

Evaluating a print-based ‘sustainability by stealth’ guide in the project home industry

How can we encourage people to make more sustainable choices? And how do we evaluate the effectiveness of material designed to encourage them to do so? These are vital questions in a world where addressing issues of environmental sustainability and climate change is becoming increasingly urgent.

In 2008, Clarendon Residential Group and its then parent company Investa¹ responded to the need to encourage project homebuyers to be more sustainable by producing *Your Home Buyer's Guide*. This publication was designed to inform potential customers about the sustainable range of options that might be considered in the building of their home. A key task was then to evaluate the extent to which the publication was used and had made an impact.

This article describes the evaluation of the Guide and how the evaluation was able to come to conclusions about: the process of preparing the document; the response of customers to the Guide; and the ongoing challenges for educating project homebuyers about sustainability.

The evaluation concluded that the *Your Home Buyer's Guide* project illustrates how print material can educate and encourage people to make different choices with regard to sustainability without the motivational material being outwardly ‘green’ in its focus. It was also established that even for print projects such as this, it is possible (indeed desirable) to conduct a multi-level evaluation—and that such an evaluation is able to provide evidence for the effectiveness of the product and efficiency for the process.

Introduction

Within the context of climate change (Commonwealth of Australia Garnaut Review 2008), there is an increasing need to communicate more effectively with the community about sustainability (DECCW 2009). This communication needs to raise awareness and increase knowledge and understanding about associated issues and effects as well as motivate personal and organisational behaviour change (DEWHA 2009). Therefore, communication must reflect an understanding of sustainability and how to motivate change in practices (Penman 2000; World Commission on Environment and Development 1987).

Gabrielle Kuiper

Grahame Collier



Gabrielle Kuiper is Head of Environmental Sustainability at ANZ, Melbourne.

Email <GabrielleSarah.Kuiper@anz.com>

Grahame Collier is the Director of T Issues Consultancy, Balgowlah, New South Wales.

Email: <grahame@tissues.com.au>

With specific regard to the home-building sector, research by Dr Carolyn Hayles (2007) at the School of Property, Construction and Project Management at RMIT University sets the context in which *Your Home Buyer's Guide* sits. This research found that found that:

Purchasing a home is the most expensive, and thus the most important economic decision made by the majority of individuals. With such a crucial decision, the amount of information on the affordability of that purchase, not only the purchase price but also the impact choices may have on running costs and on the environment, is significantly deficient.

Hayles concluded that:

As the market will not drive sustainability, there is a need to educate the consumer to demand sustainability from their homes, and this will only happen if they are given reliable, up-to-date information.

The environmental impact of building and living in project homes is significant and increasing. Despite the economic downturn in Australia, residential energy use has increased by 9 per cent in the last decade and water consumption has increased by 21 per cent (ABS 2009). Planning codes and design guidelines can only go so far in mandating more sustainable house design, features and fittings and they differ from state to state. For example, only in NSW does the Building Sustainability Index (BASIX) policy apply (Department of Planning 2007). Ultimately, house purchasers have to play a vital role in making choices that will determine the environmental impact of their house design and operation. To make more sustainable choices, house purchasers need to be well informed about options, costs—both up-front and ongoing—and sustainability issues. Consequently, *Your Home Buyer's Guide* was produced.

About *Your Home Buyer's Guide*

The Guide was a product of a partnership between a private business, Clarendon Residential Group, and Commonwealth and state government departments and agencies, namely:

- the Australian Greenhouse Office in the Commonwealth Department of Environment and Water Resources (now the Department of Sustainability, Environment, Water, Population and Communities)
- at the state level by the NSW Department of Environment, Climate Change and Water, Landcom (NSW), Building Commission

(Victoria), Sustainability Victoria, the Queensland Government Environmental Protection Agency (now part of the Department of Environment and Resource Management), the Western Australian Department for Planning and Infrastructure (now the Department of Transport), and the Western Australian Planning Commission.

The Institute for Sustainable Futures (ISF) at the University of Technology (UTS), Sydney was selected to research and prepare the text, based on its experience in educating people about sustainable buildings. It was assisted by the Centre for Design (CfD) at the Royal Melbourne Institute of Technology (RMIT) University.

