Committee comments

The following material draws together selected comments made by the committee throughout the body of the main report.

Outcomes of the Home Insulation Program

- 2.68 The Home Insulation Program markedly failed to deliver the potential benefits that the government promised would flow from the program and, as a result of design and implementation failures, appears to have left the insulation industry worse off than before the development of the HIP.
- 2.69 Concerns about the Home Insulation Program relate mostly to:
- whether the program was adequately designed and managed to mitigate risks identified during the program development phase; and
- whether the responses to the hazards and improprieties that unfolded were appropriate and effective.

Design and implementation timeframe

- 3.10 The haste in rolling out the full program by 1 July 2009 was a major cause of problems that subsequently arose. The government had clear and unambiguous warnings of this in Minter Ellison's suggestion that the interim (reimbursement) program should be extended by three months, in order to allow more time to properly address the identified program risks.
- 3.11 It is clear that the Office of the Co-ordinator General, operating within the Department of the Prime Minister and Cabinet with direct and regular reporting to the then Prime Minister, Minister Arbib and the relevant sub-committee of Cabinet applied pressure to roll out the program quickly, in spite of the forecast risks.
- 3.12 By and large, federal bureaucrats do their professional best to implement the will of the government of the day.
- 3.13 Due to a failure to comply with requests for the release of all briefings and relevant information, coupled with understandable hesitancy of lower ranking public servants to speak 'on the record', the committee could not sufficiently test allegations that junior to middle-ranking departmental officers issued early, repeated warnings to senior departmental ranks. Nor could the committee satisfactorily test allegations such as those aired on the Four Corners program that such warnings went unheeded by senior departmental officers, swept aside by government-dictated exigencies of haste to get taxpayer dollars out the door.

- 3.14 In the absence of such 'testing', and in any event, responsibility for any bureaucratic shortcomings properly falls at the feet of respective Ministers and Prime Ministers.
- 3.15 In the committee's view, then Prime Minister, the Hon Kevin Rudd, then Deputy Prime Minister Gillard who was responsible for workplace training, and the Minister Assisting the Prime Minister for Government Service Delivery, Senator Arbib (who had oversight of fiscal stimulus spending), bear significant responsibility for the consequences of the HIP, particularly due to their apparent role in placing speed of delivery before the safety of implementation.
- 3.16 This is in addition to the responsibility borne by Minister Garrett, and the responsibilities Minister Combet now has to neutralise the negative consequences of the HIP. Regrettably in rejecting invitations to appear before the committee, these Ministers failed to avail themselves of opportunities to provide evidence to the contrary.

Adequacy of DEWHA's experience, administration and resources

- 3.27 The government's move to commission an independent review of the HIP (the Hawke Review) was too little, too late and should have been undertaken earlier so that the findings could be used to improve the HIP. Such a comprehensive, independent assessment of the program structure and the capacity to deliver it should have been undertaken at the beginning and used to inform the development of such a large and untested program.
- 3.36 It appears that the management structures needed within DEWHA to handle such a large and complex program were not instituted until far too late. The committee endorses Dr Hawke's comments which it reiterates:

The opportunity to step back from the day to day management of the program, ask hard questions and test assumptions was not taken until late in proceedings. Resources were tied up with crisis management. DEWHA is not unique in this regard, but it is a lesson that is not easily learned by busy departments under pressure to deliver large programs.

- 3.37 In relation to briefs from the DEWHA to Minister Garrett, which the committee requested, the committee records its strong dissatisfaction that DEWHA has not provided these without giving adequate reasons. On 9 June 2010, pursuant to a Senate Procedural Order, the committee sought the referral of these and other related matters to relevant ministers.
- 3.38 In the absence of evidence to the contrary, the committee can only conclude a level of negligence on the part of ministers or senior officials that detailed information on risks (including Minter Ellison's recommendation to defer the starting date) were either never communicated to or never acted on by the highest levels of the government.

