



LOW CARBON LIVING
CRC

RP3016: EnergyFit Homes Initiative

Working paper 5 - Message Frame Testing



Authors	Zoe Leviston, Sarah Malkin, Melissa Green & John Gardner
Title	The EnergyFit Homes Initiative working paper 5: Message frame testing
ISBN	
Format	
Keywords	
Editor	
Publisher	
Series	Prepared for the Cooperative Research Centre for Low Carbon Living Project RP3016 'Enhancing the market for low carbon homes at point of sale and lease'
ISSN	
Preferred citation	Leviston Z, Malkin S, Green M, & Gardner, J (2015) The EnergyFit Home Initiative: Message frame testing. CSIRO, Australia.



Australian Government
Department of Industry,
Innovation and Science

Business
Cooperative Research
Centres Programme

Acknowledgements

The CSIRO would like to acknowledge the support given by CRC for Low Carbon Living, supported by the Cooperative Research Centres program, an Australian Government initiative, and the project parties: NSW Office of Environment and Heritage, AGL, Australian Windows Association, Clean Energy Council, Common Capital, CSR, Energy Efficiency Council, Fletcher Insulation, Knauf Insulation, LJ Hooker real estate, Low Energy Supplies & Services Pty Ltd, Stockland, Swinburne, and The Centre for Liveability Real Estate.

The CSIRO would also like to acknowledge contributions to this research received from Stephen White (CSIRO), Henry Adams and Matthew Clark (Common Capital), and Emily Yip (NSW OEH), and Cecile Weldon (The Centre for Liveability Real Estate), and Ray Thompson (CSR) for their feedback and suggestions for the research design.

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Executive Summary

This report is a milestone deliverable from CSIRO for the EnergyFit Homes Initiative, a project that seeks to empower consumers to recognise and value homes with better health, comfort, and sustainability benefits, and lower running costs. It is formally known as Project RP3016 and funded by the CRC for Low Carbon Living and other project parties (see Acknowledgements).

An experimental survey was designed and administered to 2,008 potential or recent home buyers across Australia in September and October 2015. The purpose of the experimental survey was to ascertain the absolute and relative effectiveness of nine different message frames in promoting the perception of benefits (both market and non-market) in low carbon EnergyFit homes—that is, homes with qualities that confer health, comfort, and sustainability benefits and lower running costs to new and existing homes.

Nine different EnergyFit message frame conditions were tested. These comprised combinations of a standard energy efficiency message, images designed to convey an energy efficiency rating, and ‘Liveability’ messages (tailored to the pre-identified customer profile of the respondent) designed to embed energy efficiency characteristics within a broader message of home comfort and liveability. An overview table of the conditions is included as Appendix A. The nine message frame conditions can be summarised as follows:

1. A standard energy efficiency message.
2. A standard energy efficiency message with rating image 1.
3. A standard energy efficiency message with rating image 2.
4. A standard energy efficiency message with rating image 3.
5. A Liveability message tailored to the respondent with Liveability icons.
6. A Liveability message tailored to the respondent with Liveability icons and rating image 1.
7. A Liveability message tailored to the respondent with Liveability icons and rating image 2.
8. A Liveability message tailored to the respondent with Liveability icons and rating image 3.
9. A Liveability message tailored to the respondent with no Liveability icons.

Respondents were randomly assigned to one of the nine message frame conditions and asked to evaluate the EnergyFit home against a ‘Control’ home (an analogous home containing no energy information) and a ‘Features’ home (an analogous home containing no energy information but containing non-energy related features desired by the respondent). Respondents were finally asked to evaluate an ‘Ultimate’ home—a home containing both an EnergyFit message frame as well as non-energy related features.

The findings of the experimental survey are summarised below.

Respondent characteristics

Respondents were typified by being a recurrent home owner with a current mortgage. Roughly half of respondents (54%) were considering purchasing a property to live in within the next two to five years. A further 33% were looking for an investment property within the next five years. Most respondents (71%) were seeking a standalone house, with a small majority (52%) looking to spend a maximum of between \$350,000 and \$600,000.

Evaluations of EnergyFit homes

The asking price of an EnergyFit home was perceived to be significantly greater than the Control home. On average, respondents rated the EnergyFit home to be 42% more expensive than the control home. This premium was similar across all message frame conditions, that is, there were no significant differences in the estimated asking price based on message frame condition.

People found EnergyFit homes more preferable than a Control home on a range of financial and non-financial criteria. People were much more likely to want to visit an EnergyFit home, found the EnergyFit home far more appealing, and stated the extra characteristics of the EnergyFit home would make them much more willing to buy it. There were no differences based on message frame condition.

People state they are quite willing to pay their estimated asking price for an EnergyFit home. Despite the high price estimates, respondents were on average moderately to very willing to pay the estimated asking price. People were more willing to pay in Conditions 6 and 7 than those in Condition 8. Willingness to pay was slightly reduced if the estimated price was higher, but the effect of this relationship was statistically small.

The asking price of a Features home was perceived to be significantly greater than the Control home. When respondent-selected features were added to a Control home description, there was a large increase in the estimated price of the home: on average, 36%, but this was lower than the 42% increase in price for the EnergyFit home. People gave increased ratings to the Features home much as they did for the EnergyFit home, but were more willing to pay their estimated price for the Features home, possibly because it was not estimated as quite as expensive as the EnergyFit home.

When compared together, people estimate a home with several additional non-energy related features to be about the same price as a home with an EnergyFit message frame conditions (with no additional features). Estimated prices were not significantly related to message frame condition.

When comparing a Features home with an EnergyFit home, message frames become an important determinant of a range of perceived benefits. Overall, people were about as likely to visit a Features home as an EnergyFit home. They were *less* likely to visit an EnergyFit home in Conditions 1, 2, 4, and 9. They were *more* likely to visit the EnergyFit home in Conditions 6, 7, and 8 (that is, in conditions that also included Liveability icons and an energy rating image). The EnergyFit home was *least* appealing in Condition 1 (the standard energy efficiency message condition), followed by Conditions 2, 4, and 9. The EnergyFit home was the *most* appealing in Condition 7, followed by Conditions 5, 8, and 6. Overall, respondents indicated moderate willingness to pay their estimated price for the EnergyFit home. This willingness was slightly lower in Conditions 8 and 9. Overall, willingness to pay was slightly reduced by the presence of a Features home as a comparison. This reduction was strongest for Condition 1.

Adding non-energy related features to an EnergyFit message frame condition did not have an appreciable difference in the estimated value of the home. Prices given to the EnergyFit home (when compared to the Control) were on average significantly higher than all other price estimates.

In total, 70% of respondents assigned to a condition with additional imagery recalled seeing it. The most commonly recollected image was in Condition 2, with 81.5% of respondents assigned to this condition recalling an additional image. The lowest recall was for Condition 3. Respondents in Conditions 3 and 7 had the highest proportion of people stating the images had made a positive influence on their assessments of the EnergyFit home.

A multi-criteria assessment of differences between message frame conditions indicates that Conditions 6 and 7 have the best overall efficacy in boosting the perceived market and non-market value of EnergyFit homes. Across our analyses, two conditions were most effective in increasing the attractiveness of EnergyFit homes: Condition 6—a Liveability message tailored to the respondent with Liveability icons and Rating image 1; and Condition 7—a Liveability message tailored to the respondent with Liveability icons and Rating image 2.

Predicting preference for EnergyFit homes

Basic demographic differences between respondents were a relatively poor predictor of preferences toward an EnergyFit home. There were only small differences between household and personal income and the estimated asking price for the EnergyFit home. Further, the direction of the relationship differed: higher household income predicted increased price estimates while higher personal income predicted decreased estimates. Older respondents estimated an EnergyFit home to be worth less than did younger respondents, but older respondents found an EnergyFit home more appealing and were more willing to pay their estimated price. Gender did not make a difference to preference.

Experienced home owners, and those looking for a townhouse, had stronger preferences for EnergyFit homes. Respondents who were looking to purchase a townhouse stated they were more likely to visit an EnergyFit home, and found it more appealing, than those who were looking for an apartment/unit or a standalone house. Experienced home owners found the EnergyFit home more appealing than those who were currently renting.

Those who fit the Liveability customer profile labelled 'True believer' (denoting a preference for environmental sustainability) showed a slightly greater preference for EnergyFit homes, but the differences were small. Respondents who viewed a Liveability message tailored to their 'True believer' profile estimated a significantly higher asking price than those who saw a Liveability message tailored to their 'Young at heart' (denoting those with an eye to a comfortable retirement) profile. There were no further differences in preferences, suggesting the tailoring of messages is an effective way of increasing appeal across market segments.

Those who define a comfortable home as easy to heat and cool, or as reflecting their values, had a greater preference for EnergyFit homes. Respondents who defined a comfortable home as best described as one that is easier and healthier to heat and cool, or one that reflects their values, had stronger preferences for EnergyFit homes than those who defined a comfortable home as either an entertainment venue or one that suited their lifestyle.

The most consistently predictive housing criterion across the different measures of EnergyFit home preference was consideration of the maximum mortgage. Respondents who rated this criterion as an important consideration when choosing a home were more likely to think the asking price of the EnergyFit home was lower, but they were also more likely to find the EnergyFit home more appealing, were more likely to visit it over the Features home, and were more willing to pay their estimated asking price.

Trust in government ratings schemes predicted preference toward EnergyFit homes. On average, the higher the respondent ranked government ratings schemes as a trusted source of information about a home, the more appealing they found the EnergyFit home and the more likely they were to visit it. Trust in real estate agents was related to lower preference toward the EnergyFit home, but this relationship disappeared if the real estate agent had specialised knowledge in energy-lifestyle-comfort design features.

Social norms about other people's willingness to pay for EnergyFit homes predicted respondents' own preferences. The appeal and likelihood of visiting an EnergyFit home were both negatively related to beliefs that others would not consider energy efficiency in their purchasing decisions, or that others would *not* care about energy ratings. Willingness to pay for an EnergyFit home was weakly to moderately associated with all social norm statements, such that willingness increased with beliefs that others would find energy efficiency and comfort levels important, and would pay more because of it.

The value of universalism predicts preference toward EnergyFit homes, while the values of hedonism and power had the opposite effect. Those respondents who valued universalism as a life-guiding principle (that is, valuing principles such as broad-mindedness, social justice, equality, and environmental protection), had a greater preference for the EnergyFit home. By contrast, respondents rating hedonism as important (valuing principles such as the gratification of desires, enjoyment in life, and self-indulgence) had lower preferences for the EnergyFit home, as did respondents who rated power as an important life-guiding principle.

1 Project background

This report is a milestone deliverable from CSIRO for Project RP3016: 'Enhancing the market for energy efficient homes at point of sale and lease'. It is funded by the CRC for Low Carbon Living and other project parties. This project is publicly referred to as the 'EnergyFit Homes Initiative: Empowering consumers to recognise and value homes with better health, comfort and sustainability benefits and lower running costs'. It is a collaborative project led by CSIRO as part of the Engaged Communities program in the CRC for Low Carbon Living seeking to develop a pathway for enhancing the market for low carbon homes at sale and lease. Research outcomes will inform a framework for a best practice rating system to measure and communicate the value of low carbon homes.

Numerous assessment and rating tools have been developed to monitor and motivate buyers of low carbon homes. However, the lower-than-anticipated purchase demand, despite the higher potential sale value for these homes, suggests that this emphasis has not resonated with home buyers. In response, this project proposes a consumer-facing, end-user perspective to understand how energy rating tool metrics are used, and how the new and existing home buyer and leasing market can be engaged by these or other metrics. This project aims to reduce greenhouse gas emissions from households by increasing market interest in low carbon homes.

This report presents the message testing component of the EnergyFit project. The overarching purpose of the message testing component of the EnergyFit project is to determine the phrases and messages conveying EnergyFit characteristics that best motivate home purchases and leasing. To this end, an online message framing experiment was conducted in September–October 2015 with 2,008 recent or impending home purchasers from across Australia, to determine perceived benefits associated with EnergyFit homes under different message framing conditions.

Research questions

The following research questions were developed after a review of the extant literature, and in collaboration with members of the steering committee, Common Capital, and the NSW Office of Environment and Heritage.

RQ1: What message frames are the most effective in buyer acknowledgement of the benefits of low carbon EnergyFit homes?

RQ1a: What is the influence of energy ratings information on perceived benefits?

RQ1b: What is the influence of Liveability information on perceived benefits?

RQ1c: What is the influence of Liveability and energy rating combinations on perceived benefits?

RQ2: Trade-offs: Are people prepared to forego non-EnergyFit related, quality features, for an EnergyFit home?

RQ3: Financial benefits: What financial benefits do people perceive accompany EnergyFit homes (as measured by estimated asking price)?

RQ4: Non-market benefits: To what extent do people find homes with EnergyFit features more appealing, and to what extent is this associated with willingness to pay, or visit?

RQ5: What is the influence of 'type' of buyer (as defined by 'stage of journey', and basic home preferences) on benefits attached to EnergyFit homes?

RQ5a: Is the effectiveness of different frames aligned with the 'type' of buyer?

RQ6: What is the effect of combining message framing with non-energy features? That is, does the inclusion of EnergyFit messaging alongside non-energy features amplify the perceived benefits of an EnergyFit home?

2 Research design and development

2.1 Message frame conditions

Nine EnergyFit message frame conditions were developed (designed to mimic an online advertisement for a home for purchase). Each condition contained a text passage describing the energy efficiency properties of a home. In addition, several conditions contained an image conveying the energy efficiency properties of a home—a rating image and/or Liveability icons. Table 1 summarises the nine message frame conditions, alongside their short descriptor used in the reporting of results. Detailed information about text passages, rating images, and Liveability icons are provided below.

Table 1 Overview of the different EnergyFit message frame conditions and their descriptors

CONDITIONS	DESCRIPTOR
1. Standard energy efficiency message	Energy efficiency
2. Standard energy efficiency message with rating image 1	Rating 1
3. Standard energy efficiency message with rating image 2	Rating 2
4. Standard energy efficiency message with rating image 3	Rating 3
5. Liveability message with Liveability icons	Liveability (icons)
6. Liveability message with Liveability icons and rating image 1	Rating 1/Liveability
7. Liveability message with Liveability icons and rating image 2	Rating 2/Liveability
8. Liveability message with Liveability icons and rating image 3	Rating 3/Liveability
9. Liveability message	Liveability (no icons)

2.2 Message types

Control message

A control message was constructed to serve as the baseline for comparisons with the standard energy efficiency and liveability text passages (Table 2).