The objectives were to prepare a printed guide for consumers that would:

- create buyer awareness of the benefits of sustainable housing at point of sale (especially cost savings as well as health, safety and lifestyle benefits)
- influence the selection of more sustainable optional features (including 'sustainability' packages)
- encourage residents to adopt additional technological and behavioural changes (outside the sale contract) that can improve the sustainability of their home and lifestyle.

The approach to developing the Guide was to focus on new homebuyers' needs (such as understanding building processes and building terminology) and address the complexity of trying to compare like-for-like products where the cost inclusions and design features differ. The Guide also concentrates on the house-buying process and takes homebuyers through the decisions they'll need to make in a step-by-step fashion. Thus, the aim was to produce an easy-to-use guide that both informs purchasers and provides them with checklists, which can be used to work through the necessary decisions that need to be made when buying a project home.

At each step, information about planning and sustainability is incorporated, but not highlighted as 'green'. Instead, all of the information is focused on enabling the buyers of new homes to make informed decisions. For example, information on how to lower heating and cooling bills through better insulation, good orientation, of rooms, etc. is included alongside information on selecting floor coverings and paint colours. In this way, the information meets the needs of the users and is written in user-friendly language while being educational—in this way, the publication has enabled sustainability and planning education 'by stealth'.

Target population and distribution

The two main users of the Guide were identified and targeted:

- *primary Guide users*—people who are home buyers (mass market/mainstream) or who are potential homebuyers
- *secondary Guide users*—residential sales and marketing staff from Clarendon Residential Group and other mass-building companies.

Meanwhile, organisations that are conduits to potential users (for example, government agencies, building information services, etc.) played an important role as distributors of the Guide.

Fifty thousand copies of the Guide were distributed in the nine months following its release. Distribution was supported by launches in some states and territories. Other marketing, training of Clarendon Residential Group sales and contract staff about how to use it with potential customers, and the development of the *Your Home Buyer's Guide* website supported distribution efforts.²

The evaluation design

The evaluation was conducted over a three-month period after the Guide had been in the marketplace for nine months.

The objectives of the evaluation were to:

- determine the extent to which the intended outcomes of the project, established at the time of approval of the project, had been achieved to date
- identify how the Guide and its distribution and use could be improved for the future.

Hence the evaluation was both summative and formative (Guba & Lincoln 1989). The full evaluation report, *It's All in One Place*, on which this article is based, was submitted to Investa in late 2008. It provided extensive findings related to the effectiveness and efficiency of the project (the summative aspects). It also suggested to Investa some areas for improvement regarding future editions of the Guide and provided some support for the development of green packages by Clarendon (the formative aspects). These were implemented in the first half of 2009.

The approach used to evaluate *Your Home Buyer's Guide* involved the development and use of a program logic model and the development of an outcomes hierarchy based on this logic (Funnell 1997; Zammit, Cockfield & Funnell 2000). Program logic allows each identified project outcome to be measured in an integrated manner and means that a logical approach can be brought to the project and its evaluation. Through the use of such a model, outcomes are usually organised in a hierarchy, which assumes that a lower level outcome is achieved before a higher level outcome. The outcomes are structured sequentially from 'immediate outcomes' at the lower end of the hierarchy to 'intermediate

outcomes' and 'ultimate outcomes', further up the hierarchy. The evaluation process—data collection and analysis—determines the extent to which the identified outcomes are met in terms of efficiency, effectiveness and appropriateness (Owen 1999).

Program logic is often used to shape the evaluation of sustainability programs across Australia, particularly in NSW where it is strongly promoted by the Department of Environment, Climate Change and Water³ and the NSW Environmental Trust (DEC 2004; DECC 2009). The program logic model appeared to be the most appropriate organising structure for this evaluation for a number of reasons, including:

- the rigour that it places on program developers to structure their programs so that clear intended outcomes are identified up-front in the program
- the rigour that it expects of the evaluator in determining how the outcomes can be structured into a meaningful hierarchy
- the way in which multifaceted data collection processes are able to be structured within this model
- the fact that findings can be extrapolated from one outcome to the next, within this model. Because of the logic applied, it is possible to argue that because a lower level outcome has been achieved, it can be logically assumed that some impact has occurred in achieving higher order/ultimate outcomes, even though precise data might not be able to be obtained.