Adequacy of DEWHA's risk management

- 3.55 For a program of the HIP's nature, Minister Garrett should have requested the conduct of a risk assessment, a copy of it once done, and an action plan identifying how each risk was being addressed, when and by whom. The Risk Register should have been provided to Minister Garrett earlier than February 2010 for his consideration and government action. The extent to which important information was allegedly not shown to the minister appears to be reflective of a 'don't show—don't tell' culture.
- 3.56 In the committee's view the government's risk management activities through DEWHA fell breathtakingly short. It failed to anticipate or respond with sufficient urgency to the extremely high risks created by the haste, scale, demand-driven and national roll-out of an ambitious program involving an industry with standards and rules, simply inadequate for a program for which the government's overriding goal was to drive demand and rapidly rollout such a large program.
- 3.57 These risks were sufficiently flagged in Minter Ellison's April 2009 Risk Register and had been raised with the government by various industry stakeholders as early as February 2009.
- 3.58 The committee comments particularly on the electrical and fire risks which have since become a critical concern. Industry associations had raised these risks as early as February 2009. For example concerns were raised:
- by the National Electrical and Communications Association (NECA), February 2009: 'There is a significant risk of electrical equipment overheating especially in the event of downlights in ceilings being covered if insulation is installed inappropriately';
- at stakeholder meeting, 18 February 2009: '...in New Zealand...a similar program had to be suspended because three people electrocuted themselves';
- by NECA to Minister Garrett, March 2009: 'Whilst not the only safety issue by far the most dangerous is the risk of fire associated with installing thermal insulation over or in close proximity to recess luminaires';
- by Master Electricians Australia in May 2009: '...incorrectly installed insulation created a very serious fire risk, especially in older homes'.
- 3.59 From the evidence presented to the committee it is clear that DEWHA and government ministers received various written and oral warnings of the serious risks posed by the program prior to its large-scale deployment in July 2009. It is also clear that these warnings were either ignored or not taken sufficiently seriously at the Cabinet or departmental level, in the rush to commence this flawed and ill-conceived stimulus measure.

Adequacy of training and installation standards

- 3.71 The committee acknowledges DEWHA's efforts to establish some training standards in an industry which had not had them previously but finds these efforts to be grossly inadequate given the scale of inexperienced start-up operations that were anticipated under the HIP.
- 3.72 Shortcomings in the detail of formal training and competency requirements were exacerbated by a systematic failure to adequately implement, enforce and communicate to the industry and workforce.
- 3.73 In the committee's view DEWHA did not adequately respond to the high risk created by the huge influx of inexperienced workers. As submissions commented:

Master Electricians Australia knew from its more than 70 years representing the electrical contracting industry that if you combined unskilled labour with electrical cabling then tragedy would not be far away.

The competency based training that was implemented should have been satisfactory, however the inconsistent delivery of this training, and the large amount of exemptions, meant that the training was not enough.

- 3.74 Arguably the key mistake was failing to ensure from the outset that all personnel involved in installation (not only supervisors) were properly trained. It was not adequate to allow a trained/qualified registered installer to oversee what could be an unlimited number of untrained workers. In this situation it was unreasonable and irresponsible to assume that written warnings about fire and electrical safety would effectively reach the actual workers in the roof.
- 3.75 It was counter-intuitive to exempt from training requirements a number of building trades which had little direct experience with insulation yet were now likely to interface with it.
- 3.76 Stakeholders gave both DEWHA and the government strong warnings of these risks from as early as February 2009. Similar warnings were expressed in a stakeholder consultation meeting on 18 February 2009. Neither DEWHA nor the government paid enough attention to these warnings. Making the standards more stringent in the last few months of the program was too little, too late.
- 3.77 The fact that the authorities felt the need to amend the installers' pocket book extensively after the first program-related fatality in October 2009, to upgrade the warnings on electrical and fire risks, does not inspire confidence in the adequacy of the earlier edition.
- 3.78 The committee expresses its deep concern and disappointment about DEWHA's and the government's failure to adequately minimise risks or respond effectively to the first tragic fatality in October 2009. It was not until February 2010 that the training requirement for all installers took effect. It appears that the option of mandating safety switches as a condition of participation was never considered.