Table 2 Control text passage

	Text passage
Control message	Hurry, don't miss out on this impressive quality home. This is a rare opportunity to deliver the life you've always wanted. Located in the suburb everyone wants to live in, this home is close to shops, transport and great schools. This home offers great value for money with everything you need for a comfortable lifestyle; contemporary living at its best.

Standard energy efficiency message

A standard energy efficiency message was constructed for the EnergyFit home for Conditions 1, 2, 3, and 4. This message was designed to reflect the more traditional (or 'standard') way of conveying energy efficiency, with a focus on specific home features (e.g. aspect, LED lighting, solar heating) rather than focussing on home qualities (e.g. running costs, comfort, sustainability).

Table 3 Standard energy efficiency text passage (Conditions 1, 2, 3, and 4)

	Text passage
Standard energy efficiency message	Hurry, don't miss out on this impressive quality home. This is a rare opportunity to deliver the life you've always wanted. Located in the suburb everyone wants to live in, this home is close to shops, transport and great schools. The home has additional energy efficiency features, including north-facing aspect, with easy care gardens, LED lighting, and solar heating system. This home offers great value for money with everything you need for a comfortable lifestyle;

The Liveability messages

Five 'Liveability' text passages were constructed for the EnergyFit homes in Conditions 5, 6, 7, 8, and 9.¹ These text passages were designed to convey energy efficiency information in the context of all round home quality, and were based on the five Liveability customer profiles outlined in the Liveability Real Estate Specialist Manual.² The Liveability profiles are referred to by the following titles: True believer; Show me the money; Look at me; Better safe than sorry; Young at heart.

As an initial step, descriptions of these profiles were cross-validated with transcripts from CSIRO buyer and tenant focus groups (Hall, Jeanneret, & Romanach, 2014). Profiles were matched to energy-relevant home features and considerations commonly cited as important to focus group participants, as follows:

True believer: Environmentally sustainable features; Industry endorsements for sustainable design and construction; Energy star-rating accreditation; Awards for environmental and sustainable excellence.

Show me the money: Energy features that reduce the running cost of the home; Heating and cooling features that increase the everyday comfort of the home; A home whose innovation makes it stand out; High-quality insulation.

Look at me: Solar panels; High-tech energy-efficient appliances; State-of-the-art heating and cooling systems; Smart lighting.

Better safe than sorry: A home that's economical to run; Passive designs that make the home healthy; Energy features that increase the safety of the home; A design with good testimonials from other buyer-occupiers.

Young at heart: Natural heating and cooling features that provide health benefits; Economical to run; Energy features that make it easier and more enjoyable to live in; A home that's contemporary but comfortable.

As a second step, in collaboration with staff from LJ Hooker, these elements were incorporated into five Liveability text passages mimicking an online advertisement for a home for purchase. The resulting text passages are shown in Table 4.

Table 4 Liveability text passages for each Liveability customer profile

Profile	text PASSAGE
True believer	<p>Award-winning building design delivers a home that can adapt to climate extremes, showcasing the latest energy and water efficiency fixtures and delivering exceptional comfort.</p> <p>Located at the heart of a vibrant community, take advantage of the fresh local produce at one of the local markets, or take a bike ride or stroll through the nearby nature reserve.</p> <p>From construction to completion this home's impressive credentials deliver low life-cycle environmental impact. Beautifully designed to adapt to seasonal changes, maintain high levels of comfort and keep emissions to a minimum.</p> <p>By bringing together sustainable credentials and contemporary style, this home is for now and the future.</p>
Show me the money	<p>Make it a smart investment. This home offers the best of both worlds, a modern energy saving home designed for comfort and convenience.</p> <p>Located close to a vibrant community experience with great lifestyle amenities within walking distance. Everything you need is on your doorstep.</p> <p>Live year round without the worry of high running costs. Smart design maximises natural heating, cooling and lighting reducing your reliance on mechanical heating and cooling.</p> <p>Blending good design, comfort and ongoing affordability, this home has everything you need to create the life you want.</p>
Look at me	<p>State of the art inclusions designed to impress. Experience the latest in 'smart' home features and future focussed innovation including integrated energy saving technology.</p>

¹ Here, the five messages were not specific to each condition. Rather, all respondents who were randomly assigned to a Liveability condition received a message specifically tailored to the Liveability profile that best suited them, as explained further on.

² These customer profiles, originally developed over a five-year period, are designed as elements of an interconnected features-based value proposition. They are 'context dependent' to the real estate moment: the point of sale or rent and the value proposition delivered by the property marketing industry during this time. As such it is important to note that their utilisation in the current context may not have the same level of engagement nor may drive the value proposition outside of this 'real estate moment'. It is in this 'language' context and within the accepted 'norms' of the real estate value proposition which gives these words, phrases and icons 'meaning'.

Profile	text PASSAGE
	<p>Live the life you want. Surround yourself with a vibrant community experience only minutes away: fresh local produce, cafes, gyms, bikeways and walkways.</p> <p>Experience the home that everyone is talking about. Great design which maximises natural heating, cooling and lighting, delivering the potential for year round comfort.</p> <p>Stand out from the crowd with this 'home of the future' Experience the very best in climate responsive design, the latest energy saving inclusions and year round comfort.</p>
Better safe than sorry	<p>Give your family the healthy home they deserve. This stylish and functional home maximises natural heating and cooling opportunities all year round.</p> <p>Live locally and experience the benefits of a close and vibrant community experience: fresh local produce, community gardens, gyms, walkways and bikeways, all in a family friendly walkable neighbourhood.</p> <p>This home's orientation delivers the potential for a healthy and comfortable home; living rooms capturing natural sunlight and natural ventilation pathways work together to creating a wonderfully inviting family space. Design and fixtures work in harmony to reduce your reliance on mechanical heating and cooling.</p> <p>Come and experience how good home design can bring a great family lifestyle, comfort and still deliver reduced environmental impact.</p>
Young at heart	<p>This contemporary and stylish home features the latest energy efficiency inclusions offering you the ultimate carefree lifestyle.</p> <p>Located at the heart of a vibrant community, this home is within walking distance to the best amenities offering a true 'village feel' with the convenience of an urban setting.</p> <p>This home's design features harness natural heating and cooling and deliver winter sun and summer shading, providing for a healthier and more comfortable lifestyle. Enjoy the freedom of owning a home that is designed with ongoing running cost in mind.</p> <p>This home offers freedom, comfort and great future proof design. Why compromise, you deserve the best home.</p>

2.3 Liveability icons

In addition to the text passages, Conditions 5, 6, 7, and 8 also included four Liveability icons. These icons are shown in Figure 1.



Figure 1 The four Liveability icons included in Conditions 5, 6, 7, and 8

2.4 Rating images

After a review of the extant literature, in particular, a review of the findings of the Green Loans Report, and in consultation with the project steering committee, three images were selected to convey an energy efficient rating. These are shown in Table 5.

Table 5 The three energy rating images

RATING

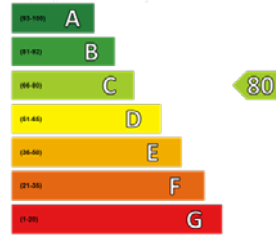
IMAGE

Rating image 1
(Conditions 2 and 6)



Rating image 2
(Conditions 3 and 7)

Very energy efficient – lower running costs



Not energy efficient – higher running costs

Rating image 3
(Conditions 4 and 8)



Energy rating

3 The experimental survey

To test our message frame conditions, we developed and deployed a nationwide randomised experimental survey with recent or impending home buyers. The overriding objective of the survey instrument was to test both the absolute and relative effectiveness of nine different EnergyFit message frame conditions on buyers' perceptions of both monetary and non-monetary benefits of houses with EnergyFit characteristics. We aimed to present our respondents with realistic scenarios of decision-making when looking for a house to buy (either for investment purposes or for owner-occupier purposes).

The survey was administered online by The ORU, an online fieldwork company with QSOAP 'Gold Standard' and Global ISO 26362 accreditation. Respondents were drawn from a research-only³ panel of 300,000 individuals. A full copy of the survey is included as Appendix B.

The experimental survey consisted of several parts, as follows:

- pre-screening
- Liveability profiling
- home selection exercise
- home comparison evaluations (using nine different message frame conditions versus several control conditions)
- open-ended assessments
- individual difference and market segment questions.

3.1 Pre-screening

To increase the representativeness of survey respondents to reflect active home purchasers, two screening questions were asked:

Might you consider, or are you considering, buying a home (either as an investment, or as somewhere to live) in the next 5 years?

Have you bought a home in the last 12 months?

If a potential survey respondent answered 'no' to both of these screening questions, they were thanked for their time and exited the survey.

3.2 Liveability profiling

Prior to the home selection exercise, the following question was asked to determine which of the five Liveability profiles best matched each respondent. The options were given in randomised order, with the Liveability profile they correspond to shown in parentheses (not seen by respondents):

* Please rank the following in order of how well they describe what you're looking for in a home, from '1—describes me best' to '5—describes me least well'.

- A house that reflects my commitment to sustainability (True believer)
- Concerned about running costs (Show me the money)
- I'm an innovator: I want a house that reflects that (Look at me)
- A safe and healthy home for my family (Better safe than sorry)
- A house that's simple and comfortable to run in retirement (Young at heart)

The top ranked statement determined which Liveability text passage the respondent saw, if they had been randomly allocated to a condition where a Liveability message was given (i.e. Conditions 5, 6, 7, 8, and 9).

3.3 Home selection exercise

The purpose of the home selection exercise was threefold: first, it enhanced the realism of the experiment by mimicking the online experience of searching for a home for purchase. Second, it provided a baseline price for a control house with

³ A 'research-only' panel means that panel members complete only surveys intended for legitimate research purposes. This strategy reduces the number of 'professional' survey respondents and increases the representativeness of respondents across behavioural, attitudinal, and lifestyle criteria.

which the message frame houses were later compared. Third, it enabled analysis of message frame effectiveness according to housing preferences, as elicited by this exercise.

Respondents were given the following direction:

We would like you to imagine you are looking for a place to purchase. Using each of the dropdown boxes below, please make the selections that reflect the type of place you would be most likely to look for. We will then present you with a series of comparison homes based on your selections.

A series of drop-down menus were presented to respondents to capture their preferences for the following housing criteria: house type (e.g. townhouse, villa, house), minimum number of bedrooms, minimum number of bathrooms, number of garage spaces, and maximum asking price. In addition, they were directed to select four extra features from a list of eight (e.g. stone benchtops, timber flooring, a pool)—the features selected informed Comparison 2 detailed below—and four Liveability features (e.g. energy efficient lighting, rainwater tanks).⁴

Respondents' selections for house type and minimum number of bedrooms determined the type of house icons they saw in the home comparison evaluations. Appendix C displays the selection criteria and resultant house icon for each combination of house type and number of bedroom selections.

3.4 Home comparison evaluation

Respondents were next given the following instructions:


Based on your selections, you will now be presented with a series of homes and asked several questions about them.

A series of two houses side by side with information was given (as in the example in Figure 2), with the instructions at the top of the first page as follows:

Please read the information about the following homes carefully and answer the questions that appear below.

⁴ The selection of Liveability features in this exercise did not inform the home comparison evaluations, but were included for descriptive analyses

(Control Frame)
HOUSE 1



Hurry, don't miss out on this impressive quality home.
This is a rare opportunity to deliver the life you've always wanted.

Located in the suburb everyone wants to live in, this home is close to shops, transport and great schools.

This home offers great value for money with everything you need for a comfortable lifestyle; contemporary living at its best.

Asking price: \$650,000***

(EnergyFit Message Frame Condition 6)
HOUSE 2



Award-winning building design delivers a home that can adapt to climate extremes, showcasing the latest energy and water efficiency fixtures and delivering exceptional comfort.

Located at the heart of a vibrant community, take advantage of the fresh local produce at one of the local markets, or take a bike ride or stroll through the nearby nature reserve.

From construction to completion this home's impressive credentials deliver low life-cycle environmental impact. Beautifully designed to adapt to seasonal changes, maintain high levels of comfort and keep emissions to a minimum.

By bringing together sustainable credentials and contemporary style, this home is for now and the future **



Asking price: \$ _____

* The home icon was the same across comparisons and was automatically generated based on respondent selections for preferred home type and minimum number of bedrooms

** The text passage in this example is based on the respondent being identified as a 'True believer' profile type

*** The asking price for House 1 was automatically generated by subtracting 5% from the respondents' nominated price in the home selection exercise, in order to increase the market realism of the comparisons for each respondent

Figure 2 Example of the home comparison evaluations

Comparison 1

For the first comparison, respondents were shown a home with a control message, next to a home with one of the nine EnergyFit message frame conditions, as per Figure 2. Once they had read the information about both homes, respondents were asked the following questions:

* Given what you know about the price of House 1, how much do you think the asking price of House 2 is? Responses were open-ended.

* Assuming the asking price of the two houses was about the same, which of these houses would you be more likely to visit for a home open? Responses were recorded on a 100-point sliding scale from 0=Definitely House 1 to 100=Definitely House 2.

* From the information given, which house do you find more appealing? Responses were recorded on a 100-point sliding scale from 0=Definitely House 1 to 100=Definitely House 2.

* Would the extra features of House 2 make you... Responses were recorded on a 100-point sliding scale from 0=Much less willing to buy it to 100=Much more willing to buy it.

* Given what you know, would you be willing to pay the asking price you have indicated for House 2? Responses were recorded on a 100-point sliding scale from 0=Not at all willing to 100=Very willing.

These questions were designed to assess the perceived market benefit of EnergyFit homes, as well as to assess preferences for the EnergyFit home, including willingness to pay for any perceived market benefit.

Comparison 2

For the second comparison, respondents were again shown the home with a control message, next to a home with an identical control message, but with the addition of the four non-energy related features they had selected in the home selection exercise (hereon referred to as the 'Features home') (Figure 3). The same questions were asked as for Comparison 1.

<p>(Control Frame)</p> <p>HOUSE 1</p>  <p>Hurry, don't miss out on this impressive quality home. This is a rare opportunity to deliver the life you've always wanted.</p> <p>Located in the suburb everyone wants to live in, this home is close to shops, transport and great schools.</p> <p>This home offers great value for money with everything you need for a comfortable lifestyle; contemporary living at its best.</p> <p>Asking price: \$650,000</p>	<p>(Features frame)</p> <p>HOUSE 2</p>  <p>Hurry, don't miss out on this impressive quality home. This is a rare opportunity to deliver the life you've always wanted.</p> <p>Located in the suburb everyone wants to live in, this home is close to shops, transport and great schools.</p> <p>This home offers great value for money with everything you need for a comfortable lifestyle; contemporary living at its best.</p> <p>Features include:</p> <ul style="list-style-type: none">A good viewUp-to-date kitchensUp-to-date bathroomsA big garden <p>Asking price: \$_____</p>
--	---

Figure 3 Example of Comparison 2: Control home versus Features home

Comparison 3

For the third comparison, a home with the EnergyFit message frame condition was shown (identical to the EnergyFit home given in Comparison 1), next to the Features home (identical to the Features home shown in Comparison 2). No asking prices were given for either house. An example of Comparison 3 is given in Figure 4.