Table 1 identifies the outcomes and related key evaluation questions associated with the evaluation of *Your Home Buyer's Guide*.⁴ To understand the hierarchy, the table should be read from the bottom up.

In response to Table 1, a multi-level evaluation process was used to determine the extent to which *Your Home Buyer's Guide* had achieved its intended outcomes.⁵

Data was collected in a wide variety of ways, including:

- *A customer online survey*: This involved email contact with 1015 people, who had requested *Your Home Buyer's Guide* via the Clarendon website, asking that they fill in an online survey. SurveyMonkey, an online survey tool, was used to provide a user-friendly format and useful reporting formats. There were 122 responses; in other words, a 12 per cent response rate, which was greater than anticipated.
- *A customer telephone discussion*^{6*}: A small number of follow-up phone interviews, 10 in all, were held with those who indicated in the survey that they would be willing to discuss the Guide further by phone interview.
- *Program partner phone interviews*^{*}: Phone interviews were held with all project partners. Nine interviews were conducted in total.

TABLE 1: PARTIAL OUTCOME HIERARCHY FOR THE EVALUATION OF YOUR HOME BUYER'S GUIDE AND ASSOCIATED QUESTIONS

(read from the bottom up)

Outcome	Evaluation questions relevant to each outcome
6 Increased demand for sustainable housing	How can the Guide benefit Clarendon more? What are the opportunities for further business?
5 Adoption and use of technology and improved behaviour that impact on sustainability	Is there any evidence of improved self-reported sustainability behaviour on the part of home purchasers as a result of the Guide? Is there evidence of adoption and use of sustainability related technology as a result of the Guide?
4 Increased selection of more sustainable features, design and inclusions	To what extent is there evidence of increased selection of sustainability features, design and inclusions?
3 Increased buyer awareness of the benefits of sustainable housing at the point of sale	Did buyers like the Guide? Does there appear to be an increase in the general awareness of buyers (and potential buyers) over the past 12 months?
2 Willingness, knowledge and confidence gained by Clarendon staff to distribute and support the Guide effectively	To what degree has the Guide been distributed appropriately to customers/potential customers? To what extent has effective, relevant training been provided for staff about the Guide?
1 Satisfactory delivery and management of the Guide by partners	How effectively was the guide produced? How effectively has the partnership approach worked? To what extent has the Guide been distributed/marketed by other agencies?

- *Stakeholder phone interview/email*: A brief electronic survey was used to seek initial input from 15 identified stakeholders. The opportunity was offered for a follow-up phone discussion and five telephone interviews were held. Stakeholders included representatives from councils, a real estate agent, an industry association and building companies that had distributed the Guide.
- *Clarendon management focus group**: This was held with nine senior managers from NSW, Western Australia, Queensland and Victoria.
- *Review of program documentation and Clarendon staff training evaluation reports*: Data was drawn from immediate post-evaluation surveys of 70 sales and contract staff in Melbourne, Sydney and Brisbane. A further six-month follow-up data collection process was undertaken with 15 per cent of these staff members.
- *Key informant interviews**: Two key informants were identified and each was interviewed.
- *Interrogation of project records/documentation*: Phone and email records held by Clarendon were reviewed. These include material drawn from:
 - information identified during the development of the Guide
 - speeches at launches, etc.
 - any information available from contractors—informal or formal responses
 - changes in operations/policies, etc. that may have been impacted by the Guide
 - records of distribution of the Guide.

The findings of the evaluation⁷

While the findings that have been highlighted indicate some positive results for the Guide, the key issue is how it performed when measured against the intended outcomes in the program logic model (AEA 2004).

Outcome 1: Satisfaction with the delivery and management of the Guide by partners

All program partners reported that the Guide was well-managed in relation to both design and implementation. They expressed a high level of satisfaction about the processes used to develop the Guide by stating that:

- they had sufficient opportunity to comment/ provide input into the Guide during the drafting
- the focus testing process, where input was received from customers and staff, was effective and resulted in an excellent product
- the process did not drag; it was quick and efficient
- Clarendon staff and the consultants who assembled the Guide were easy to work with, pleasant and efficient.

