Australian Government
Asbestos Safety and Eradication Agency

# ASEA REPORTS

# Barriers, motivations and options for increasing asbestos removal in the residential and commercial sectors

EXECUTIVE SUMMARY

As prepared by Ipsos Social Research Institute

Asbestos Safety and Eradication Agency Report – 06-2018

# EXECUTIVE SUMMARY

This executive summary provides an overview of the findings of research commissioned by the Asbestos Safety and Eradication Agency (ASEA) to understand the barriers and motivations for asbestos removal in the residential and commercial sectors in Australia.

Six conclusions relating to homeowners are reached based on the findings. These, in brief, are:

- Cost is the main factor in decisions relating to asbestos removal
- Low levels of risk literacy relating to products containing asbestos is a barrier to informed decision-making
- Perceived likelihood of health impacts is associated with likelihood to remove asbestos
- Government initiatives which reduce the combined cost of removal and disposal are effective
- Interest-free loans are an effective means of increasing removal, although less so than interventions that reduce costs
- Renovators are more likely than others to remove asbestos, but are limited in their information seeking behaviours

# OBJECTIVES AND RESEARCH DESIGN

This research has been commissioned by ASEA in order to provide a better understanding of the barriers and motivations for asbestos removal in the residential and commercial sectors. In addition to this, the research sought to explore potential options for increasing and encouraging the removal of asbestos within these sectors.

To meet the objectives, the project comprised three phases of research:

- An initial qualitative stage, involving six focus groups with homeowners in state capital cities and regional locations across Australia (NSW, Victoria and Western Australia)
- A nationally representative quantitative survey was administered online with n=2,036 Australians, which incorporated a conjoint analysis (choice modelling) component
- A second qualitative phase involving n=8 commercial property managers

## Key findings – homeowners

### Overview

One of the key aspects of the project was the undertaking of choice modelling based on the quantitative survey. ASEA required statistical modelling to assist in identifying interventions which may encourage home owners to remove asbestos from their properties in the immediate future. A conjoint modelling approach (specifically, traditional full profile conjoint analysis) was considered most suitable for this objective and hence applied to the study design.

The objective of the conjoint analysis was to understand the impact that the location of the asbestos, application of a hypothetical government initiative, and the amount/cost of the asbestos to be removed have on decisions about asbestos removal.

### Importance of factors

Three key factors were used in the conjoint analysis:

- The location of the asbestos in the home (a proxy for the potential risk of exposure to asbestos)
- The hypothetical government initiative or intervention provided to encourage and support removal of the asbestos
- The size of the area of asbestos to be removed (and the corresponding price)

In order to assess how important each factor is in relation to decisions on whether or not to remove asbestos from the home, factor importance scores are calculated.

Importance scores are derived for each factor based on the full range of model coefficients within a factor. For example, for the location of asbestos factor, the coefficients for kitchen, bathroom, eaves and guttering, and fencing or shed are considered.

The base level within each factor is represented by an importance score of zero (see column 4 in Table 1). A high positive or negative score indicates a strong impact on the likelihood to remove asbestos. The more positive the score, the higher the likelihood to remove the asbestos for that feature, compared to a base level. A negative score reflects a reduction of proportion of people likely to remove the asbestos. A higher importance score for any given factor, regardless of positive or negative direction, therefore means that it has a greater influence over the likelihood to remove asbestos. Note that importance scores show rankings, not relative differences between the levels within the factor.

The table below displays the importance scores for each of the factors included in the model, and the overall importance of each factor.