<p>(EnergyFit Message Frame Condition 6) HOUSE 1</p>  <p>Award-winning building design delivers a home that can adapt to climate extremes, showcasing the latest energy and water efficiency fixtures and delivering exceptional comfort.</p> <p>Located at the heart of a vibrant community, take advantage of the fresh local produce at one of the local markets, or take a bike ride or stroll through the nearby nature reserve.</p> <p>From construction to completion this home's impressive credentials deliver low life-cycle environmental impact. Beautifully designed to adapt to seasonal changes, maintain high levels of comfort and keep emissions to a minimum.</p> <p>By bringing together sustainable credentials and contemporary style, this home is for now and the future</p>  <p>Asking price: \$_____</p>	<p>(Features Frame) HOUSE 2</p>  <p>Hurry, don't miss out on this impressive quality home. This is a rare opportunity to deliver the life you've always wanted.</p> <p>Located in the suburb everyone wants to live in, this home is close to shops, transport and great schools.</p> <p>This home offers great value for money with everything you need for a comfortable lifestyle; contemporary living at its best.</p> <p>Features include:</p> <ul style="list-style-type: none">A good viewUp-to-date kitchensUp-to-date bathroomsA big garden <p>Asking price: \$_____</p>
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Figure 4 Example of Comparison 3: EnergyFit home versus Features home

Respondents were asked the same series of questions as for the previous comparisons, with the first question amended to:

* Again, estimate the asking price of the House 1; and House 2


and the last question amended to:

* Given what you know, would you be willing to pay the market price you have indicated for House 1?; and House 2?

Combination assessment (the Ultimate home)

The final home respondents were asked to evaluate was presented on its own. The house was an amalgam of the EnergyFit message and the four features respondents had selected in the home selection exercise (hereon referred to as the 'Ultimate home'). An example is given in Figure 5.

(Combination Frame, Ultimate home)



Award-winning building design delivers a home that can adapt to climate extremes, showcasing the latest energy and water efficiency fixtures and delivering exceptional comfort.


Located at the heart of a vibrant community, take advantage of the fresh local produce at one of the local markets, or take a bike ride or stroll through the nearby nature reserve.

From construction to completion this home's impressive credentials deliver low life-cycle environmental impact. Beautifully designed to adapt to seasonal changes, maintain high levels of comfort and keep emissions to a minimum.

By bringing together sustainable credentials and contemporary style, this home is for now and the future

Features include:

- A good view
- Up-to-date kitchens
- Up-to-date bathrooms
- A big garden



Asking price: \$ _____

Figure 5 Example of Combination assessment

Respondents were asked the following questions:

- * How much do you think the asking price of House 1 is?
- * How appealing do you find House 1?
- * Given what you know, would you be willing to pay the asking price you have indicated for House 1?
Responses were recorded on a 100-point sliding scale from 0=Not at all willing to 100=Very willing.

3.5 Open-ended assessments

Upon completion of the home comparison evaluations, respondents were asked a series of questions about any images they had seen (ignoring the home icon accompanying each home for comparison). These questions were designed to

elicit the perceived meaning of energy ratings related imagery, the perceived influence this imagery had when comparing the homes, and any confusion related to the message the imagery was meant to convey.

3.6 Individual difference and market segment questions

To conclude, respondents were asked a series of individual difference questions. These questions were designed to identify characteristics of individuals that might influence preferences for EnergyFit homes. These questions measured the following constructs:

Attitudes toward paying more for homes with energy efficient qualities.

While attitudes toward spending more to buy an energy efficient home should predict preferences for EnergyFit homes in the home comparison evaluations, such general attitudes can often mask true preferences revealed by methods where trade-offs have to be made (Sheeran, 2002). A series of questions were included to assess attitudes to pay for homes that contain energy efficient and related characteristics, to uncover the extent to which this does in fact predict willingness to pay for an EnergyFit home in a trade-off scenario.

Social norms about others' willingness to pay more for homes with energy efficient qualities.

Social norms, or beliefs about others' attitudes, can influence how communication is interpreted (Zehr, 2000), but communication can also subtly shape people's beliefs about what other people's attitudes are (Moser, 2010). Social norms questions were included to determine whether beliefs about others' preparedness to pay more for homes with energy efficient features are linked to their own preferences for EnergyFit homes.

The importance of different life-guiding principles, or values.

Audiences are known to filter information through the lens of their value and belief systems and cultural experiences, which may vary greatly among and between communities (Koltko-Rivera, 2004; Vaughan, 1995). Values questions were based on a short-form version of the Schwartz Values Survey, designed to measure the relative importance of ten universal values that are recognised throughout all major cultures (Lindeman & Verkasalo, 2005; Schwartz, 1992).

Trust in different sources to provide truthful information about homes for sale.

Trust in the source of communication can have a profound effect on how messages are received and processed (Hartley, 2003; Moser 2010). While we do not specifically manipulate information source in the current survey, we include measures of trust to identify whether trust in specific source categories predict preferences for EnergyFit homes. These categories were based on a set list of options developed by Hall, Jeanneret and Romanach (2014), with the addition of the following distinction: real estate agents in general, versus real estate agents with specialised knowledge in energy-lifestyle-comfort design features.

Current home status (e.g. renting, home owner with mortgage, home owner without mortgage).

Future home purchasing intentions (e.g. intending to buy an investment property within the next two years).

The importance of different housing criteria when purchasing.

These criteria were based on variables of buyer preference identified by Ratchatakulpat, Miller and Marchant (2009).

Home comfort preference.

Comfort has been cited as the leading motivator and driver for householders in the market for purchasing or renovating a home (Instinct and Reason, 2014). These items were based on the five main ways that renovators and buyers conceptualise a comfortable home, identified by Instinct and Reason (2014) in research commissioned by the NSW Office for Environment and Heritage.

Demographic information (e.g. gender, household and personal income, location, and age).

4 Results

4.1 Participant profiles

A total of 2,008 respondents from across Australia were surveyed. The demographic characteristics of the sample are shown in Table 6.

Table 6 Demographics of survey respondents (N=2008)

Demographic	CATEGORY	Percentage	N
Age	18–24	6.5%	130
	25–29	10.2%	204
	30–34	11.3%	226
	35–39	12.7%	255
	40–44	10.9%	219
	45–49	11.0%	220
	50–54	9.6%	192
	55–59	7.5%	150
	60–64	7.6%	153
	65–69	6.4%	129
	70+	6.5%	130
Gender	Male	49.7%	997
	Female	50.3%	1011
Location	NSW–Sydney	21.9%	440
	NSW–Other	9.3%	187
	VIC–Melbourne	21.8%	437
	VIC–Other	7.1%	143
	QLD–Brisbane	10.3%	207
	QLD–Other	9.0%	180
	SA–Adelaide	6.4%	129
	SA–Other	1.7%	34
	WA–Perth	7.2%	144
	WA–Other	1.5%	31
	TAS–Hobart	0.4%	9
	TAS–Other	0.9%	19
	ACT	1.8%	37
	NT	0.5%	11

Figure 6 displays a breakdown of respondents' Liveability profile rankings. The 'Better safe than sorry' profile was the most commonly selected first preference, with just under half of respondents (45.3%) selecting this statement as best reflecting what they were looking for when purchasing a home. 'Young at heart' was the next most commonly selected first preference (28.1% of respondents), while the 'Look at me' profile was least commonly selected as first preference (6.7% of respondents).

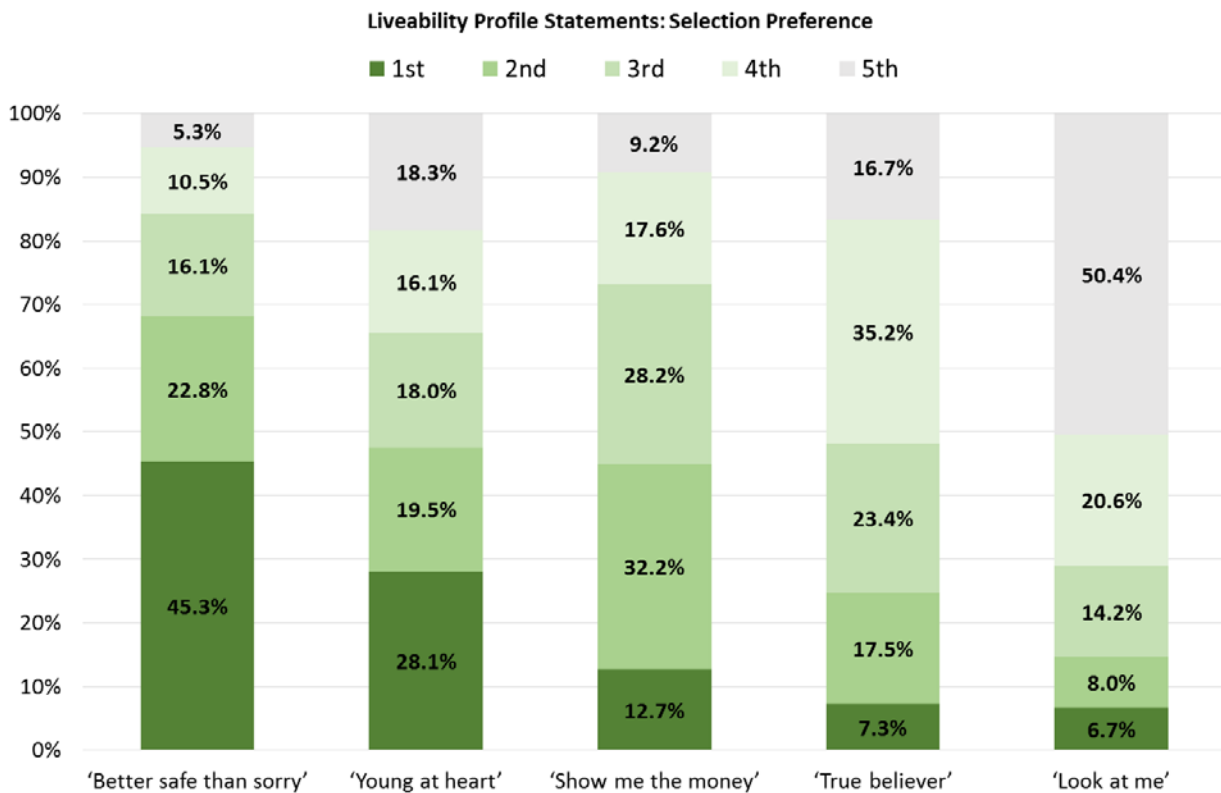


Figure 6 Preference order of each Liveability profile statement, as a percentage of respondents (N=2008)

Table 7 displays a demographic breakdown of respondents selecting each Liveability profile as their first preference. 'Show me the money' and 'Look at me' respondents were more likely to be male, while 'Better safe than sorry' respondents were more likely to be female. 'Young at heart' selectors were likely to be older than the average age of respondents.

Table 7 Respondents who nominated Liveability customer profile type as the best descriptor of what they were looking for in a home, by demographics (N=2008)

profile Statement	Profile type	Percentage	Gender	Mean Age
A house that reflects my commitment to sustainability	True believer	7.3% (n=146)	M=48.6% F=51.4%	43.97
Concerned about running costs	Show me the money	12.7% (n=255)	M=56.1% F=43.9%	41.03
I'm an innovator: I want a house that reflects that	Look at me	6.7% (n=134)	M=59.7% F=40.3%	38.93
A safe and healthy home for my family	Better safe than sorry	45.3% (n=909)	M=45.7% F=54.3%	40.52
A house that's simple and comfortable to run in retirement	Young at heart	28.1% (n=564)	M=51.1% F=48.9%	56.45

Table 8 displays the historic and current housing ownership status of respondents. Nearly half of all respondents (42.9%) described their current status as 'home owner, not for the first time'. A further quarter (25.3%) described their status as home owner for the first time.

Table 8 Respondents' current and historic housing status (N=2008)

what best describes your current status Q1	Percentage	N
Renting for the first time	7.5%	150
Home owner for the first time	25.3%	508
Have never owned or rented	5.5%	111
Home owner, not for the first time	42.9%	862

Renting, not for the first time	18.8%	377
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Table 9 displays respondents' current ownership status using different categories. The most common ownership status of respondents (41.5%) was an owner with a mortgage.

Table 9 Respondents' current housing and ownership status (N=2008)

what best describes your current status Q2	Percentage	N
Owner without a mortgage	28.2%	567
Owner with a mortgage	41.5%	833
Renter-private	22.0%	442
Renter-state/territory housing authority	2.3%	46
Other	6.0%	120

Table 10 displays respondents' future purchasing intentions. Roughly half of respondents (54.4%) stated they may consider purchasing a property to live in over the next two to five years. Just under a third of respondents (32.7%) stated they may consider purchasing an investment property within the next five years.

Table 10 Respondents' intentions for future home purchases (N=2008)

which best describes you	PERCENTAGE	N
May consider purchasing a property to live in within the next 6 months	13.0%	262
May consider purchasing an investment property within the next 6 months	9.4%	188
May consider purchasing a property to live in within the next 2 years	25.7%	516
May consider purchasing an investment property within the next 2 years	11.8%	236
May consider purchasing a property to live in within the next 5 years	28.7%	576
May consider purchasing an investment property within the next 5 years	11.5%	230

4.2 Home selection preferences

This section provides an overview of the prevalence of different choices made during the home selection exercise. Table 11 displays the proportion of respondents selecting each house type as their preference. By far the most common selection, selected by 70.6% of respondents, was a house.

Table 11 Proportion of respondents selecting each house type (N=2008)

HOUSE TYPE	PERCENTAGE	N
House	70.6%	1418
Apartment/unit	12.2%	245
Townhouse	6.8%	137
Villa	3.4%	68
Rural	3.9%	79
Block of units	0.2%	5
Retirement living	2.8%	56

Table 12 displays respondents' preferences for number of bedrooms, number of bathrooms, and number of garage spaces. The most commonly selected preference for each was three bedrooms (48.3% of respondents), two bathrooms (66% of respondents), and two garage spaces (57.3% of respondents).