Universally, the project partners indicated the highest level of efficiency associated with this project. The following compilation of quotes exemplifies responses provided by partners from both state and national jurisdictions:

‘They were fantastic at getting the Guide written and out there [and] really efficient from our point of view. The Guide was written well, and quick approval was obtained through our publications process ... So, the project has worked really well—very efficient and effective.’

Outcome 2: Willingness, knowledge and confidence gained by Clarendon staff to distribute and support the Guide effectively

Clarendon staff and their managers were highly supportive of the Guide. As a result, 70 staff received related training and all workshops were evaluated. Feedback indicated that:

- the training reached the relevant staff and was structured and delivered effectively
- the vast majority of participants found the training of value and rated it as either ‘helpful’ or ‘very helpful’ (92 per cent)
- staff regarded the interactive nature of the training positively. They seemed unused to training of this style and responded to it well. In general, they were articulate and responsive regarding the small group activities and the whole-group discussions. Furthermore, the training was characterised by a high degree of energy.
- the training resulted in the Guide being received well by staff. All staff undertook training and 100 per cent felt confident to use the Guide with their customers. The most significant concern related to the fact that a few staff members were worried that clients were being given ‘too much information’.

- following training, all staff saw the Guide as providing a marketing advantage for Clarendon.

In summary, Clarendon staff indicated that they found the Guide useful and could use it in a proactive way with clients. Overall, they felt confident about their capacity to use the document.

Outcome 3: Increased buyer awareness of the benefits of sustainable housing at the point of sale

Data collected provided evidence that the Guide had an impact on those in the industry as well as both those in the process of buying a project home and those still considering purchasing one. As staff explained:

‘The people I spoke to that have an interest in the industry, thought the Guide was great.’

‘There was a positive initial response from customers that, “Yeah this is helpful”.’

‘It is exactly what is required to help homebuyers understand the basic elements of energy efficiency and the relevance to their comfort and ongoing costs.’

The customers themselves reported enthusiastically about the Guide. Consequently, the percentage of respondents who found the Guide to be useful was very high (95 per cent) with only 5 per cent of respondents thinking it was not useful. Then from the 98 people who responded ‘Yes’ to the ‘useful’ question, most (n=95) people answered the open-ended question to describe how the Guide was useful. Indeed, some respondents made reference to multiple aspects of the Guide in their description.

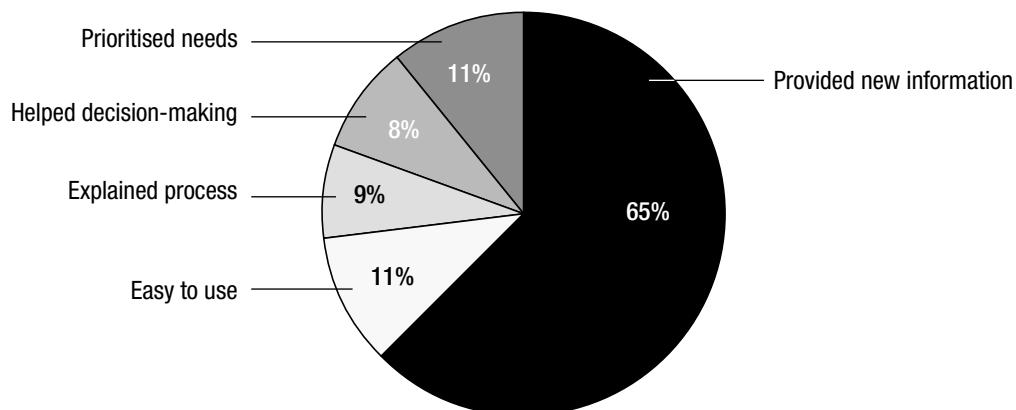
As Figure 1 indicates, respondents found that the Guide: provided new information; was easy to read, explained the process clearly; helped with decision-making; and assisted them to prioritise needs.

These findings are especially important when considered within the context of the ‘education by stealth’ concept. An overtly ‘green’ guide would probably not have achieved the same level of engagement with potential homebuyers because many may not have even picked it up. However, because sustainability issues were grounded within the 10-step home-purchasing process, there was excellent uptake of the new information.