Table 1: Importance coefficients for conjoint analysis

| Factor | Level | Ranking | Importance score | Factor importance |
|---|---|---|---|---|
| Size of asbestos to be removed/price | Small: $500 | 1 | 0 | 54% |
| | Medium: $2000 | 2 | -0.47 | |
| | Large: $5000 | 3 | -0.76 | |
| Government initiative | Free disposal | 1 | 0.46 | 33% |
| | 50% subsidy on removal | 2 | 0.32 | |
| | Tax concession | 3 | 0.31 | |
| | Interest free loan | 4 | 0.24 | |
| | No initiative | 5 | 0 | |
| Location of asbestos | Bathroom | 1 | 0.07 | 14% |
| | Kitchen splash-back area | 2 | 0 | |
| | Eaves and guttering | 3 | -0.07 | |
| | Fencing or shed | 4 | -0.13 | |

- The most important factor (i.e. the one with the most influence over the likelihood to remove asbestos) is the size of the area of asbestos to be removed/price of removal, at 54%. This is followed by the government initiative at 33% and then the location of the asbestos at 14%.
- Homeowners are more likely to remove asbestos when the volume is smaller and the price of removal is lower. Within the size of asbestos to be removed/price factor, we see that average model coefficients (importance scores) for levels 2 and 3 (the medium sized/$2000 and the large sized/$5000 removal options) are increasing in size in a negative direction from level 1 (the small/$500 removal option).
- The initiative under which immediate removal of asbestos is most likely is free disposal, which has a higher importance score (0.46) than all others. All the hypothetical government initiatives presented to participants have importance scores higher than the no initiative option. This suggests that any form of government initiative has a positive effect on likelihood to remove and hence they all increase the likelihood of home owners to remove asbestos.
- Relative to the other factors, the location of the asbestos has a low impact on likelihood to remove it (14% overall importance). The locations have relatively similar importance scores, indicating lower levels of differentiation between the options than for the other two factors. This is out of step with research showing that asbestos in roofs and fences poses a threat to public health[1], and indicates a lack of asbestos literacy among homeowners.

## Conclusions

The findings above support the conclusions that:

- Cost is the main factor in decisions relating to asbestos removal
- Forms of Government initiative which reduce the combined cost of removal and disposal are effective
- Interest-free loans are an effective means of increasing removal, although less so than interventions that reduce costs
- Low levels of risk literacy relating to products containing asbestos is a barrier to informed decision-making

[1] Gray, C., Carey, R. & Reid, A. Current and future risks of asbestos exposure in the Australian community, International Journal of Occupational and Environmental Health Vol. 22, Iss.4, 2016.

# REMOVAL BEHAVIOURS

The behavioural outcome of interest for this research is the removal (or non-removal) of asbestos from homes. This section outlines the likelihood of removal of asbestos in the scenarios tested in the conjoint analysis, including self-removal.

## Likelihood to remove under differing scenarios

Given the four levels within the location factor, five within government initiatives, and three within size/price, there are 60 different combinations that can be considered by the model (4 x 5 x 3). For each combination, the model predicts the proportion of homeowners who will rate their likelihood to remove asbestos immediately at each point on the Juster scale.

The Juster scale used seven descriptors ranging from no chance, almost no chance (1 in 100) through to certain, almost certain (99 in 100).

Table 2 shows the top 20 factor combinations when ranked by predicted likelihood to remove asbestos as certain, almost certain (99 in 100), almost sure (9 in 10) or probable (7 in 10). This proportion is shown in the top-three box (T3B) column. For example, the first row shows the scenario in which the most homeowners are likely to remove asbestos. Here, 43% of homeowners indicate that it is at least probable that they would remove a small volume of asbestos from their bathroom if provided with free disposal.

The pattern of findings for Table 2 shows that lowest-cost removal and disposal options are consistently those with the highest rates of likelihood to remove.