Table 12 Proportion of respondents selecting each bedroom, bathroom, and garage space specification (N=2008)

bedrooms	PERCENT AGE	N	BATHROOM S	PERCENT AGE	N	GARAGE SPACES	PERCENT AGE	N
Studio	1.0%	20	1 bathroom	27.1%	544	None	3.1%	62
1 bedroom	2.5%	51	2 bathrooms	66.0%	1326	1	32.1%	644
2 bedrooms	24.4%	490	3 or more	6.9%	138	2	57.3%	1150
3 bedrooms	48.3%	970				3 or more	7.6%	152
4 or more	23.8%	477						

Table 13 displays the distribution of respondents' selections for maximum asking price. The most commonly selected ranges were between \$350,000 and \$600,000, with a total of 51.6% of respondents falling within this price range.

Table 13 Distribution of respondents' selections for maximum asking price (N=2008)

Max asking price	PERCENTAGE	N
\$150,000	2.1%	42
\$200,000	1.6%	32
\$250,000	2.1%	43
\$300,000	5.6%	112
\$350,000	8.0%	161
\$400,000	8.0%	161
\$450,000	8.7%	175
\$500,000	12.2%	244
\$550,000	6.0%	120
\$600,000	8.7%	174
\$650,000	4.8%	96
\$700,000	5.0%	100
\$750,000	4.3%	86
\$800,000	4.4%	88
\$850,000	1.7%	35
\$900,000	2.4%	49
\$950,000	0.9%	18
\$1,000,000	5.2%	105
\$1,250,000	3.1%	62
\$1,500,000	2.2%	44
\$1,750,000	0.8%	17
\$2,000,000	1.0%	21
\$2,500,000 +	1.1%	23

Table 14 displays the most commonly to least commonly selected non-energy related features. Up-to-date kitchens were the most commonly selected, followed by up-to-date bathrooms, and a good view. A pool was the least commonly selected feature.

Table 14 Most commonly to least commonly selected non-energy related features (N=2008)

Features	PERCENTAGE	N
Up-to-date kitchens	87.3%	1753
Up-to-date bathrooms	80.3%	1612
A good view	55.4%	1112
Timber flooring	45.3%	910
A big garden	41.0%	824
Stone benchtops	35.7%	716
Handsome street front design	35.4%	711
A pool	19.6%	393

Table 15 lists the most commonly to least commonly selected Liveability features. Efficient heating and cooling devices were selected by more than half of respondents (53.1%). Insulation and an efficient hot water system were the next most commonly selected features, followed by energy efficient lighting and rainwater tanks. Density of building materials, climate zone of the property, and zoning were the least frequently selected features.

Table 15 Most commonly to least commonly selected Liveability features (framed as '17 Things') (N=2008)

17 things	Percentage	N
Efficient heating and cooling devices	53.1%	1067
Insulation	46.9%	941
Efficient hot water system	41.8%	840
Energy efficient lighting	33.4%	671
Rainwater tanks	28.4%	570
Solar photovoltaic system	28.0%	562
Water efficiency devices	22.5%	452
Living locally	22.2%	445
Shading or sun control	21.1%	424
Energy rating	20.5%	411
Windows (glazing)	20.3%	408
Low water garden	17.5%	351
Cross-ventilation	13.7%	276
Orientation	12.1%	242
Density of building materials	7.2%	144
Climate zone of the property	6.7%	134
Zoning	4.7%	94

4.3 Home evaluations. Comparison 1: Control home versus EnergyFit home

In the first comparison, respondents were asked to compare the Control home (whose asking price was determined by their maximum asking price in the home selection exercise, less 5%) with an EnergyFit home.

Table 16 displays the number of respondents randomly assigned to each of the EnergyFit message frame conditions.

Table 16 Number of respondents randomly assigned to each message frame condition (N=2008)

CONDITIONS	DESCRIPTOR	N
1. Standard energy efficiency message	Energy Efficiency	230
2. Standard energy efficiency message with Rating Image 1	Rating 1	222
3. Standard energy efficiency message with Rating Image 2	Rating 2	217
4. Standard energy efficiency message with Rating Image 3	Rating 3	201
5. Liveability message with Liveability icons	Liveability (icons)	235
6. Liveability message with Liveability icons and Rating Image 1	Rating 1/Liveability	211
7. Liveability message with Liveability icons and Rating Image 2	Rating 2/Liveability	243
8. Liveability message with Liveability icons and Rating Image 3	Rating 3/Liveability	236
9. Liveability message	Liveability (no icons)	213

Price estimates of the EnergyFit home

Figure 7 compares the average price given for the Control home (orange bars) with respondents' average estimates of the asking price for the EnergyFit home (blue bars). Figure 7 reveals that respondents' estimates of the price of the EnergyFit home were considerably higher—on average, 42% higher—than the asking price of the Control home, independent of message framing condition (that is, EnergyFit homes were estimated to be more expensive than the Control home under all message framing conditions). There were no statistically significant differences in the estimated price of the EnergyFit home between message framing conditions.⁵

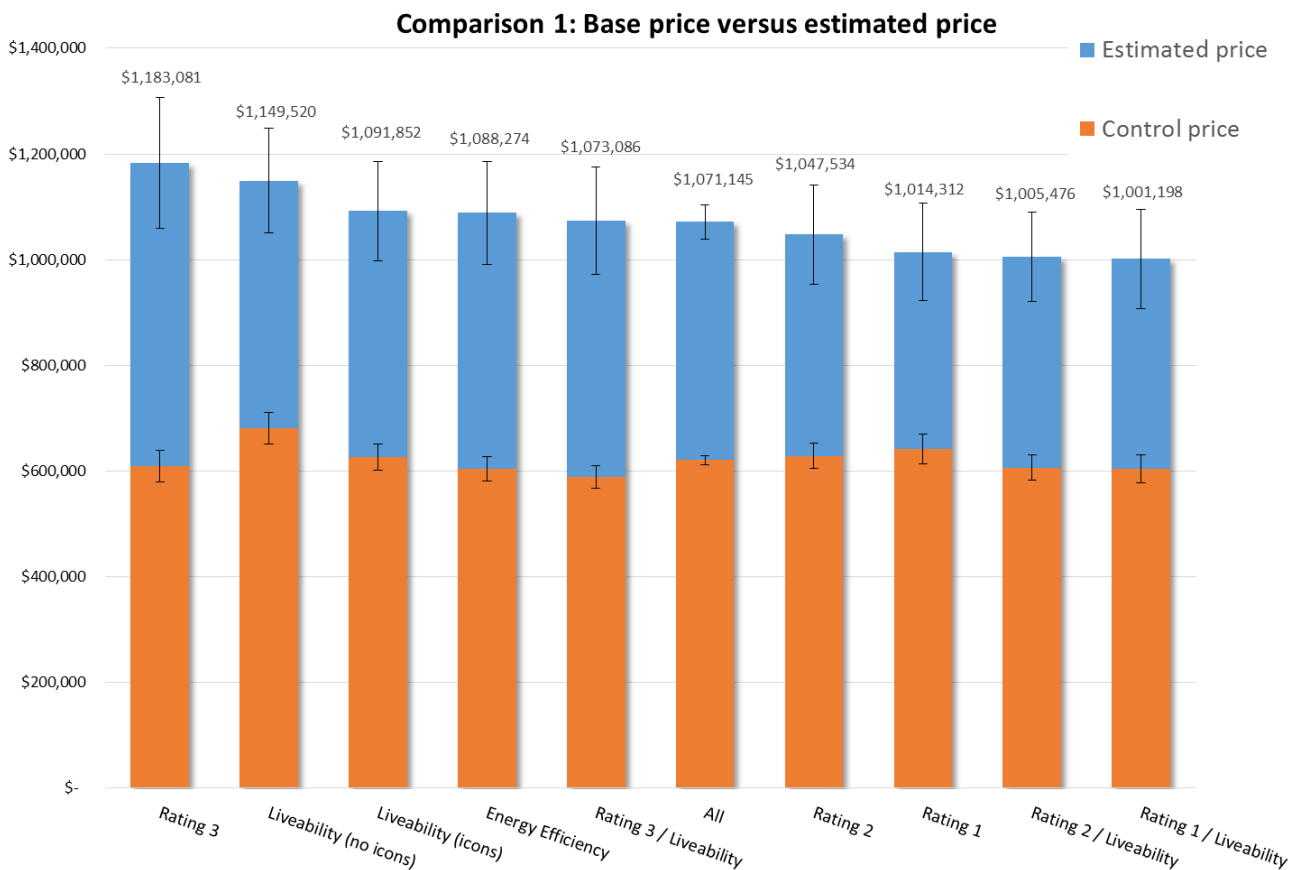


Figure 7 Estimates of asking price for EnergyFit homes, compared to the asking price of the Control home (N=2008)

⁵ $F(8, 1999) = .41, p = .92, \eta^2 = .002.$

Likelihood of visiting the EnergyFit home

Figure 8 displays ratings for which of the two homes respondents would be more likely to visit. On average, participants stated they would be more likely visit the EnergyFit home rather than the Control home. There were no statistically significant differences in likelihood based on message frame condition.⁶

Comparison 1: Which of these homes would you be more likely to visit for a home open?

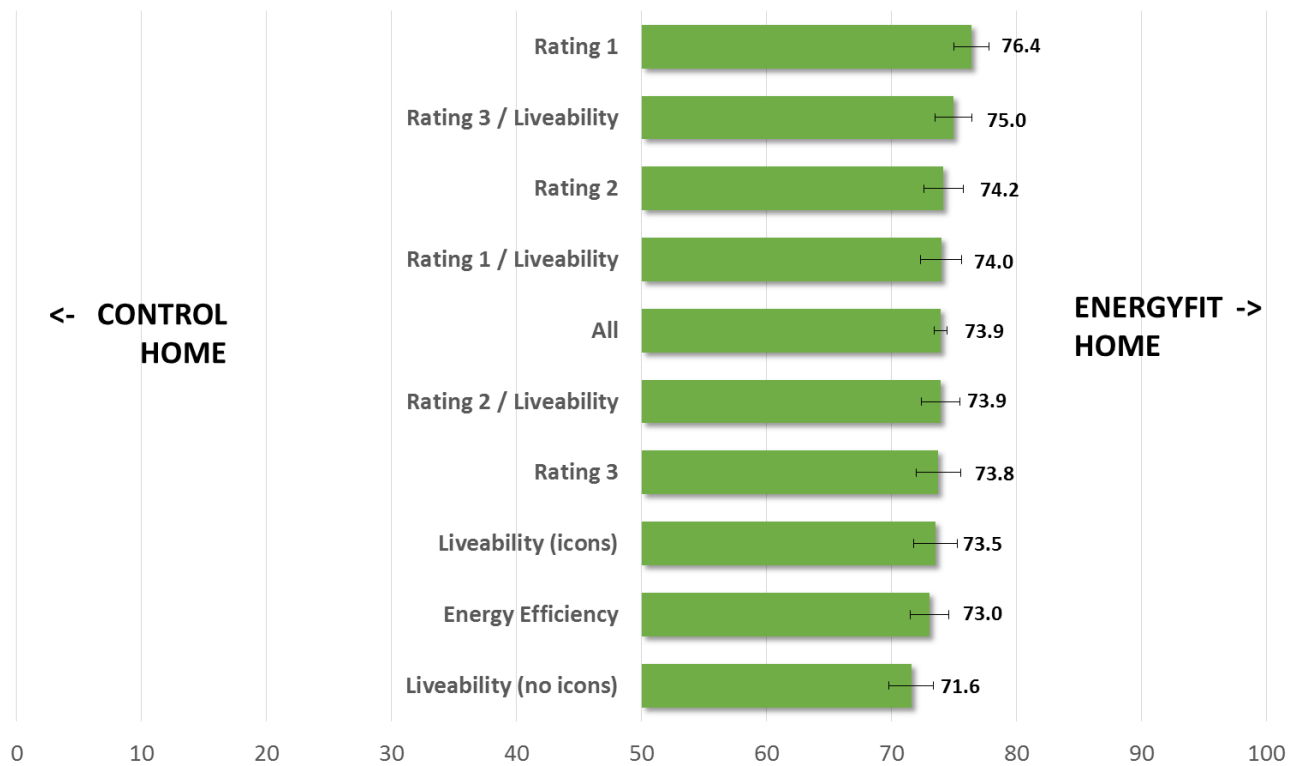


Figure 8 Ratings of which home the respondent would be more likely to visit, EnergyFit home or Control home (N=2008)

⁶ $F(8, 1999) = .67, p = .73, \eta^2 = .003$.

Appeal of the EnergyFit home

Figure 9 displays ratings for which of the two homes respondents found more appealing. On average, respondents found the EnergyFit home more appealing than the Control home. There was no statistically significant effect based on message frame condition.⁷

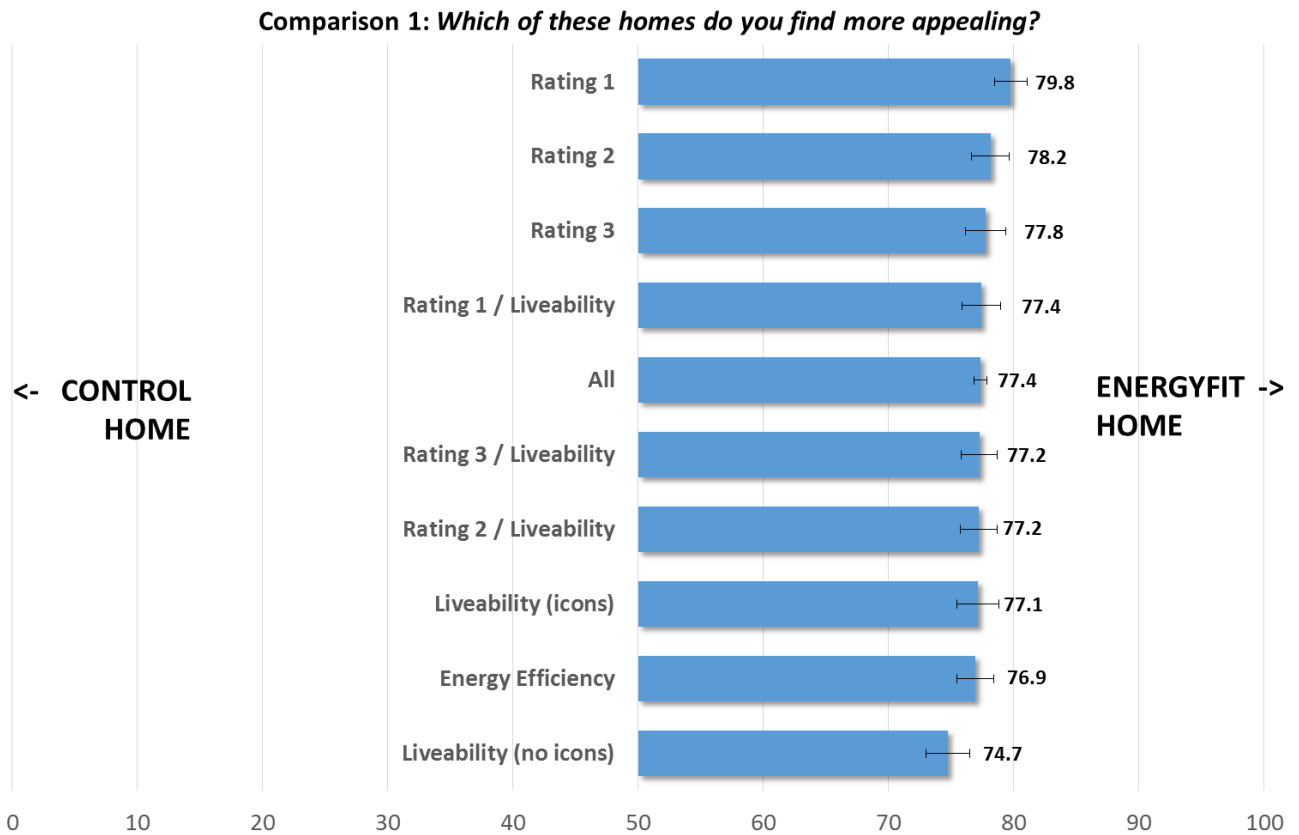


Figure 9 Ratings of which home the respondent found more appealing, EnergyFit home or Control home (N=2008)

⁷ $F(8, 1999) = .72, p = .68, \eta^2 = .003$.