Not only did the Guide have an impact on readers’ decision-making, but, as one customer indicated, it became a source document and was used repeatedly whereby, ‘I kept checking back and reading things in the book to see if I was right’. This quote indicates that while a minority of respondents indicated that they were choosing products on the basis of information in the Guide, further research is needed to understand how fully the Guide is being used in an ongoing way by customers.

Nevertheless, it should be noted that because of the point in time and nature of the evaluation of the Guide, it was impossible to shed light on the question of whether there was an increase in the general awareness of buyers (and potential buyers)

FIGURE 1: HOW THE GUIDE WAS USEFUL



about sustainable choices over the previous 12 months.

Outcome 4: Increased selection of more sustainable features, design and inclusions

There was some evidence that the Guide had an impact on the selection of sustainability features, design and inclusions. In general terms, those still considering the purchase of a home were influenced by the content of the Guide because:

‘We are new to home buying and it helped us understand the many things that we hadn’t thought about ourselves.’

The issue of timing and readiness is important (Lazenbatt 2002) and information needs to be available at the point of decision-making. Thus, some specific choices were identified by the customers surveyed as options that they would select when they ‘signed the contract’. These choices included: high-performing materials and fittings; solar products; kitchen upgrades; solar hot water; gas heating; extra sound insulation in home theatre; insulation in roof and external walls; third garage; bathroom, kitchen and flooring options; less glass; bamboo flooring; air conditioning; better doors; and particular kitchen appliances.

Only a few people who had completed purchasing a home had made choices about product inclusions as a result of using the Guide. Those who had, reported a number of choices influenced by the Guide, such as the choice of roof tiles, a solar hot water system, colours and paints, appliances and a kitchen upgrade.

Outcome 5: Adoption and use of technology and improved behaviours that impact on sustainability

There is evidence to support the view that this outcome was achieved to some extent. The following two evaluation questions were considered:

- Is there any evidence of improved self-reported sustainability behaviour on the part of home purchasers as a result of the Guide?
- Is there evidence of adoption and use of sustainability-related technology as a result of the Guide?

Overall, the majority of respondents indicated that they would do something differently after reading the Guide. Most commented on their increased knowledge and confidence. Some mentioned that they had revised their approach and others mentioned specific design and product choices. Seventy-nine respondents answered the question: *What did you do differently (if anything) as a result of reading the Guide?* Twenty-nine people (37 per cent) said they had ‘done nothing different’. Meanwhile, the other 63 per cent indicated that they had made changes to design choices. It should be noted, however, that only two people (unprompted) described the changes they had made in terms of ‘sustainability’. It is clear therefore, that buyers of project homes do not equate their actions with the word ‘sustainability’. This concept and its label remain difficult for people to understand. But that does not mean that they are not making choices that are sustainable; they just call them something else.

People who made changes said that they knew more and were more aware. They also did more research, or felt that they had made more informed choices. In addition, a few re-thought their budget and others (10 people) used the Guide as an

information source about choice. As a result, they reported that:

'I took my time in looking at all options ... I bought a house with my head and not my heart and ... felt more confident in my search and choice.'

Another theme that came out of the responses included re-prioritising or changing needs. For example, one person explained how:

'I made a list of "needs", "wants" and the "must haves". Your Guide made it clear that not everything would be exactly what I want, but it has allowed me to make a list of what I need and what I can afford.'

Outcome 6: Increased demand for sustainable housing

The evaluation suggested that there has been some increase in the level of awareness in matters related to sustainability among prospective homebuyers. Partners who were involved in the project saw that the community was ready for such a product, with some indicating that the community was requesting it. Partners also remarked that this trend is likely to continue and to grow, particularly because of the current focus on climate change and water availability.

As far as Clarendon is concerned, one customer who was interviewed summed up the views of many when he said:

'I get the feeling that [this company] is doing better than others in addressing environmental issues.'

Project partners were very positive about Clarendon's role as a sustainability market leader because of their work in this project. Indeed, all project partners reported that this perception is likely to become stronger as time progresses. However, some partners made the point that the Guide needed to be supported by more visible green options, specifically offered by the building company, so that buyers engaged by the Guide would be able to make easier choices.