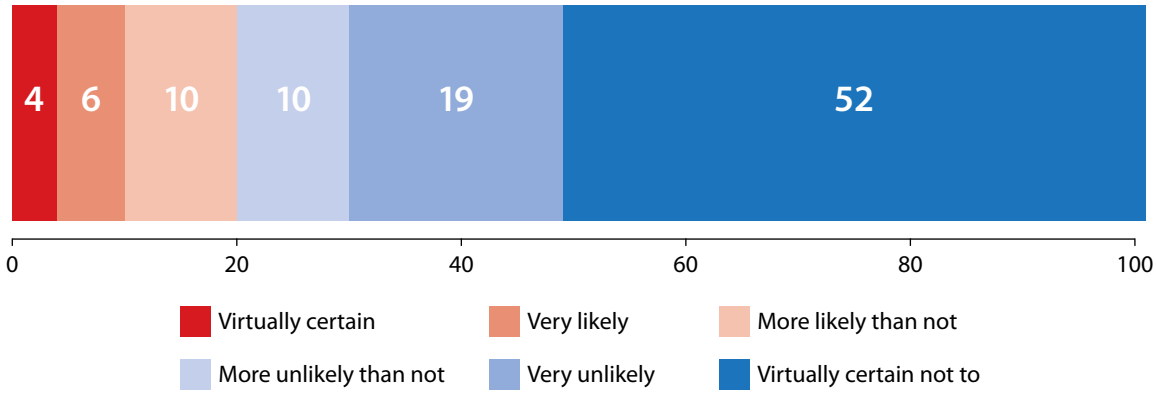
Table 2: Top 20 factor combinations by likelihood to remove asbestos

| | | | Juster scale response | | | |
|---|---|---|---|---|---|---|
| Location | Government initiative | Size / price | Certain/ Practically certain (99 in 100) | Almost sure (9/10) | Probable (7 in 10) | T3B |
| Bathroom | Free disposal | Small | 18% | 13% | 12% | 43% |
| Eaves Gutter | Free disposal | Small | 15% | 13% | 14% | 42% |
| Kitchen | Free disposal | Small | 17% | 13% | 11% | 41% |
| Bathroom | 50% subsidy on removal | Small | 15% | 13% | 13% | 41% |
| Bathroom | Tax concession | Small | 15% | 13% | 12% | 40% |
| Kitchen | Tax concession | Small | 14% | 13% | 12% | 39% |
| Fence outdoor | Free disposal | Small | 14% | 13% | 12% | 39% |
| Kitchen | 50% subsidy on removal | Small | 13% | 13% | 12% | 38% |
| Kitchen | Interest free loan | Small | 13% | 13% | 12% | 38% |
| Bathroom | Interest free loan | Small | 14% | 12% | 12% | 38% |
| Eaves Gutter | 50% subsidy on removal | Small | 12% | 13% | 13% | 38% |
| Eaves Gutter | Tax concession | Small | 13% | 12% | 13% | 38% |
| Eaves Gutter | Interest free loan | Small | 11% | 13% | 13% | 37% |
| Fence outdoor | Tax concession | Small | 12% | 12% | 13% | 37% |
| Fence outdoor | 50% subsidy on removal | Small | 11% | 13% | 12% | 36% |
| Fence outdoor | Interest free loan | Small | 11% | 12% | 12% | 35% |
| Bathroom | No initiative | Small | 8% | 12% | 14% | 34% |
| Kitchen | Free disposal | Medium | 9% | 10% | 13% | 32% |
| Kitchen | No initiative | Small | 7% | 11% | 13% | 31% |
| Bathroom | Free disposal | Medium | 9% | 10% | 12% | 31% |

## Likelihood to self-remove asbestos

The majority of homeowners surveyed indicated that the likelihood of self-removal of asbestos was low. Eighty-one percent said that they would be at least more unlikely than not to do so, while half (52%) said they would be virtually certain not to. Conversely, one in ten said they were virtually certain or very likely to self-remove asbestos.

Table 1: Importance coefficients for conjoint analysis




Q11. If you wanted asbestos removed from your home, how likely would you be to do this work yourself? Base: Total sample, n=2,036

Women (79%), older homeowners (80% of those aged 65 and over), flat, unit or apartment dwellers (62%) and those who have completed up to secondary school (76%) are among groups less likely to conduct self-removal of asbestos (the percentages included above represent the combined totals for virtually certain not to and very unlikely). Homeowners who have had previous renovation work completed on their home were also more likely to say they would conduct self-removal, alluding to a potentially heightened level of confidence acquired from their experience.