Willingness to buy the EnergyFit home

Figure 10 displays ratings of whether the extra features of the EnergyFit home would make respondents more willing or less willing to buy it. On average, respondents stated the features would make them much more willing to buy it. There was no statistically significant effect for message frame condition.⁸

Comparison 1: Would the extra features of Home 2 (EnergyFit Home) make you...

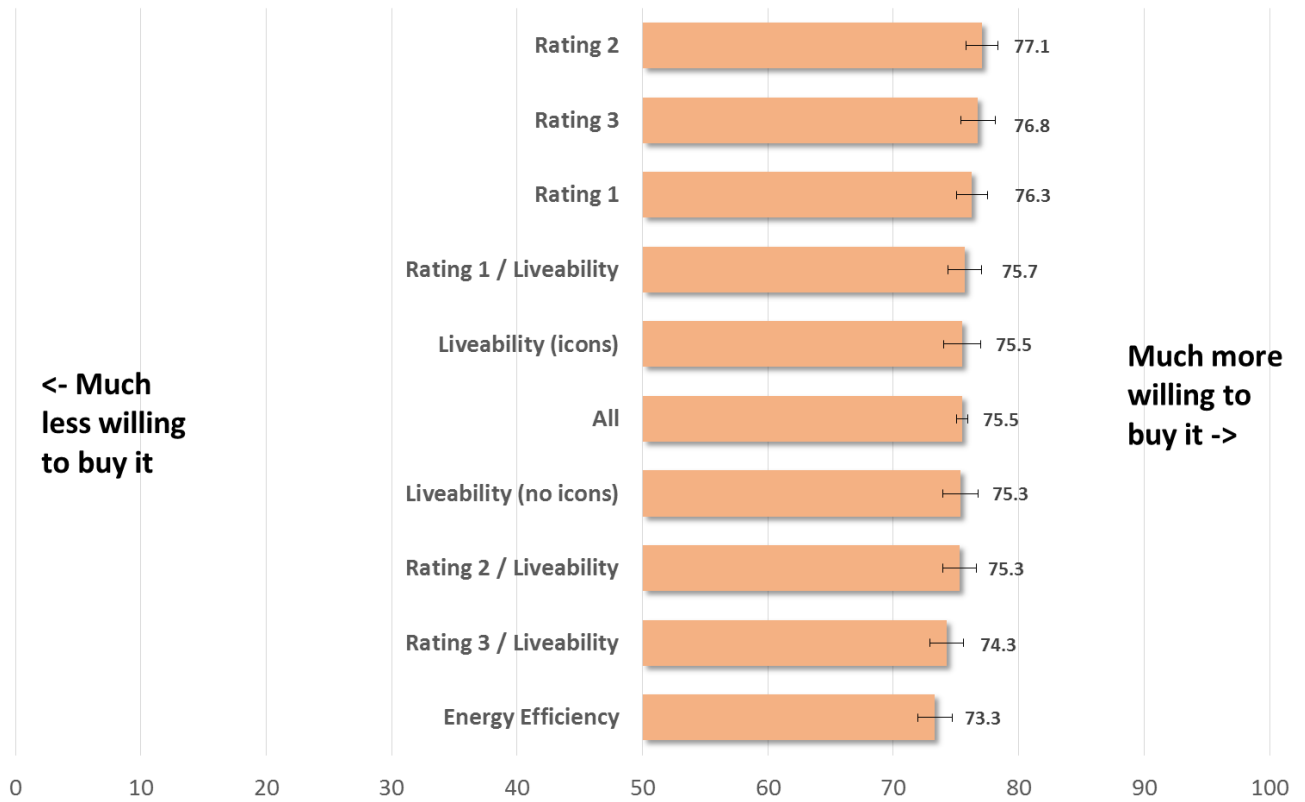


Figure 10 Ratings of whether the extra features of the EnergyFit home would make respondents more willing to buy it (N=2008)

⁸ $F(8, 1999) = .76, p = .64, \eta^2 = .003$.

Willingness to pay the estimated asking price of the EnergyFit home

Figure 11 displays respondents' ratings of their willingness to pay the asking price they estimated for the EnergyFit home. On average, respondents stated they would be at least moderately willing to pay their estimated asking price. There was a statistically significant effect for framing condition.⁹ Respondents in the Rating 3/Liveability condition were significantly less willing to pay their estimated asking price than respondents in both the Rating 1/Liveability condition and the Rating 2/Liveability condition.

Comparison 1: *Given what you know, would you be willing to pay the asking price you have indicated for Home 2 (EnergyFit home)?*

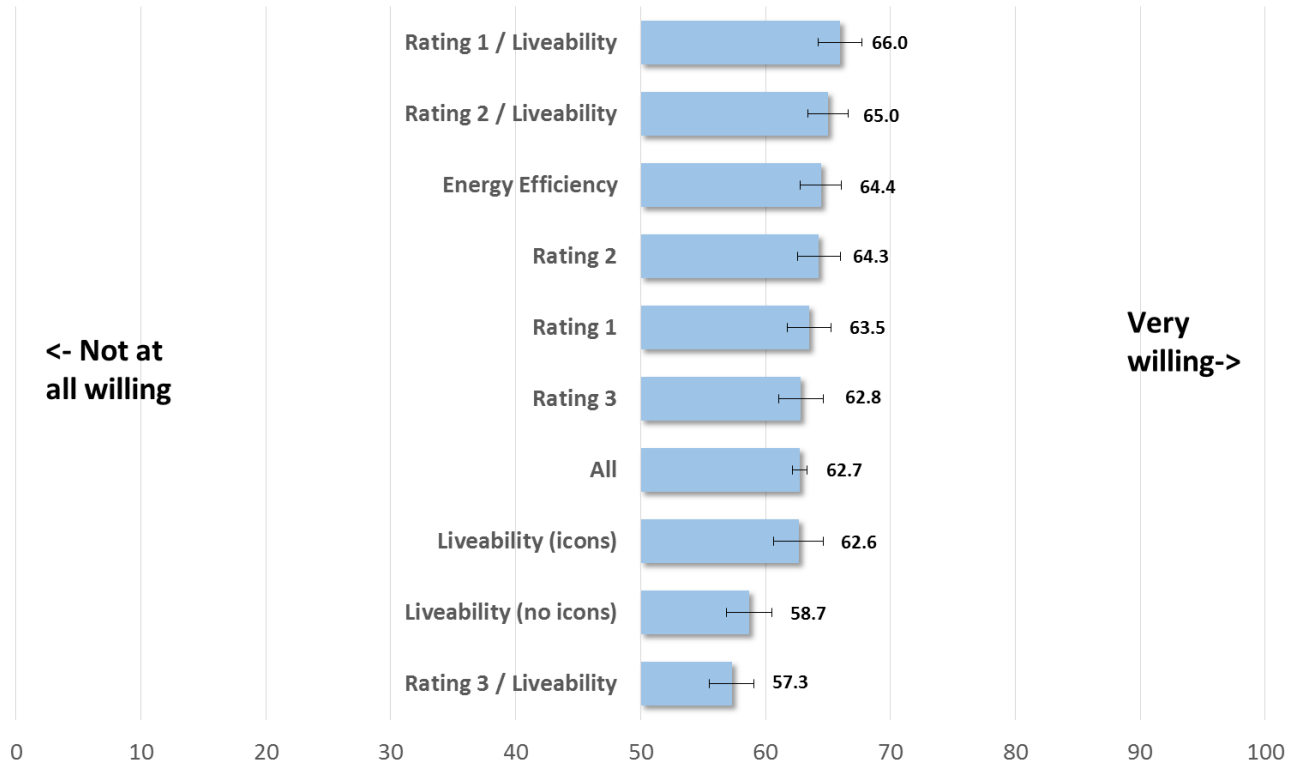


Figure 11 Ratings of willingness to pay estimated asking price for EnergyFit home (N=2008)

There was a small but statistically significant negative relationship between estimated asking price and willingness to pay ($r = -.11, p < .001$), such that higher estimated asking prices was associated with a decreased willingness to pay that price.

4.4 Home evaluations. Comparison 2: Control home versus Features home

The purpose of this comparison was to establish the extent of perceived benefits people place on non-energy related home features important to the buyer. The Features home contained identical information to the Control home, with the addition of the four non-energy related features selected in the home selection exercise.

Estimated asking price of the Features home

In total, respondents estimated the Features home to cost on average \$961,699, compared to an average of \$620,718 for the control home. This represents an average increase of 35.5% in estimated property value with the inclusion of the respondents' four nominated non-energy related features. This is slightly lower than the average increase in estimated value of 42% with the inclusion of an EnergyFit message.

⁹ $F(8, 1999) = 2.70, p = .006, \eta^2 = .01$.

Likelihood of visiting, appeal, willingness to buy, and willingness to pay for the Features home

Figure 12 shows respondents' ratings of their likelihood of visiting, appeal, willingness to buy, and willingness to pay their estimated price of the non-energy related Features home compared to the Control home. A comparison with the combined ratings of the EnergyFit home is also given (EnergyFit ratings are shown in the figure in light blue). On average, people stated they were much more likely to visit the Features home than the Control home, found it more appealing, were more willing to buy it, and were willing to pay their estimated price. Ratings were very similar to the preferences shown toward the EnergyFit home in Comparison 1, with the exception of willingness to pay the estimated price.

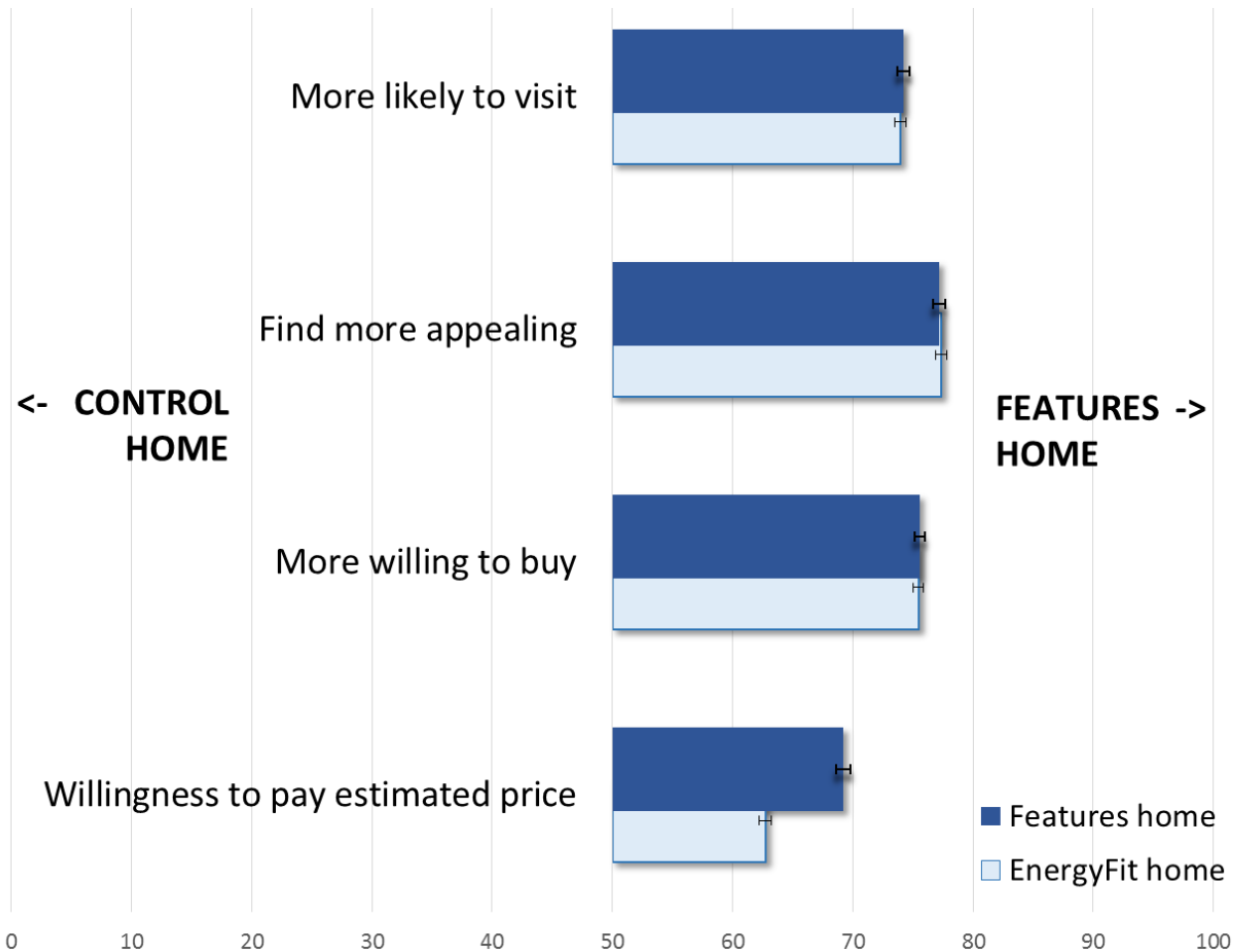


Figure 12 Ratings of likelihood of visiting, appeal, willingness to buy, and willingness to pay for the Features home compared with the Control home (N=2008)

4.5 Home evaluations. Comparison 3: EnergyFit home versus Features home

In the third comparison, respondents were shown the EnergyFit home and the Features home. Prices for both homes were left blank.