Similarly, despite the best endeavours of the Fuller family, the simple step of requiring the household's power to be switched off during installation was never mandated. Steps along these lines may have helped avoid at least one of the subsequent fatalities. The committee finds this both tragic and deplorable.

- 3.79 The committee is not expert in insulation or electricity. However, it considers it incumbent upon the government to counter criticism that the government should have mandated:
 - (a) turning off the power before entering the roof;
 - (b) the use of plastic staples with foil, as had been recommended in New Zealand since 2007; and
 - (c) a condition of HIP insulation that a house had a safety switch (residual current detector).
- 3.80 In the committee's view, by October 2009, DEWHA and the government had received sufficient written and oral warnings of the serious risks posed by the program that it should have been suspended immediately following the first fatality. However disturbingly, these warnings were either ignored or not taken sufficiently seriously. Again, the desired speed of spending appears to have superseded safety considerations.

The maximum rebate and the Medicare billing model

- 3.89 Arguably many of the problems of the program resulted from the government's role, in and quest for, driving demand, culminating in an overwhelming deluge in the second half of 2009. In terms of market-place drivers, it seems to have been driven more by marketing by installers, taking advantage of the fact that installations were free for most dwellings, than by the initiative of householders.
- 3.90 As householders had no motivation (and almost certainly no expertise) to check the quality of the work, it left the way open to program abuses by unscrupulous newcomers to the industry who encouraged a large influx of inexperienced installers. This in turn was a contributor to the deaths, safety risks and other poor program outcomes described in more detail in chapter 4.
- 3.91 The committee considers it incumbent on government to explain why it did not spread the program over a considerably longer time frame and promote 'buy in' by householders by:
- reducing the level of the subsidy offered;
- requiring a co-payment, that is the householder pays some part of the price; and/or
- requiring the householder to pay the price of installation upfront and then be reimbursed a portion of the price.

- 3.92 The committee finds that the excessive value of the initial \$1600 rebate (above the industry average at the time) was always going to promote profiteering and, with it, bring about the low standards, short cuts and shonks that inevitably come from those solely attracted by a 'quick buck'.
- 3.93 The committee further finds that effectively making insulation 'free' for a period of time was never likely to provide lasting benefits to the industry as it was structured to create a boom-bust cycle, without leaving consumers with any understanding or appreciation of the real 'value equation' that underlies the installation of insulation.
- 3.94 A reimbursement or co-payment scheme might have moderated demand, and may have helped to deliver some longer term sustainability. However, it is unlikely of itself to have seen improved long term environmental effects or to have reduced risks to installers and householders without commensurate higher standards.

The safety of work carried out under the program

- 4.30 The committee acknowledges that, as in many areas of the building and construction sector, there are inherent risks associated with installing insulation. There are risks to both installers working in hot and confined spaces containing electrical wiring; and to householders if the insulation is not properly installed.
- 4.31 The consequences of these inherent risks are very high and in the extreme can result in the loss of both lives and property.
- 4.32 However, the committee is of the view that with adequate and appropriate risk management—for example, fully informed and properly trained and competent installers, and the use of safety equipment such as downlight covers—these risks can be significantly mitigated.
- 4.33 Roof/ceiling insulation is safe provided it is of appropriate standard, properly installed with full knowledge of the possible hazards and with effective safety arrangements in place. This applies to both bulk materials and foil. The fire and electrocution problems which have occurred resulted from inadequate training and unsafe work practices.
- 4.34 The committee acknowledges DEWHA's attempts to ensure suitable training standards and work practices. However, too many of these attempts were a case of playing catch-up to problems in both the formal requirements and with their inadequate and flawed implementation.
- 4.35 In the committee's view DEWHA did not adequately anticipate the high risk created by the huge influx of inexperienced and unqualified workers. When issues did emerge, DEWHA's responses were both slow and often inadequate. DEEWR, meanwhile, appears to have been missing in action, despite being members of the

Project Control Group and, logically, having a key responsibility for workplace safety and training issues.