Ongoing challenges for education for sustainability

The evaluation identified some challenges for ongoing work in education for sustainability. These included:

1 The perceived cost of sustainability features

In both telephone and online surveys, all customers who commented on the issue of barriers highlighted the relative costs of sustainability features. The major barrier was the perceived cost of the options flagged in the Guide. Often though, customers had

little definite knowledge of real costs and they seemed not to understand the concept of 'payback period' at all well. So at times the dollar barrier might well have been a perceived barrier as much as a real one. Therefore, there needs to be more research undertaken on how to overcome this issue—and, more importantly, innovative financing mechanisms need to be developed to address the issue of the up-front capital cost. Potential customers require specific information about the notion of a payback period, for example. There are barriers, in particular, for low-income earners, when they cannot meet the up-front capital cost, even if there is a short payback period on a 'sustainability' investment. This highlights the limitations of education; it needs to be combined with structural and other changes to financing mechanisms to bring about the greatest change.

2 Lack of informed advice from project home builders

One telling quote from a telephone respondent illustrates the barrier of clients driving demand for environmental choices:

'I encountered many difficulties trying to make environmental changes. I felt that [the company] had little to no understanding of environment. They didn't understand why [I] wanted to move the windows. I wanted to put a skylight in to light a central area and they wouldn't allow it. I also wanted to put in an instantaneous water heater on the pipes to eliminate hot water wastage, but couldn't find a builder willing to install the system.'

This customer reported that he didn't mind spending the money, but couldn't get someone to install what he wanted. The issue here is how well project home builders can adapt from traditional approaches and traditional designs to accommodate sustainability innovation. This is a general issue for sustainability—it requires change and finding ways to do things differently. Even though some industries (and some companies) are more receptive to making alterations to the plan, clearly, without change on the supply side, altering the demand (through community education) is often limited in value in the short-term.

3 Information alone is never enough

So, while *Your Home Buyer's Guide* met the users' and partners' needs, was persuasive, and changed some of the users' decisions, information alone is almost always insufficient (Hawe, Degeling & Hall 1990; Lazenbatt 2002).

Most people will not change their choices based on information alone. There needs to be emotional commitment to change and/or the change needs to be made easy through pricing or other mechanisms. Any barriers to sustainable action

need to be removed and sustainable building needs to become the norm, not an option. More research is needed, therefore, on both how the barriers to more sustainable housing and sustainable choices by purchasers can be removed. Such work needs to investigate financing arrangements, supply constraints and issues of fashion, status and identity.

Conclusion

Overall, the evaluation of *Your Home Buyer's Guide* demonstrated that:

- well-crafted print material can impact on people's choices and sustainable behaviours, even in financially fraught areas such as those in regard to the purchase, design and fit-out of a project home
- to achieve this result, print material needs to be structured in a way that integrates information about sustainability into relevant learner-centred teaching/learning processes, especially grounding it in the context of decision-making
- it is clear from the evaluation data collected, that sometimes when dealing with major social changes, those developing programs need to approach the matter in a subtle way
- the use of education of customers and potential customers to promote increased sustainable awareness and choice was effective. The Guide is a catalyst, a starting point for prompting the sector forward towards a heightened application of sustainability
- the approach used was strategic, innovative and highly valued.

The *Your Home Buyer's Guide* project improved our understanding of educating for sustainability coupled with a comprehensive evaluation methodology based on program logic, which explored not only the process and outcomes, but also makes recommendations for future action. The approach taken to preparing and evaluating *Your Home Buyer's Guide* prioritised users' needs over aesthetics or conventional practice in sustainability education. Given the proven effectiveness of this approach, the Guide therefore provides a new model, which others could consider applying in other contexts. We welcome further discussion about this approach to prioritising users' needs in sustainability education and evaluation.