Estimated asking price of the EnergyFit home and the Features home

Respondents were asked to estimate the price of both homes. Figure 13 displays the average estimated prices broken down by message frame condition. While there were no statistically significant differences within conditions between the EnergyFit home and the Features home, trends across conditions suggest the first estimated price serves as an ‘anchor point’ for the estimate of the second price—that is, the estimated price of the Features home is influenced by the respondent’s estimate of the EnergyFit home price (with the exception of the Energy efficiency frame). Across all conditions, there was no statistically significant difference in price estimates between the EnergyFit and Features homes.

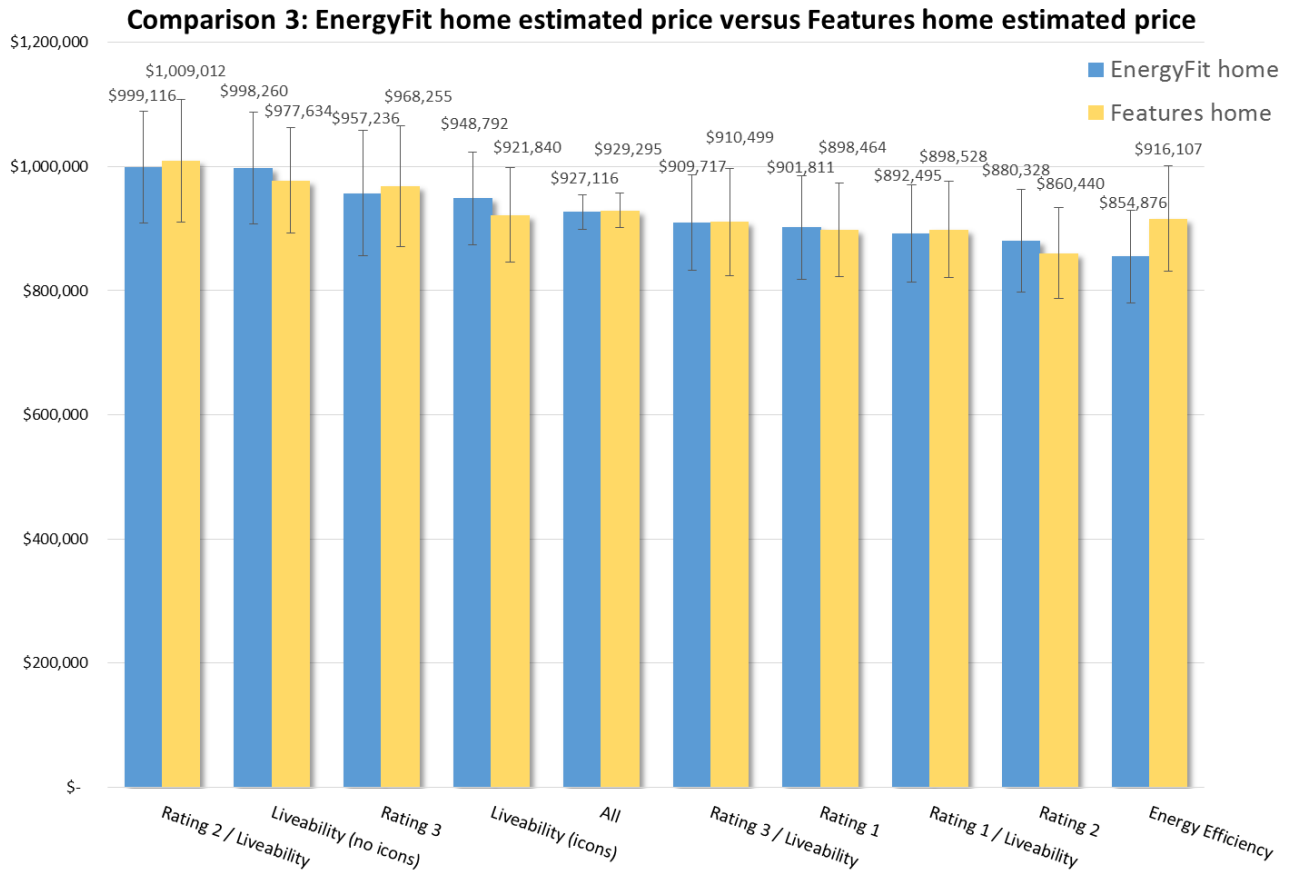


Figure 13 Estimated asking prices for EnergyFit home and Features home, by condition (N=2008)

Likelihood of visiting the EnergyFit home or the Features home

Respondents were asked whether they would be more likely to visit the EnergyFit home or the Features home (Figure 14). There was a statistically significant effect for message framing condition.¹⁰ Overall, respondents were slightly more likely to visit the Features home. People were least likely to visit the EnergyFit home in the Energy efficiency condition, followed by the Rating 1 and Rating 2 conditions, and the Liveability (no icons) condition. People were most likely to visit the EnergyFit home in the Liveability (icons) condition, followed by the Rating 2/Liveability and Rating 3/Liveability conditions, the Rating 2 condition and the Rating 1/Liveability condition.

Comparison 3: Which of these homes would you be more likely to visit for a home open?

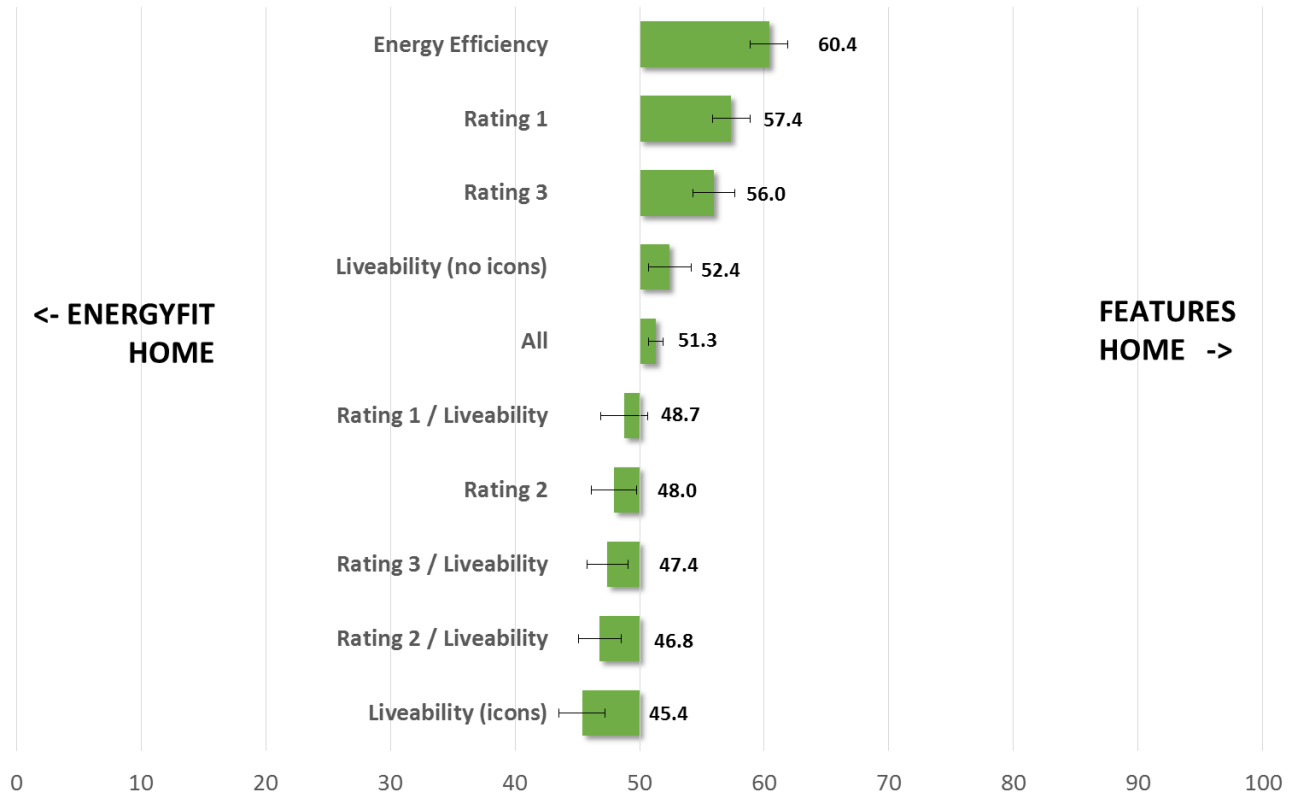


Figure 14 Ratings of which home the respondent would be more likely to visit, EnergyFit home or Features home (N=2008)

¹⁰ F (8, 1999) = 10.11, $p < .001$, $\eta^2 = .04$.

Appeal of the EnergyFit home versus the Features home

Respondents were asked to rate whether they found the EnergyFit home or the Features home more appealing (Figure 15). Again, there was a statistically significant effect for message framing condition.¹¹ Overall, respondents rated the Features home as very slightly more appealing. The EnergyFit home was least appealing in the standard energy efficiency message condition, followed by the Rating 1 and Rating 3 conditions, and the Liveability (no icons) condition. The EnergyFit home was the most appealing in the Rating 2/Liveability condition, followed by the Liveability (icons) condition, the Rating 3/Liveability condition, and the Rating 1/Liveability condition.

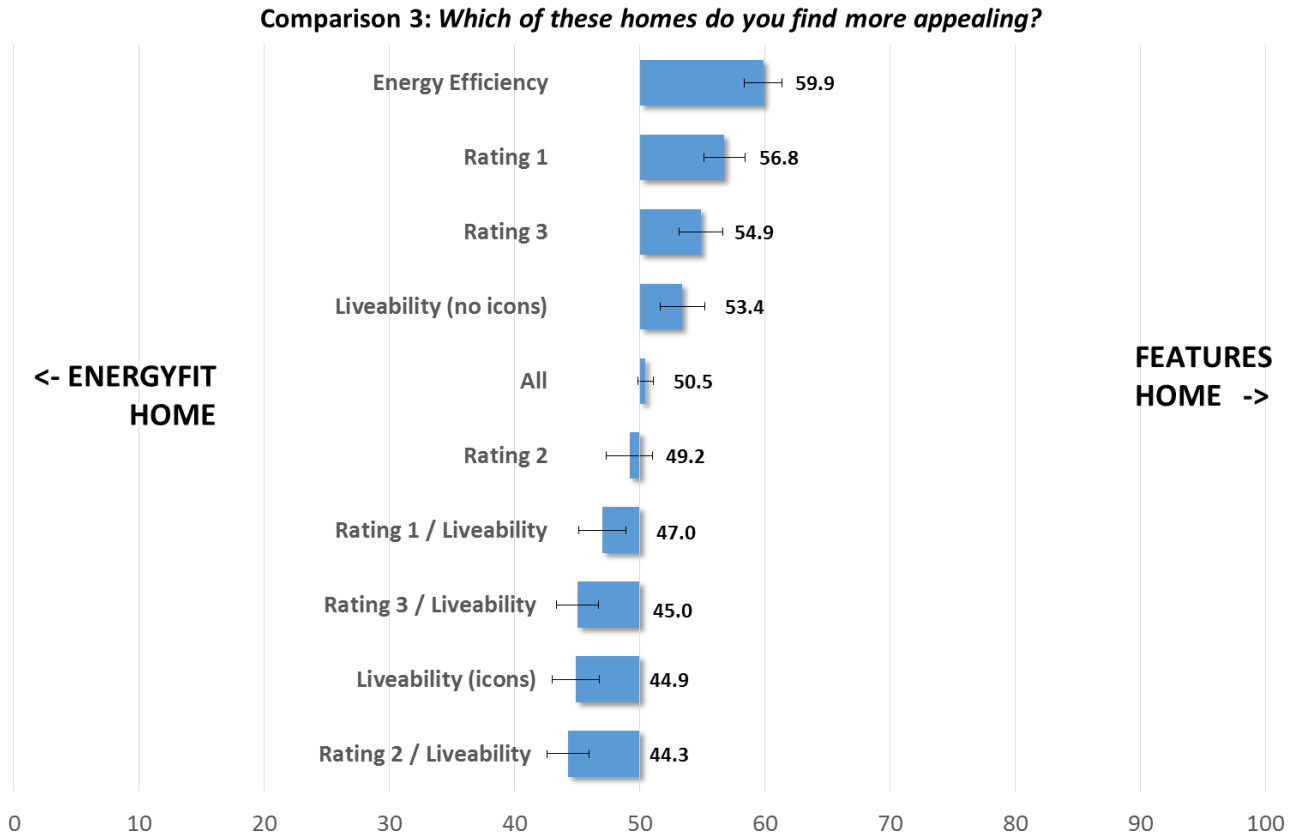


Figure 15 Ratings of which home the respondent found more appealing, EnergyFit home or Features home (N=2008)

¹¹ $F(8, 1999) = 11.20, p < .001, \eta^2 = .05$.

Willingness to pay estimated asking price of the EnergyFit home versus the Features home

Respondents were asked to rate their willingness to pay their estimated price for the EnergyFit home in the context of the Features home comparison (Figure 16). There was a marginally statistically significant effect for message framing condition.¹² Overall, respondents indicated moderate willingness to pay their estimated price for the EnergyFit home. This willingness was slightly lower in Liveability/Rating 3 and Liveability (no icons) conditions than in the Rating 1, Rating 1/Liveability, and Rating 2/Liveability conditions. There were no significant differences between the remaining conditions. The numbers in parentheses in Figure 16 represent the difference scores in willingness to pay for the EnergyFit home in the current comparison compared with the comparison with the Control home. Overall, willingness to pay was slightly reduced by the presence of a Features home as a comparison. This reduction was strongest for the Energy efficiency condition.

Comparison 3: Given what you know, would you be willing to pay the asking price you have indicated for Home 1 (EnergyFit home)?