- 4.36 Arguably the key mistake was failing to ensure from the outset that all personnel involved in installation (not only supervisors) were properly trained and fully understood the risks associated with installing insulation.
- 4.37 Making the requirements more stringent in the last few months of the program was too little, too late. For example, DEWHA's reaction to the unfolding safety issues after the first death on 14 October 2009 was tardy. The ban on metal staples for foil insulation took effect on 2 November 2009. The requirement for a mandatory risk assessment of each job took effect only on 1 December 2009. The requirement for all installers, not only supervisors, to have training took effect only on 12 February 2010. At no stage was there a firm requirement to turn off the power during installation, a simple step which arguably would have greatly reduced electrical risk to the installer (though not to the householder afterwards).
- 4.38 The committee notes the government's statements that there have always been fires associated with poorly installed ceiling insulation. The intended inference seems to be that some increase in the number of fires is to be expected because of the huge increase in the number of installations.
- 4.39 On the available figures it is impossible to say whether the rate of defective-installation-causing-fire is higher or lower in HIP jobs than in earlier jobs. However, the committee notes that a targeted inspection of 15 000 installations has found that 7.6 per cent of them have fire safety hazards. The committee notes the government's contention that these figures may not be representative of all installations, as inspections to some degree have been targeting installations by firms with a poor compliance record. However, even if this figure is discounted by half, given the one million-plus houses that have had insulation installed under the HIP, this would mean that in the order of 38 000 homes face the risk of a house fire. The committee considers this to be an unacceptably high figure, and creates a massive time-bomb for tens of thousands of Australian households.
- 4.40 In any case, the government cannot somehow excuse the incidence of HIP-related fires by pointing to precedents prior to the program. If anything, the incidence of insulation related fires prior to the HIP should have served as another warning to the government and should have provided further cause for care and caution in the development of the new program. The government's aim should have been to have no fires resulting from work which the government had encouraged and which taxpayers have funded.
- 4.41 DEWHA was, and the government should have been, aware of the risks before the commencement of the program, both through the Minter Ellison Risk Register, which DEWHA expressly commissioned, and through the various approaches to government by concerned stakeholders. Despite being told of such risks, they appear to have been brushed aside in pursuit of other priorities.

4.42 While acknowledging that DEWHA may not have known the precise scope and magnitude of the risks, the committee is nevertheless of the view that its response in addressing the risks before the program's commencement was wholly insufficient. It did nothing to address certain risks. The committee is also of the view that as the identified risks manifested as serious problems, both DEWHA and the government's responses were overwhelmingly and perhaps tragically deficient.

The level of fraud and abuse

- 4.60 The rate of fraud and abuse in the HIP is unclear. However, it is uncontested that it occurred, and at an unacceptable level. The results of the survey and targeted inspections mentioned at paragraphs 4.50ff paint a picture far more concerning than DEWHA's statement that only '0.65' per cent of installations have resulted in a complaint.
- 4.61 While the government had and still has auditing and compliance activities, it is unclear how well they are informed, targeted or resourced in proportion to the need. The committee notes evidence that more resources have been put into auditing and compliance recently.
- 4.62 In the committee's view the incidence of fraud and abuse was a predictable outcome of a program which encouraged an influx of new businesses into a small and largely unregulated industry, and was designed in a manner open to profiteering around the premise that the householder should not be out of pocket (the subsidy amount was expected to cover the whole price in most cases). Ignorant of the risks, householders were lured into thinking they needn't have a stake in ensuring that the job was well done (quite apart from the fact that most would not have the knowledge to do so).

The level of imported and non-compliant materials

- 4.77 The committee agrees with submissions that the high level of imports was regrettable, and is potentially detrimental to the Australian insulation manufacturing industry in the medium term.
- 4.78 The committee notes the evidence that thermally non-compliant Chinese imports are likely to be about three per cent of total HIP materials. However, the overall level of non-compliant imported materials is uncertain (since there is no evidence on the extent of non-compliance in imports other than the Chinese). Nevertheless, the committee finds it wholly inadequate for DEWHA or the government to dismiss this issue by saying that householders with non-compliant materials should complain to state/territory fair trading offices. Householders are not likely to know whether their insulation materials are compliant or not. The government, having encouraged householders to take up the subsidy, has a duty to ensure that materials installed are compliant. This should be part of the inspection of every insulated home.

