/default.aspx>
- Department of Prime Minister and Cabinet, *Nation Building—Economic Stimulus Plan Commonwealth Coordinator-General's Progress Report (3 February 2009 to 30 June 2009)* http://www.economicstimulusplan.gov.au/documents/pdf/ESP_Project_Report_August.pdf
- Department of the Environment, Water, Heritage and the Arts, 2008, *Energy Use in the Australian Residential Sector 1986–2020*, <http://www.environment.gov.au/settlements/energyefficiency/buildings/publications/energyuse.html>
- Department of the Environment, Water, Heritage and the Arts, 2008, *Your Home Technical Manual*, 4th edition, <http://www.yourhome.gov.au/technical/pubs/fs47.pdf>.
- Department of the Environment, Water, Heritage and the Arts, 2009, *Living Greener*, website, www.livinggreener.gov.au
- Horne, R E, Hayles, C, Hes, D, Jensen, C, Opray, L, Wakefield, R, and Wasiluk, K., 2005, *International Comparison of Building Performance Standards*, RMIT University: Centre for Design.
- Insulation Council of Australia and New Zealand (ICANZ), 30 October 2009 *Stick to the insulation facts*, Media release, <http://www.icanz.org.au/news/sticktofacts>
- Insulation Council of Australia and New Zealand (ICANZ), Media Release, 10 March 2009, *Fed's insulation plan will increase Australian jobs*, Media release, <http://www.icanz.org.au/news/Fedplanjobs>
- McKinsey&Company, 2008, *An Australian Cost Curve for Greenhouse Gas Reduction*, <http://www.mckinsey.com/client-service/ccsi/costcurves.asp>
- Office of Fair and Safe Work Queensland (Queensland government), *Ministerial notice - to all Queensland insulation installers*, 1 November 2009, <http://www.deir.qld.gov.au/electricalsafety/law/legislation/notice/installing-insulation/index.htm>

Prime Minister of Australia, 03 February 2009, Media Release “Energy Efficient Homes - Ceiling Insulation in 2.7 Million Homes” <http://www.pm.gov.au/node/5332>

The Hon Peter Garrett AM MP, Minister for the Environment, Heritage and the Arts, *A 'Green Start' for vulnerable Australians*, Media release, 25 November 2009
<http://www.environment.gov.au/minister/garrett/2009/mr20091125.html>

The Hon Wayne Swan MP, Treasurer, Fact Sheet, 2009 *Updated Economic and Fiscal Outlook*, *The Energy Efficient Homes Program*,
<http://treasurer.gov.au/DisplayDocs.aspx?doc=factsheets/2009/010.htm&pageID=011&min=wms&Year=&DocType=3>

GLOSSARY

The following definitions are applied for the purpose of the program:

Ceiling insulation – material which meets Australian Standards and reduces the amount of heat flowing into or out of a building via the ceiling.

Householder – the owner-occupier, the beneficial owner, the tenant or landlord of the dwelling where the insulation is to be installed and who meets the rest of the criteria in the program guidelines.

Installer – an organisation or individual who has agreed to the terms and conditions of registration and is listed on the Installer Provider Register for the program.

Landlord - for the purposes of the program the assistance includes a person or persons or a housing co-operative, community or church group, retirement village, non-government housing organisation, company, trustee or any other body not previously mentioned (apart from the Commonwealth or a Commonwealth authority, a state, territory or local government or state, territory or local government authority including a housing authority), who own(s) a dwelling.

Owner-Occupier - an individual who owns and occupies a dwelling as their principal place of residence.

Physical site inspection – includes a physical inspection of the ceiling or roof of the dwelling to be insulated, including a full measurement of the roof space to be insulated, confirming that the dwelling does not already have ceiling insulation or has ceiling insulation of negligible effectiveness.

Program – the Home Insulation Program.

Raked ceilings - ceiling that follows the line of the roof, often with the roof timbers exposed. Also known as cathedral ceiling. Homes with these types of ceilings, or flat roofs, may be more difficult and expensive to insulate.