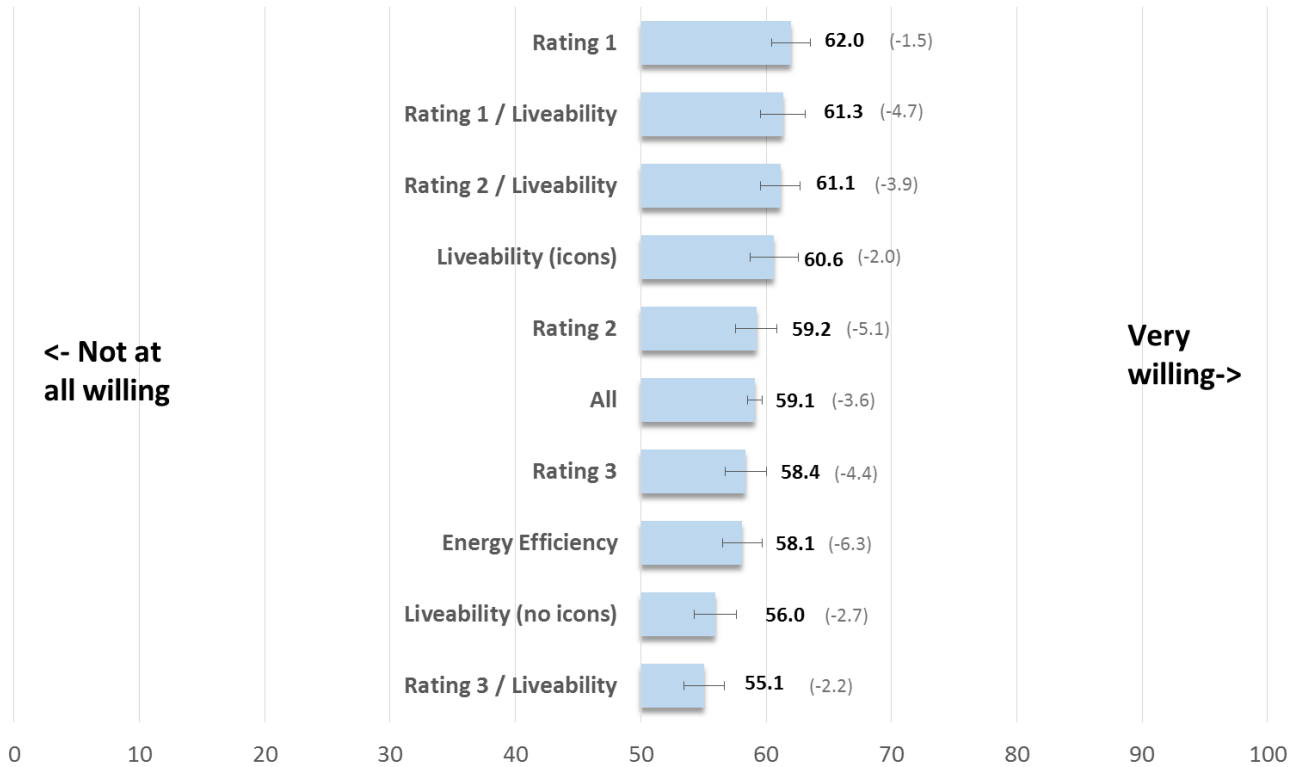


Figure 16 Ratings of willingness to pay estimated asking price for EnergyFit home, in context of a Features home comparison (N=2008) (Figures in parentheses denote the difference in ratings for willingness to pay when EnergyFit home is considered in isolation)

4.6 Home evaluations. Combination assessment: The Ultimate home

The purpose of this compilation was to test the influence of pairing different EnergyFit message frames with Features important to the individual. Is there a decay in estimated price, or are EnergyFit attributes and non-energy related Features additive?

Estimated asking price of the Ultimate home

Figure 17 shows respondents' estimated asking price for the Ultimate home—a combination of EnergyFit and non-energy related features. On average, respondents' estimated the asking price of the Ultimate home to be \$926,487. There was no statistically significant effect for message frame condition.¹³

¹² $F(8, 1999) = 2.15, p < .001, \eta^2 = .01$.

¹³ $F(8, 1999) = 0.55, p = .82$.

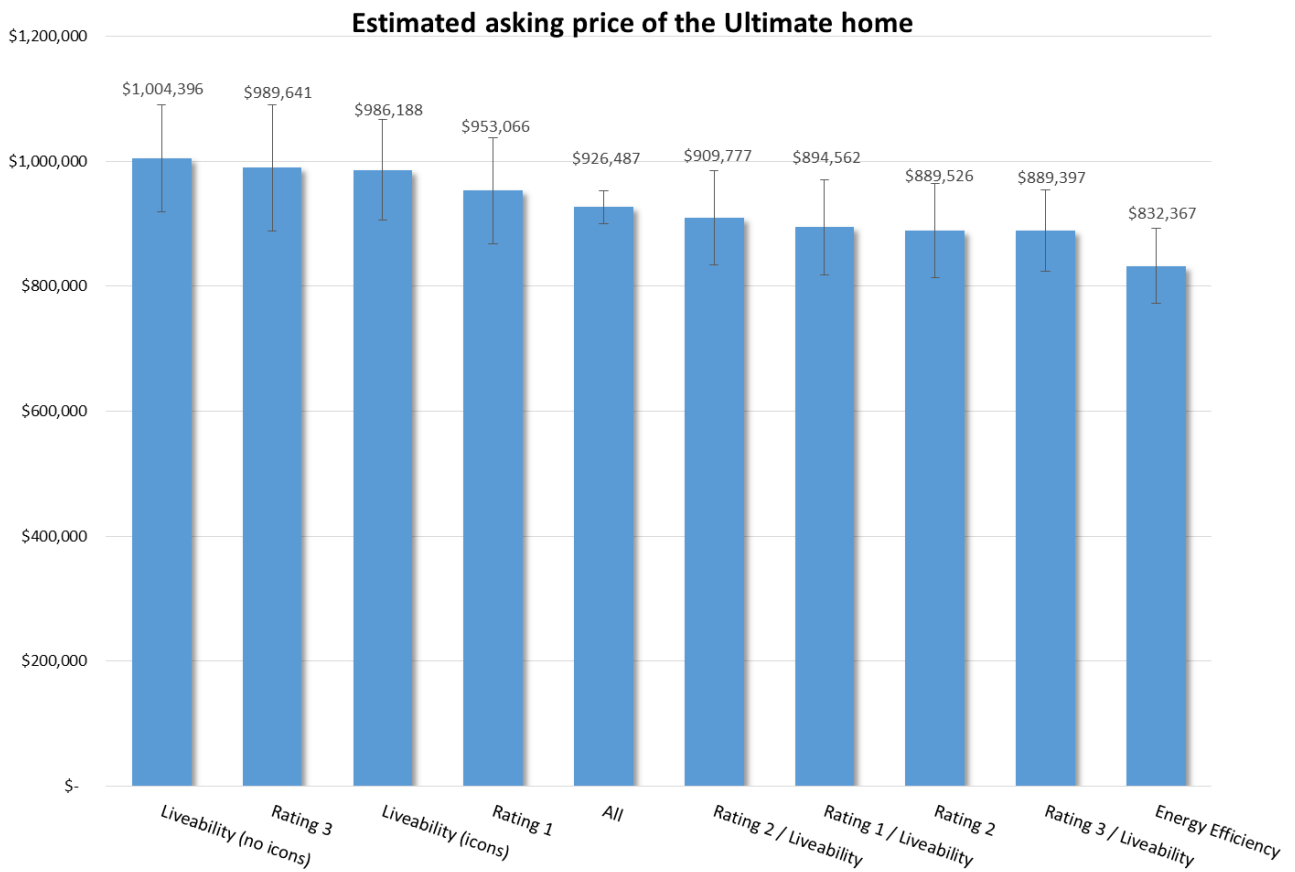


Figure 17 Respondents' estimated asking price of the Ultimate home (N=2008)

Appeal of the Ultimate home

Figure 18 displays ratings of appeal for the Ultimate home. There were no statistically significant differences based on message frame condition.¹⁴ On average, respondents rated the Ultimate home as moderately to strongly appealing.

¹⁴ $F(8, 1999) = 1.22, p = .29, \eta^2 = .005$.

Combination: How appealing do you find this home (Ultimate home)?

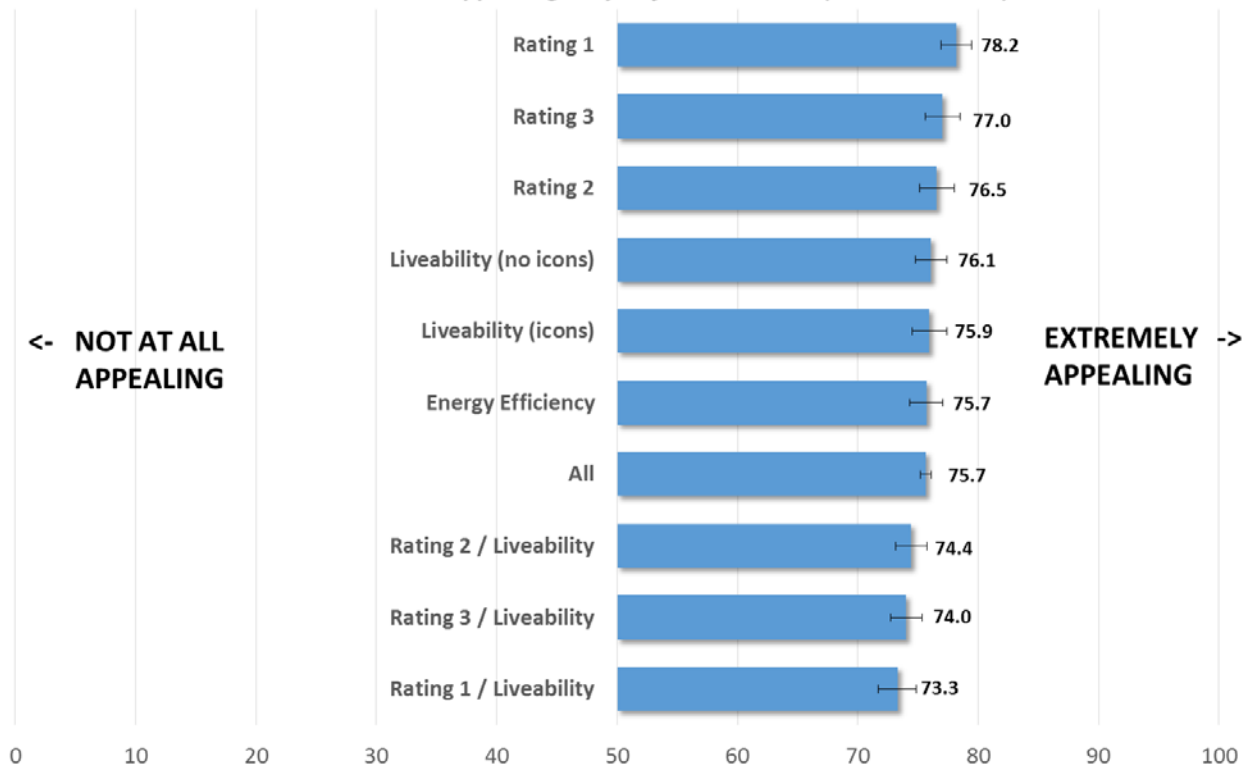


Figure 18 Respondents' ratings of how appealing they found the Ultimate home (N=2008)

Willingness to pay for the Ultimate home

Figure 19 displays respondents' ratings of willingness to pay their estimated asking price for the Ultimate home. There was no statistically significant effect for message frame testing.¹⁵ On average, respondents were moderately to very willing to pay the asking price they estimated.

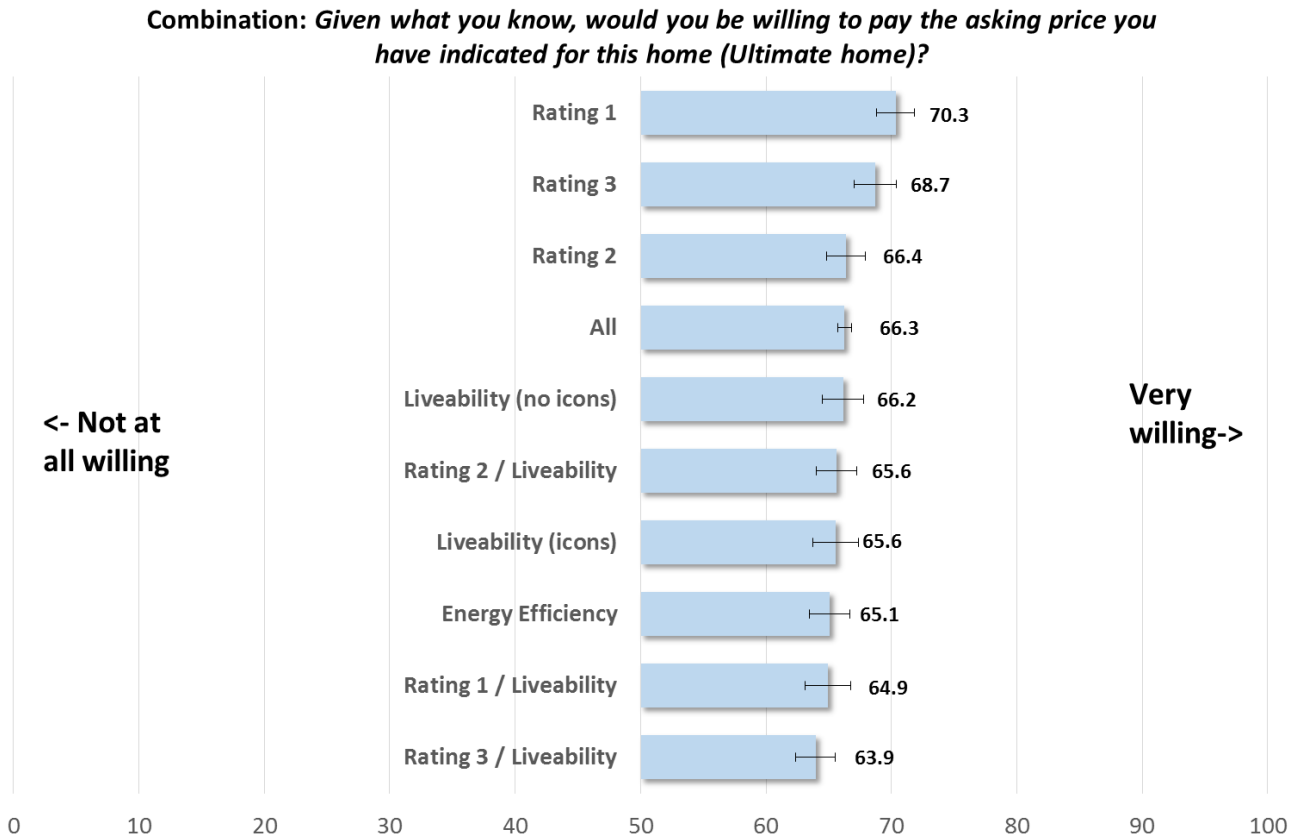


Figure 19 Respondents' ratings of willingness to pay their estimated asking of the Ultimate home (N=2008)

Comparing estimated asking prices of all homes

Table 17 displays a summary of the estimated price of all homes compared to the control price (the control price was based on the respondents' desired maximum price for purchasing, less 5%). On average, all homes were perceived as more expensive than the Control home. When comparing the five overall respondent price estimates, a statistically significant difference emerged.¹⁶ Prices given to the EnergyFit home (when compared to the Control) were on average significantly higher than all other price estimates. Differences in prices for the remaining estimates did not reach statistical significance. There did not appear to be an additive influence for EnergyFit features and non-energy related Features, as price estimates for the Ultimate home were no different than estimates for the Feature home, or than estimates of the EnergyFit home when compared with a Feature home.