## Conjoint analysis

Participants were also asked how likely they would be to remove asbestos themselves from the four locations (i.e. kitchen, bathrooms, eaves and guttering, and fence or shed) for a medium volume of asbestos at a cost of $1000 for disposal. No removal cost is incurred as the asbestos is removed by the home owner.
The modelling shows that, if asked to remove the asbestos themselves, a much lower proportion of homeowners would be probable to undertake the work (i.e. provide a T3B response).

The model predicts that 14% of homeowners would remove the asbestos themselves from the kitchen and bathrooms, while 12% would remove it from eaves and guttering or a shed or fence. For the comparable example (i.e. a disposal cost of $1000 plus $1000 for the contractor's removal fee) where a contractor undertakes the work, the T3B responses for each location are:

- Kitchen: 22%
- Bathroom: 23%
- Eaves and guttering: 20%
- Fence or shed: 20%

**Note that the proportion of those in the T3B is higher for contractor removal, despite an additional $1000 cost to the homeowner due to the removal fee. This demonstrates a strong disinclination among many to remove the asbestos themselves.**

# MOTIVATIONS FOR REMOVAL AND DISPOSAL

### Potential health impacts

Focus group discussions revealed that the primary motivation for asbestos removal was the negative associated health risk posed. Those who owned older properties had often already considered the possibility of asbestos presence in the home, although not all had addressed this by its removal. Intention to renovate was a trigger for the consideration of removal however, conversely, the potential presence of asbestos also acted a barrier to renovation work. The presence of others in the home (particularly children) was a definite catalyst for the consideration of removal, while moral obligations and a potential depreciation in property value encouraged a few to consider removal.

The conjoint analysis supports this finding. The analysis shows that awareness of health and safety risks associated with the removal, alteration and/or disturbance of asbestos increases the likelihood that a homeowner will remove asbestos immediately. However, this effect is relatively weak. In many cases, the effect of awareness is less than the effect of plans to renovate, underlining the importance of the financial and planning context in removal decisions, in addition to knowledge of the potential impacts of asbestos exposure.

This said, the conjoint analysis also shows that holding the belief that serious health impacts are probable where asbestos is present has a greater impact on likelihood to remove asbestos (as opposed to knowledge of the potential impacts without a belief that the impacts are probable). Participants who felt that it was probable, almost sure or certain that they or members of their household could develop serious or chronic health problems if there was asbestos in their home, were more likely to indicate that they would remove asbestos.

## Conclusions

The findings above support the conclusions that:

- Low levels of risk literacy relating to products containing asbestos is a barrier to informed decision-making
- Perceived likelihood of health impacts is associated with likelihood to remove asbestos

### Renovation plans

The renovation planning context is important in decisions relating to asbestos removal.

The conjoint analysis shows that those with plans to renovate are much more likely to remove asbestos immediately. When comparing homeowners with plans to renovate in the future against those who do not, we find that intentions to renovate greatly increase the likelihood to remove asbestos immediately.

During focus groups, some participants assumed that removal of asbestos would require the alternative living arrangements to be made. This inconvenience was noted as a barrier to removal. In this context, the inconvenience of living disruptions can be seen as a barrier to removal. It is possible that, for those planning to renovate, the existence of plans may mitigate the inconvenience barrier. This is because disruptions linked to renovations are planned for in advance, and have the positive benefit of a rejuvenated living space.

## Conclusion

The findings above support the conclusion that:

- Renovators are more likely than others to remove asbestos, but are limited in their information-seeking behaviours

# BARRIERS TO REMOVAL AND DISPOSAL

Although health risks posed by exposure to asbestos were viewed universally as the chief driver of removal in focus group discussions, health risks alone were often insufficient to prompt removal and disposal. Indeed, the conjoint analysis shows that, even in the best scenario (a small volume of asbestos in the bathroom with free disposal), only 43% of homeowners would remove the asbestos immediately.

Barriers identified during the qualitative and quantitative phases are outlined below.