R-value – thermal efficiency of insulation is measured by its R-value. The higher the R-value, the more resistant the insulation is to heat flowing into and out of the dwelling. All insulation that meets the Australian Standard has its R-value clearly marked on its package.

Tenant – for the purposes of this assistance includes a person or incorporated entity which has a license or other occupation arrangement with a landlord, whether including the payment of rent or not, to live in a dwelling which the landlord owns and who meets the rest of the criteria in these guidelines.

Work Order Form - The hardcopy form that must be correctly completed by the householder and the installer at the completion of the installation work to the satisfaction of the householder.

TERMS OF REFERENCE

Senate Inquiry into the Energy Efficient Homes Package Terms of Reference

1. The Federal Government's Energy Efficient Homes Package (ceiling insulation), with particular reference to:
 - i. the level of ceiling and wall insulation in Australian residences, state by state, prior to the announcement of the Energy Efficient Homes Package and the adequacy of the Building Code to ensure comprehensive roll out in future.
 - ii. the administration of the program from a pricing, probity and efficiency perspective, including:
 - A. the basis on which the Government determined the size of the rebate for ceiling insulation;
 - B. regulation of quoting and installation practices;
 - C. protection against rorting and abuse of the rebate;
 - D. the impact of the program in pushing up insulation prices;
 - E. the level of imported insulation to meet demand;
 - F. ensuring value for money for taxpayers;
 - G. waste, inefficiency and mismanagement within the program;
 - H. ensuring the program achieves its stated aims as part of the government's stimulus package; and
 - I. the consultation and advice received from current manufacturers regarding their ability to meet the projected demand.
 - iii. an examination of:
 - A. the employment and investment in insulation production and manufacturing resulting from the program;
 - B. what advice was provided to the Government on safety matters, particularly in relation to fire and electrocution risks and to what degree the Government acted on this advice.
 - C. the costs and benefits of extending the scheme to include other energy efficiency products including wall and floor insulation, draft stoppers and window treatments;
 - D. the costs and benefits of changing or extending the scheme to make small and medium sized businesses eligible for installations;
 - E. the extent to which imported insulation products met Australian standards and the method used to make that determination; and
 - F. what advice was provided to the Government on occupational health and safety matters, particularly in relation to training for installers; including:
 - i. to what degree the Government acted on this advice; and
 - ii. identification and examination of fires and electrical incidents resulting from the Government's Home Insulation Program.
 - iv. an analysis of the effectiveness of the package as a means to improve the efficiency of homes and reduce emissions of greenhouse gases, including comparison with alternative policy measures;
 2. Consideration of measures to reduce or eliminate waste and mismanagement, and to ensure value for money for the remainder of the program, noting the planned \$2.7 billion to be distributed under the program in total.
 3. Other related matters.
-

ATTACHMENT A

TIMELINE OF KEY EVENTS AND SELECTED KEY INDUSTRY CONSULTATIONS ENERGY EFFICIENT HOMES PACKAGE

Key Program Guidelines Changes

- 3 February 2009 – Announcement of the Energy Efficient Homes Package and commencement of the early installation phase of HIP, LEAPR and the expanded Solar Hot Water Rebate.
- 26 February 2009 – Initial Early Installation Guidelines (Phase One) released.
- 27 March 2009 – Revised Early Installation Guidelines released (containing technical clarifications).
- 9 June 2009 – Installer Provider Register open to installers.
- 29 June 2009 – Launch of the Installer Provider Register.
- 1 July 2009 to 31 August 2009 – Main phase of the Program launched. Main phase guidelines apply (two quotes no longer required, online payment system launched).
- 1 September 2009 – Discontinuation of the LEAPR program and modifications to the communications package. Guidelines for the new Home Insulation Program apply, covering owner-occupiers, as well as landlords and tenants. Pricing table and physical site inspection requirements added.
- 1 November – Reduction in the amount of assistance to \$1200 and additional safety measures introduced including a ban on metal fasteners for foil insulation products.
- 1 December – Further safety and consumer measures introduced including, mandatory risk assessment for installers, and a requirement for installers to agree to have their name published if de-registered for non-compliance.