4.79 The use of these non-compliant imports failed the test of good public policy at almost every level. It failed as an economic stimulus by sending dollars overseas; it failed as an environmental measure as the standard of insulation provided was unsatisfactory and will not deliver the intended energy efficiency dividend; and it failed to deliver for many unfortunate homeowners, who will be left with little energy savings but will face the cost of removing these inferior products if they are to install quality insulation at a later stage.

Adequacy of advice on different types of insulation

- 4.98 The extent of any inappropriate use of bulk materials is unclear. However the committee is concerned that householders may not have had adequate advice on this matter.
- 4.99 Nothing in the program guidelines justify DCCEE's statement at paragraph 4.97 that 'the installer was required to assess what type of insulation would best suit the householder'. The guidelines quoted at paragraph 4.96 clearly put the onus for this on the householder. The installer's only obligation in this regard was to follow the table of minimum R-values. The whole point of concern about this issue is that the table of R-values (like the Building Code of Australia) ignores the problem of bulk materials in hot climates keeping naturally ventilated houses hot at night.
- 4.100 The referenced Your Home Technical Manual, which (it was implied) householders should have consulted, is a large document which contains this solitary relevant comment on page 103:

The most important thing to remember is that in high humid [tropical] climates where houses are naturally ventilated, high down values and lower up values are appropriate for roofs and ceilings.

- 4.101 The reason for this advice (to help the house cool naturally at night) is not given. Nor is any advice given about the relative effectiveness of bulk insulation in different climates.
- 4.102 In the context of a program—an attempt by government to roll out insulation to people who have never before thought about the different varieties and their respective performance—it is unrealistic to expect that householders would notice this advice—particularly as the Your Home Technical Manual was not mentioned in the HIP guidelines. If they did notice it, given the brief and incomplete nature of the advice, it is unrealistic to expect they would realise its importance.
- 4.103 The committee considers that householders should have been given better and more accessible consumer advice about appropriate insulation for their situation. The committee does not think it is adequate to rely on asking householders to refer to a large technical manual accessed by weblink.
- 4.104 The committee is not qualified to opine on these technical issues, but considers it unacceptable that the government failed to settle them before embarking on the HIP.

The consequences were, once again, a less than optimal outcome for taxpayers, homeowners and the environmental objectives allegedly behind the program. Regulatory changes should be pursued to address these issues following extensive industry and scientific consultation leading to amendment to the relevant Australian Standards and the Building Code of Australia where appropriate.

4.105 The committee comments on the obvious disagreement between foil interests and bulk insulation interests on this issue: it is regrettable that there continues to be dispute among the various industry groups over issues theoretically capable of settled scientific conclusion.

Issues for renters and low income earners

4.112 Submissions on this matter focussed on landlords and tenants; however the problems of access to the program by low income homeowners should not be forgotten. Once again, these issues highlight the ill-designed nature of the incentives offered under the HIP.

Issues relating to Australian Standards

- 5.19 Considering the importance of insulation to the energy efficiency of Australian homes, it is most regrettable that there is no independent scientific facility in Australia able to research the properties of the various systems and advise on insulation policy in context of overall energy efficient housing goals. It is unfortunate that the dispute the different forms of insulation, about basic science to do with the suitability of the different systems, has endured for so long without resolution. It appears that the lack of a suitable research vehicle has been one of the reasons for this.
- 5.20 CSIRO's new test facility, since it will only test in accordance with AS/NZS 4859.1, will not resolve the wider arguments about the appropriateness of the standard or desirable policy on ceiling insulation.
- 5.21 The committee agrees that there should be a dedicated and independent research facility able to research insulation systems and advise on insulation policy. Where it should be housed would a matter for further consideration.
- 5.22 This should be regarded as an essential part of any future government initiative to improve home insulation, in order to ensure that the investment is directed most efficiently.

Issues relating to the Building Code of Australia

5.48 Determining concerns about increased insulation requirements in the Building Code of Australia and inadequate treatment of 'heat box' and condensation issues in the Building Code of Australia is beyond the expertise of the committee. The Australian Building Codes Board should be asked to respond.