## Cost

Cost was, unquestionably, the primary barrier to removal expressed by homeowners during focus groups. Most saw the cost of removal as being highly expensive, explaining that costs extended beyond simply removal and disposal; costs would also include replacement of materials and potentially additional unforeseeable expenditures. Unsurprisingly, homeowners had competing financial priorities, and most accepted that given the apparent lack of urgency surrounding asbestos removal, it was not a main concern.

The conjoint analysis, as noted earlier, reinforces the finding that cost is the main barrier to removal. As noted earlier, size/price is a key determinant of likelihood to remove asbestos, and most of the top 20 combinations include the lower-priced/smaller options. Government initiatives which reduce the homeowner's cost further (e.g. the provision of free disposal, a subsidy on removal fees or a tax concession) also consistently increase the proportion choosing to remove asbestos.

## Income

The conjoint analysis also indicates that those with lower incomes are less likely to remove asbestos immediately.

Income has a relatively large impact on intention to remove asbestos immediately. Those with low incomes (<$50,000) are consistently less likely to remove asbestos than those with medium ($50,000-$99,000) and high incomes ($100,000+) in the next three to six months. This pattern is true across all locations and sizes/costs of asbestos, as well as for government initiatives.

## Location of asbestos

While the influence of location is smaller than the influence of size/cost and government initiatives, the conjoint analysis shows location does impact removal decisions. Removal is more likely for indoor locations than outdoor locations.

Homeowners display a preference for removal when the location in question is the bathroom or kitchen. Removal from both indoor locations is more likely than from eaves and gutters and from fences or sheds.

The implication to be drawn from this is that asbestos in outdoor locations is perceived as less of a health risk than indoor asbestos; a perception which may in fact, be erroneous given external ACMs are exposed to weathering.[2]

## Lack of urgency and disturbance of asbestos

The belief that asbestos is safe unless disturbed (provided it is in decent condition) was an attitude that very likely underpinned all barriers to removal as it suspended any urgency to take action to remove asbestos. While it is true that asbestos may be low-risk when left in place in some circumstances, this view does not consider the risks inherent in older or weathered asbestos.[3] There is a need to improve homeowners' literacy in relation to the risks associated with asbestos in different forms, locations and conditions.

Among participants in the qualitative research, some were apprehensive about the potential disturbance to asbestos which had otherwise been safe. Some who had previously discovered asbestos in their homes had also been reassured by builders or other professionals that the asbestos was safe to keep.

For the conjoint analysis, half of the survey participants were exposed to information about the risks of asbestos. The findings indicate that exposure to

[2] Gray, C., Carey, R. & Reid, A. Current and future risks of asbestos exposure in the Australian community, International Journal of Occupational and Environmental Health Vol. 22, Iss.4, 2016.
[3] Ibid.

the information provided reduces the likelihood of immediate removal of asbestos by homeowners. It is possible that the inclusion of information about the risks of "building and/or maintenance work involving asbestos" and "demolition and/or unsafe and uncontrolled removal of asbestos" raised concerns for some participants about undertaking removal activities.

## Conclusion

The findings above support the conclusion that:

- Low levels of risk literacy relating to products containing asbestos is a barrier to informed decision-making

## Self-perceptions of DIY skills

Almost all focus group participants expressed unwillingness to remove asbestos themselves. Participants expressing absolute rejection to self-removal were generally female, while those willing to do so were almost exclusively male. Although the advantages of using a professional far outweighed those of DIY removal work (safer, more convenient and worry-free), cost was viewed by far as the strongest deterrent to the use of a professional. The lower costs accompanying self-removal work was often seen as the only benefit.

Most homeowners surveyed said they would not remove asbestos from their homes themselves – 81% are *more unlikely than not* to do so, while 52% are *certain* or *virtually certain not to*. Further, an inverse relationship was found between an individual's self-rating of DIY skills and their willingness to self-remove; the better a homeowner regarded their DIY skillset to be, the more likely it was that they would be *virtually certain* or *very likely* to conduct a self-removal (see Table 3 below).