Notes

- 1 Note that Investa separated from Clarendon in early 2009. Both companies are owned by funds under management of Morgan Stanley Real Estate. Investa Property Group has established the Investa Sustainability Institute to conduct action research for sustainability in the built environment. The Institute aims to be a collaborative venture between Investa and research, academic, industry and professional bodies as well as government organisations.
- 2 The evaluation written about here was based on the printed information, although, as indicated above, a Guide website was developed by DEWHA (now the Department of Sustainability, Environment, Water, Population and Communities). It is of note though that the website featured the Guide itself and strongly promoted its use. However, it did not introduce contaminating information that might confuse the results of the evaluation of the project.
- 3 The NSW Government has changed the name of the Department of Environment and Climate Change and combined its responsibilities with the water management responsibilities of the former Department of Water and Energy. The current name is the Department of Environment, Climate Change and Water. The name of the equivalent department in 2004 was the Department of Environment and Conservation.
- 4 Space does not allow the publication of the entire hierarchy. This can be provided by the authors upon request.
- 5 Note that the method for the evaluation of the Guide was also informed by the work of the Communication Research Institute of Australia on 'usability testing' (see Penman & Sless 1992). This testing seeks to understand how a document is used, in comparison with the standard focus on whether a document is attractive to a 'target audience'.
- 6 It is important to note that specific discussion guides were developed to frame each verbal data collection interaction indicated by an asterisk (*). The survey instruments used with customers and training participants were developed with the evaluation questions in mind.
- 7 It should be recognised that given that the evaluation was conducted within a nine-month period after the release of the Guide, many respondents had not yet completed the purchase of their new home at the time of data collection. Home purchase tends to be a lengthy process for most people and the best use of the Guide is as a resource available throughout the process. Not surprisingly then, people who were advanced in the purchase before they saw the Guide were understandably less influenced by it. Furthermore, those most influenced had not completed the process and in the findings reported here, those who had not completed the purchase were allocated to the 'still considering' group.

References

- ABS 2009, *Australian social trends*, cat. no. 4102.0, Australian Bureau of Statistics, Canberra, viewed 10 August 2010, <<http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4102.0Main+Features80March%202009>>.
- AEA 2004, *American Evaluation Association guiding principles for evaluators*, American Evaluation Association, Fairhaven, Massachusetts, viewed 12 August 2010, <<http://www.eval.org/Publications/GuidingPrinciples.asp>>.
- Commonwealth of Australia 2008, *The Garnaut climate change review: final report*, Cambridge University Press, Port Melbourne.
- DEC 2004, *Does your project make a difference?*, Department of Environment and Conservation, NSW Government, Sydney.
- DECC 2009, *Guide to using research in sustainability programs*, Department of Environment and Climate Change, NSW Government, Sydney.
- DECCW 2009, *Who cares about the environment in 2009?*, Department of Environment, Climate Change and Water, NSW Government, Sydney.
- Department of Planning 2007, *About BASIX*, Department of Planning, NSW Government, viewed 10 August 2010, <<http://www.basix.nsw.gov.au/information/about.jsp>>.
- DEWHA 2009, *Living sustainably: the Australian Government's national action plan for education for sustainability*, Department of the Environment, Water, Heritage and the Arts, Commonwealth of Australia, Canberra.
- Funnell S, 1997, Program logic: an adaptable tool for designing and evaluating programs', *Evaluation News and Comment*, vol. 6, no. 1, pp. 5–7.
- Guba, EG & Lincoln, YS, 1989, *Fourth generation evaluation*, Sage, Thousand Oaks, California.
- Hawe P, Degeling, D & Hall J, 1990, *Evaluating health promotion: a health worker's guide*, MacLennan and Petty, Sydney.
- Hayles CS, 2007, *An examination of the relationship between sustainability and affordability in residential housing markets, school of property, construction and project management*, RMIT University, Melbourne.
- Lazenbatt, A 2002, *The evaluation handbook for health professionals*, Routledge, London.
- Owen, J with Rogers, P 1999, *Program evaluation: forms and approaches*, 2nd edn, Allen & Unwin, St Leonards, New South Wales.
- Penman, R 2000, *Reconstructing communicating: looking to a future*, Lawrence Erlbaum Associates, Mahwah, New Jersey.
- Penman, R & Sless, D (eds) 1992, *Designing information for people: proceedings from the symposium*, Communication Research Press, Canberra.
- World Commission on Environment and Development 1987, *Our common future: report of the World Commission on Environment and Development*, United Nations, New York.
- Zammit C, Cockfield, G Funnell, S 2000, *An outcomes-based framework for evaluating natural resources management, policies and programs*, Social and Institutional Research Program, Land and Water Australia, Canberra.