Selected Key Industry and Stakeholder Consultations

Regular consultation meetings have occurred throughout 2009 including in February, March, April, May, June, August and October and November. The following key stakeholder organisations have participated in consultations.

Industry Organisations

- Insulation Council of Australia and New Zealand (ICANZ)
- Australian Cellulose Insulation Manufacturers Association (ACIMA)
- Polyester Insulation Manufacturers Association (PIMA)
- Australian Foil Insulation Manufacturers Association (AFIA)
- Insulation installers in small and medium businesses
- Master Builders Association (MBA)
- Housing Industry Association (HIA)
- National Association of Electrical Contractors (NECA)
- Master Electricians Australia (MEA)
- Construction, Forestry, Mining and Energy Union (CFMEU)

Regulatory Agencies and Industry Standards Organisations

- Australian Building Codes Board (ABCB)
- Standards Australia
- Electrical Regulatory Authorities Council (ERAC)
- State and territory fair trading agencies
- State and territory electrical regulators
- Insulation testing laboratories

Training and Skills Organisations

- Construction and Property Services Industry Skills Council (CPSISC)
- Electro-Comms and Energy Utilities Industry Skills Council (EE-Oz)
- Other registered training organisations

The following Australian Government agencies have also participated in consultations:

- Department of Prime Minister and Cabinet (PMC)
- Centre link
- Medicare Australia
- Department of Education, Employment and Workplace Relations (DEEWR)
- Department of Industry, Innovation, Science and Research (DIISR).

ATTACHMENT B

INSTALLER ADVICE No. 18, 11 DECEMBER 2009

Dear Insulation Installer

Welcome to the 18th advisory note from the Energy Efficient Homes Package team with guidance on key issues relevant to the Home Insulation Program.

As you know, we have recently strengthened compliance to make sure householders have the best possible insulation experience. While most installers are doing the right thing, we want to make it clear that there is no room in the Program for companies who try to break the rules.

This is particularly the case when it comes to safety, both for householders and installers.

As a result of these compliance changes, from 1 December 2009, if you want to be on the Installer Provider Register you must:

- agree to the new rules about our deregistered installer list; and
- complete a risk assessment on the approved template before you start each job.

If you don't follow the Program requirements, you risk being taken off the Register, publicly named, required to pay back money or taken to court.

In the event of a serious safety incident involving work under the Program, for example due to an unsafe work environment, you will be taken off the Register and blocked from claiming further payments under the Program.

If there is a fire in a house as a result of the insulation you have installed, you will be sent a letter giving you 24 hours to explain to the Department of the Environment Water, Heritage and the Arts why you should not be taken off the Register.

If your work causes a fire risk or other safety issue, or the quality of your work is poor (not to standard), you will be sent a letter asking you to 'show cause' as to why you should not be taken off the Register.

If you are deregistered, your details will be published on the Department's website including the reason for your deregistration. The current list can be found at:

- [Deregistered installers list](#)

If you do not advise us of your agreement to the new rules regarding the deregistered installer list by 15 December 2009, you will be taken off the register and any claims you make after that date will not be paid. In these circumstances you will not be named on the website.

If you choose to remove yourself from the Program, we will take you off the Installer Provider Register and you will not be named on the website. However the Department reserves the right to publicly name deregistered installers if it is in the public interest.

It is the responsibility of installers to ensure that everyone who works for them, including sub-contractors, understands and complies with all Program requirements including complying with all relevant Commonwealth, state, territory and local government laws and regulations.

Installers should also know they can not claim for work that has not been completed.

The Australian Government is ensuring insulation is being installed properly by:

- contacting householders to confirm their satisfaction with the installation;
- checking that claims are not for more than they should be;
- checking paperwork, including Work Order Forms and Risk Assessments;
- doing roof inspections; and
- carrying out investigations and where necessary contacting state and territory authorities, such as WorkCover, Fair Trading offices and fire services.

The new rules mean that those who are doing the right thing can continue to help the community, environment and economy benefit from the Home Insulation Program.