Table 3: Likelihood of self-removal, by self-rating of DIY skills

| | Self-rating of DIY skills | | | | |
|---|---|---|---|---|---|
| | Very good | Somewhat good | Neither good nor poor | Somewhat poor | Very poor |
| Virtually certain | 18%↑ | 2%↓ | 2%↓ | 0%↓ | 1%↓ |
| Very likely | 11%↑ | 12%↑ | 4%↓ | 1%↓ | 0%↓ |
| More likely than not | 11% | 14%↑ | 11% | 3%↓ | 2%↓ |
| More unlikely than not | 9% | 11% | 13%↑ | 7% | 2%↓ |
| Very unlikely | 16% | 20% | 19% | 26%↑ | 9%↓ |
| Virtually certain not to | 34%↓ | 41%↓ | 51% | 62%↑ | 86%↑ |

Q11. If you wanted asbestos removed from your home, how likely would you be to do this work yourself? Base: Total sample, n=2,036
Q12. How would you rate your home maintenance/DIY skills? Base: Total sample, n=2,036
Significant differences are shown on charts with upwards (↑) and downwards (↓) facing arrows alongside figures. Arrows illustrate whether a figure is higher or lower than the average.

The conjoint analysis uncovered a slightly different and unexpected pattern of responses relating to self-perception of home maintenance/DIY skills. The main trend is of increasing confidence in one's DIY skills, leading to a higher likelihood to remove asbestos (whether via a contractor or not). However, this pattern only holds true for those rating their DIY skills from *very poor* through to *somewhat good*.

Those who rate their DIY skills as *very good* are less likely than others to intend to remove asbestos immediately. While it is tempting to hypothesise that those who rate their DIY skills as *very good* are more circumspect than others due to a better understanding of the risks of asbestos, this is not borne out by the numbers. Those with *very good* DIY skills are not significantly more likely than others to indicate that they think it is probable that they or members of their household could develop serious or chronic health problems if there is asbestos in their home. We speculate that the reason for the pattern, therefore, may be because those who rate their skills as *very good* perceive there to be less risk associated with the presence of asbestos in their home, but do see a risk to disturbing it. This indicates a higher level of literacy than among those who rate their DIY skills as *very good*.

## Conclusion

The findings above support the conclusion that:

- Low levels of risk literacy relating to products containing asbestos is a barrier to informed decision-making

## Perceptions of health impacts and self-removal

The survey also found associations between perceptions of asbestos-related health risks and the likelihood of self-removal.

A significant proportion of homeowners willing to conduct self-removal of asbestos perceive the associated health threat as being low (65% of those *virtually certain* to self-remove asbestos believe there is just a *very slight possibility* or no chance of developing a serious health condition).

## Conclusions

The findings above support the conclusions that:

- Low levels of risk literacy relating to products containing asbestos is a barrier to informed decision-making
- Perceived likelihood of health impacts is associated with likelihood to remove asbestos

# ENCOURAGING ASBESTOS DISPOSAL VIA GOVERNMENT INITIATIVES

Both the qualitative and quantitative phases of the research investigated perceptions and potential impacts of government initiatives on homeowners' likelihood to remove asbestos. The findings from each phase are outlined in brief below.

## Qualitative phase

Opinions of focus group participants were mixed in relation to who holds responsibility for asbestos removal. While most acknowledged that in part, responsibility fell with homeowners given they had purchased the property, most also felt that government should provide at least some support. The rationale behind this revolved around the unprohibited use of asbestos after the government had known about its related dangers, the general responsibility of government to care for citizens and the fact that removal was likely to be costly.

Four hypothetical government initiatives were presented and discussed with focus group participants to gauge the effectiveness of each as an encouragement for asbestos removal. For homeowners likely to employ a professional for removal, an approach incorporating a cost reduction or rebate of some level was the most favoured. A collection service or a reduced fee at the tip was more popular with those who would consider self-removal. Some expressed an aversion to a collection service or reduced tip fee as they felt this would incentivise self-removal, which they did not support given the associated health risks. Others were sceptical on the viability of the initiatives as participants struggled to understand where the funding would be drawn from.

- **Offset in council rates:** An offset in council rates was the most preferred hypothetical government initiative presented to homeowners, ultimately due to its rebate aspect. However, while homeowners recognised that a 'fair' or 'reasonable' amount would likely not cover the full cost (estimates were between 30-50% of the total removal cost), many felt that such an offset would be insufficient to adequately assist with the costs of removal as council rates are generally quite low. For some, a full rebate would remain insufficient, given the additional costs that would still be unaccounted for (e.g. temporary relocation, unforeseen expenses, replacement costs) and the low priority given to asbestos removal (due to the belief it is 'safe unless disturbed'). Related suggestions included income-tested rebates and rebates on the basis of the age of a home.
- **Reduced fee at tip:** This option was generally popular among homeowners, given it offered some level of reduction in cost; some of those who would consider removing asbestos themselves felt this would sufficiently encourage them to remove the asbestos. The majority (both those who would and wouldn't conduct removal themselves) also felt this option would be positive in the sense that it could reduce rates of illegal dumping, although most also felt that disposal at a tip should be free of charge. Some voiced concerns over the encouragement of self-removal which could be performed unsafely. Concerns were also raised as to whether such a saving would be passed onto homeowners where a professional was used, and if so, how could this be guaranteed.
- **Income contingent loan:** There was apathy among homeowners in relation to this initiative, especially among those who did not prioritise asbestos removal. However, some felt that this could be a desirable option for Australians in lower socio-economic strata.
- **Collection service for small volumes of asbestos:** The idea of a collection service was generally well received, particularly by those who would consider DIY removal (noting that this is a minority of homeowners). Those who would use a professional did not feel this option would be as helpful, as they would need to have the asbestos removed anyway. The main issues in relation to this initiative were: the location of the asbestos while it awaited removal and the relative safety of those nearby during this period.

## Participant suggestions

Across multiple focus group discussions, two suggestions that emerged were in relation to the certification for the sale of properties and free asbestos inspections.

- Homeowners indicated that they would like to see some level of regulation around the disclosure of asbestos presence in homes and that this could be in the form of a certification process.
- Others spoke about their lack of understanding on asbestos and in their confidence regarding its identification. These participants were interested in ensuring their property was safe to inhabit and wanted simply to know what their next steps should be, however they felt that such inspections should be free (as they felt the responsibility sat with the government).

## Conjoint analysis

As noted above, the conjoint analysis involved four alternative government initiatives which were tested along with a base option where no government initiative was offered:

- **No Initiative.**
- **Subsidy:** The government provides a subsidy paying 50% of the removal fee.
- **Tax concession:** 100% of total cost of removal is tax deductable (calculated at a 33% reduction in the cost of removal).
- **Free disposal:** A 100% reduction in the disposal fee for asbestos.
- **Interest-free loan:** An interest free loan from the government which covers 100% of the cost of removal and replacement of the asbestos.

All the government initiatives presented to participants have importance scores higher than the no initiative option. This suggests that all forms of initiative tested would have a positive effect on homeowners' likelihood to remove asbestos.

As Table 1 and Table 2 show, initiatives which offer the greatest reduction in total cost of removal and disposal are the most effective in encouraging homeowners to remove asbestos. The initiative under which immediate removal of asbestos is most likely is free disposal, which has a higher importance score (0.46) than all others. This initiative also offers the highest reduction in cost.

However, it should be noted that the interest-free loan, which infers no cost reduction at all (but does allow for deferred payment) increases the proportion of homeowners choosing to remove asbestos and is therefore more effective.

## Conclusions

The findings above support the conclusions that:

- Forms of government initiative which reduce the combined cost of removal and disposal are effective
- Interest-free loans are an effective means of increasing removal, although less so than interventions that reduce costs

# KEY FINDINGS – COMMERCIAL BUILDING MANAGERS

## Roles and responsibilities

Commercial building managers interviewed varied in terms of the portfolios they managed (type of commercial property, mix of residential and commercial properties and age of properties) as well as their positions and subsequently, roles and responsibilities. The role of strata and property managers was relatively limited in terms of decision-making power regarding asbestos; they provided information regarding legislative requirements, recommendations and quotes however, beyond this, their influence was restricted.

While property owners were thought to be driven heavily by cost, property managers were strongly motivated by an adherence to legislative requirements. For most property managers interviewed, having a reliable record of the presence of asbestos (and location) was highly important, to ensure the protection of others working onsite. It is a legal requirement that workplaces built prior to 2003 have an asbestos register.

## Salience of asbestos, perceived health risks and sources of information

Asbestos was very much top-of-mind for property managers when queried on health risks in the buildings they were responsible for. Asbestos was considered to pose substantial risks where it does occur, however the likelihood of it occurring was deemed to be low. Despite the perceived low likelihood of asbestos being found among their property portfolio, it was considered to have a high impact if it were to be found, and participants were wary about this.

In terms of knowledge, unless participants had direct experiences with asbestos or have previously had it in a building they managed, this tended to be top level (mostly relating to health implications). Homeowners and property managers were of the belief that asbestos is 'safe unless disturbed'.

Their understanding on asbestos had been derived informally from others in the strata or property management community, industry association newsletters, and the media. There was good awareness in regard to the need for specialist contractors, and all participants were confident on where to seek information, if required. These sources would include the internet, the wider strata community, tradespeople, the workplace health and safety representative in their own organisation, and government sources such as the EPA and Fair Trading.

## Barriers to removal

The property managers interviewed did not have extensive experience of dealing with asbestos in the properties they managed, therefore their views on why property managers may or may not remove asbestos if found were largely based on second-hand experience and experiences with property owners about other issues. While some had managed buildings where asbestos had been found, it was not a regular experience for them.

Of the property managers who had experienced the discovery of asbestos in either commercial or residential properties they managed asbestos had not been removed in all cases. In all cases, risk areas had been assessed by a professional (in-house or external). Where asbestos had not been removed, property owners had been advised that it was safe to leave and had subsequently elected not to remove it. Sealing it was generally viewed as an acceptable solution if it was declared safe.

Cost was regarded as the primary barrier to asbestos removal and perceived as being high. Property managers felt that asbestos removal would be very much a commercial decision for owners, rather than a risk-based one. Factors of the total cost would include: the cost of specialist contractors; the cost of disposing of the asbestos appropriately; the disruption to business for the tenant (the cost of which may be passed on to the owner); the loss of rental income for a period; and further inspections and reporting of the status of the building after removal.

Property managers indicated that they would not push owners to remove asbestos in cases where a contractor said it was safe to leave it in place. They also indicated that if property owners decided against asbestos removal, they would not progress the issue unless there was a legal requirement to do so. Some noted that it would be difficult to make a business case for full precautionary removal of asbestos due to owners' cost sensitivity.

# ENCOURAGING ASBESTOS REMOVAL

## Tax offset

Of the suggested initiatives, the tax offset was thought to have the highest potential impact on building owners given its monetary value. The size of the offset was predicted to greatly influence the effectiveness of the initiative and participants felt that the cost of the disruption to businesses would need to be taken into consideration.

## Targets for removal

While setting targets was viewed positively, commercial building managers did not believe this would be effective in the commercial space in absence of relevant legislation (i.e. without cost incentives or legal consequences). Advanced notice of such a target was suggested in order to maximise likely uptake and success.

## Reduced disposal fees

Commercial property managers felt this initiative had some potential given it relates to a reduction in costs, however some were also doubtful as disposal costs make up only a small fraction of the total removal cost (which as mentioned above, extend beyond removal itself). Participants also expressed concern over whether cost savings would be passed down from contractors.

## Participant suggestions

Education campaigns, an information helpline and a ratings system were suggested by property managers. Generally, where an initiative was to be implemented, all participants felt that unless it was tied to legal ramifications, it was not likely to be effective.