Table 17 Respondents' estimates of different homes compared with the control price, by message frame condition (N=2008)

message fraME	CONTROL	ENERGYFIT HOME 1*	ENERGYFIT HOME 2*	FEATURE HOME 1**	FEATURE HOME 2**	ULTIMATE HOME
Energy Efficiency	\$604,141	\$1,088,274	\$854,876	\$916,107	\$969,525	\$832,367
Rating 1	\$641,860	\$1,014,312	\$901,811	\$898,464	\$982,843	\$953,066
Rating 2	\$628,488	\$1,047,534	\$880,328	\$860,440	\$943,667	\$889,526

¹⁵ $F(8, 1999) = 1.46, p = .17, \eta^2 = .006$.

¹⁶ $F(4, 2003) = 8.47, p < .001, \eta p^2 = .02$.

message fraME	CONTROL	ENERGYFIT HOME 1*	ENERGYFIT HOME 2*	FEATURE HOME 1**	FEATURE HOME 2**	ULTIMATE HOME
Rating 3	\$609,266	\$1,183,081	\$957,236	\$968,255	\$903,901	\$989,641
Liveability (icons)	\$626,372	\$1,091,852	\$948,792	\$921,840	\$1,002,086	\$986,188
Rating 1/Liveability	\$604,526	\$1,001,198	\$892,495	\$898,528	\$904,752	\$894,562
Rating 2/Liveability	\$606,549	\$1,005,476	\$999,116	\$1,009,012	\$939,524	\$909,777
Rating 3/Liveability	\$588,576	\$1,073,086	\$909,717	\$910,499	\$940,157	\$889,397
Liveability (no icons)	\$681,049	\$1,149,520	\$998,260	\$977,634	\$1,065,147	\$1,004,396
All	\$620,718	\$1,071,145	\$927,116	\$961,699	\$929,295	\$926,487

* EnergyFit home 1 is the estimate when comparing to the Control home, EnergyFit home 2 is the estimate when compared to the Features home.

** Feature home 1 is the estimate when comparing to the Control home, Feature home 2 is the estimate when compared to the EnergyFit home.

4.7 Open-ended responses

As an initial question in this section, respondents were asked whether they had noticed any images, such as logos, visuals, or ratings, in addition to the picture of the home icon, on the homes they were asked to compare. These are broken down by message frame condition in Table 18. Most respondents (59.6%) reported seeing additional images. The condition with the highest recollection rate was Rating 1 (81.5%). The next most common were each of the Rating conditions paired with a Liveability message. The lowest recollection rate (for a condition in which an extra image did appear) was the Rating 2 frame.

Table 18 Percentage of respondents who reported seeing a logo, visual, or rating, by message frame condition (N=2008)

message fraME	YES	NO
Energy Efficiency	19.1%	80.9%
Rating 1	81.5%	18.5%
Rating 2	56.2%	43.8%
Rating 3	65.2%	34.8%
Liveability (icons)	69.4%	30.6%
Rating 1/Liveability	73.0%	27.0%
Rating 2/Liveability	72.4%	27.6%
Rating 3/Liveability	74.6%	25.4%
Liveability (no icons)	23.5%	76.5%
All	59.6%	40.4%

Those who could remember seeing an additional image were asked a series of further questions about the image(s). Firstly, respondents were asked to describe the additional images. Responses were categorised into common themes (Table 19). Both the Rating 1 and Rating 3 message frame images were strongly associated with star ratings, however this association was attenuated when coupled with Liveability messages (cells shaded green). When Liveability icons are present, there is increased attention to non-energy related features of the house (cells shaded blue). These icons were also more likely to make people think of heating and cooling (cells shaded red).

Table 19 Respondents' description categories for any additional images they noticed, by message frame (N=1197)

Number of respondents in each	Energy efficiency	Rating 1	Rating 2	Rating 3	Liveability (icons)	Rating 1 Liveability	Rating 2 Liveability	Rating 3 Liveability	Liveability (no icons)	Total
	230	222	217	201	235	211	243	236	213	2008

condition										
Energy rating		51	34	12	9	34	18	22	2	182
Star rating		61		64	3	19	1	27	1	176
Icons	11	7	7	9	39	15	33	16	10	147
Key features	7	7	7	8	30	18	23	20	14	134
Rating logo		16	3	13	10	17	18	17		94
Energy efficiency rating	2	6	22		12	6	19	5		72
Graph			21				11			32
Energy saving	1	9	2		5	1	3	6	1	28
Extra information	2			4	6	3	1	2	2	20
Efficiency			3		2	3	5	5		18
Heating and cooling					4	5	3	4		16
Sustainability		1	1			2	4	6	1	15
Energy usage		4	4	1		2	2			13
Value			1	1		1	2	1	2	8
Ratings and endorsements					3	1		1		5
Regulations					1					1
Miscellaneous	7	6	6	6	14	4	11	8	6	68
Not applicable		1			1		1	4	1	8
Don't know	7	4	7	5	15	11	12	13	6	80
Missing	7	8	4	8	9	12	9	19	4	80
Total	44	181	122	131	163	154	176	176	50	1197

Respondents were asked what they thought these additional images meant. Responses were again categorised into common themes (Table 20). The Rating 1 and Rating 2 conditions were more heavily associated with cheaper long-term running costs (cells shaded green). Images in message frames with Liveability icons were more likely to be associated with ratings and features other than energy, but including 'environmentally friendly' features (cells shaded orange). These messages were also more likely to be associated with notions of endorsement and accreditation (cells shaded blue)

Table 20 Respondents' meaning categories for additional images they noticed, by message frame (N=1197)

	Energy efficiency	Rating 1	Rating 2	Rating 3	Liveability (icons)	1/ Rating Liveability	2/ Rating Liveability	3/ Rating Liveability	Liveability (no icons)	Total
Number of respondents in each condition	230	222	217	201	235	211	243	236	213	2008
Energy efficiency rating of the house	3	101	52	48	34	50	40	43	3	374
Energy efficiency and cheaper running costs	2	19	18	2	4	8	12	4	1	70
Key attributes		1	2	4	16	4	18	8	2	55
Energy use savings		16	6	2	4	6	7	4	1	46
A rating		3	2	4	3	10	11	12		45
Added extras/benefits	2	3	2	4	8	10	6	6	1	42
Added to appeal/marketing	4	2	3	5	7	1	7	9	4	42

Environmentally friendly features	3	1	8	4	8	15		39		
Endorsement/accreditation	1	2	1	9	6	3	8	30		
Housing built sustainably	1	1	3	4	6	5	5	2	27	
Better quality	1	1	1	9	3	3	2	5	2	27
A quick visual snapshot	1	1	8	6	4	6		26		
Extra information		2	1	3	4	3	2	2	17	
Energy and water use	1	1	2	5	1	3	1	14		
Environmental impact	1	3	3	1	2	4		14		
House price	1	1	2	2	1	1	1	9		
Savings	2	2	1	1	1	1	1	8		
Clean energy	1	4	2	1				8		
Ability to compare	1	1	2	1			2	7		
Healthy/safe		1	2	1			1	5		
Efficiency of energy saving device/appliance	1	1	1	1				4		
Fitted with heating/cooling units		1	1				1	3		
High standard of materials and workmanship			1				2	3		
How much energy house generates		1						1		
Miscellaneous	11	6	5	12	13	5	10	7	9	78
Nothing	4	4	3	6	5	2	6	12	2	44
Don't know	11	8	11	13	16	18	13	14	13	117
Missing	3	2	2	5	2	2	3	2	1	22
Not applicable		1	1	1	3	7	5	2		20
Total	44	181	122	131	163	154	176	176	50	1197

Participants were asked whether the additional images had influenced their decisions when comparing the homes, and if so how (Table 21). Rating 1 had the most positive influence on average, with 74.6% of respondents who remembered seeing an image in this message frame condition saying it had made the EnergyFit home more appealing. The next most positive influence was for the Liveability/Rating 2, and Rating 2 conditions. The Rating 3 and Liveability (no icons) conditions were the least positively influential of the message frames containing images.

Table 21 Respondents ratings of whether images made a difference in comparing houses, by message frame (N=1197)

message fraME	NO, IT MADE NO DIFFERENCE	YES, IT MADE THE HOME MORE APPEALING	YES IT MADE THE HOME LESS APPEALING
Energy efficiency (n=44)	50.0%	45.5%	4.5%
Rating 1 (n=181)	25.4%	74.6%	0%
Rating 2 (n=122)	32.0%	67.2%	0.8%
Rating 3 (n=131)	49.6%	48.1%	2.3%
Liveability (icons) (n=163)	35.0%	62.6%	2.5%
Rating 1/Liveability (n=154)	35.7%	63.6%	0.6%
Rating 2/Liveability (n=176)	28.4%	70.5%	1.1%
Rating 3/Liveability (n=176)	38.6%	58.5%	2.8%

Liveability (no icons) (n=50)	52.0%	48.0%	0%
All	35.8%	62.7%	1.5%

Perceived meaning of an energy efficient home

Respondents were asked what sort of features they thought would be included in a home that was accredited as 'more energy efficient than the minimum building code'. The first three responses for each respondent were recorded (Table 22). The most commonly cited feature was solar panels, followed by insulation. Other commonly mentioned features included double glazing and rainwater tanks.

Table 22 Most commonly mentioned features of a home 'more energy efficient than the minimum building code' (N=2008)

FEATURE	FIRST SELECTION	SECOND SELECTION	THIRD SELECTION	TOTAL
Solar panels	596	202	88	886
Insulation	256	139	108	503
Double glazing	100	83	69	252
Rainwater tanks	41	108	80	229
Solar hot water system	59	94	35	188
Efficient lighting	70	55	45	170
Orientation	52	41	29	122
Water saving fixtures	27	53	28	108
LED lights	53	34	21	108
Energy efficient appliances	37	23	21	81
Window treatments	15	26	23	64
Efficient heating/cooling	16	27	21	64
Cross-ventilation	12	26	24	62
Passive heating/cooling	27	18	14	59
Solar heating	34	18	6	58

Questions respondents would ask if they visited the homes

Respondents were asked what questions they might ask a real estate agent if they went to inspect one of the homes presented in the comparisons. Respondents could provide up to three questions. Responses were summarised into topics and presented in Table 23.

Table 23 Summary of questions respondents might ask an agent upon inspecting one of the homes in the study

	Energy efficiency	Rating 1	Rating 2	Rating 3	Liveability (icons)	Rating 1/ Liveability	Rating 2/ Liveability	Rating 3/ Liveability	Liveability (no icons)	Total
Number of respondents in each condition	230	222	217	201	235	211	243	236	213	2008
pricing	162	168	172	162	158	153	184	181	168	1508
price	59	64	65	60	71	56	82	71	66	594
annual rates/insurance	33	21	29	29	20	21	24	34	30	241

	Energy efficiency	Rating 1	Rating 2	Rating 3	Liveability (icons)	Rating 1 Liveability	Rating 2 Liveability	Rating 3 Liveability	Liveability (no icons)	Total
running costs/savings	12	37	32	21	26	18	30	25	24	225
reason for sale	22	10	13	15	11	14	14	19	10	128
sales information	9	18	7	13	14	17	10	13	19	120
body corporate (fees)	5	2	6	3	5	7	10	4	4	46
how long on the market	4	1	7	6	1	3	3	3	4	32
rental potential	7	2	4	5	3	2	1	4	1	29
resale	4	3	1	5	4	1	4	4	1	27
additional costs	4	5	4		2	5	2	2	2	26
other offers/interest	2	2	2	2	1	5	1	1	3	19
value for money	1	3	1	2		4	2		2	15
rebates/buyer concessions			1	1			1	1	2	6
structure and construction	144	104	119	105	122	93	121	137	133	1078
age of house	65	48	52	38	50	36	45	61	55	450
size house/block	15	8	15	12	16	12	18	11	18	125
construction materials	7	4	10	11	12	8	10	13	14	89
history	10	7	8	12	12	8	11	7	9	84
issues/problems	9	8	6	1	4	8	6	13	4	59
quality/condition	6	6	8	8	5		8	8	8	57
qualified builder/installer	14	6	4	2	8	5	4	6	7	56
renovations	8	9	7	8	4	3	4	6	4	53
termites/pests	3	2	5	6	4	5	6	8	8	47
orientation	4	4	3	4	4	5	5	3	2	34
house plan/interior design	3	2	1	3	3	3	4	1	4	24
features	64	109	85	67	112	96	106	75	61	775
energy efficiency/energy rating	15	22	23	18	30	22	26	23	18	197
solar	11	16	15	12	23	21	19	14	13	144
inclusions	12	13	10	10	7	8	8	5	6	79
how does it get that rating/how can you prove rating	2	15	7	1	7	11	14	8	3	68
water sustainability features	3	5	6	5	11	10	12	7	8	67
ongoing maintenance	5	8	5	5	8	8	6	4	2	51
age/lifespan of inclusions	5	11	3	6	3	1	2	2	2	35
what do icons/rating mean?		3	4	3	7	5	5	7		34
environmental impact	3	4	3	2	7	4	4	1	5	33
'green' inclusions	5	3	3		4	2	6	1	1	25
condition/quality of inclusions	1	7	3	3	2		1	2	1	20
potential for system upgrades/ developing house in future	2	1	2	2	1	3	1	1	2	15
benefits		1	1		2	1	2			7
area	89	49	67	61	65	56	89	84	102	662
neighbourhood	33	27	28	27	33	24	36	34	36	278

	Energy efficiency	Rating 1	Rating 2	Rating 3	Liveability (icons)	Rating 1 Liveability	Rating 2 Liveability	Rating 3 Liveability	Liveability (no icons)	Total
transport/roads	13	6	8	4	16	11	10	12	17	97
security/security of neighbourhood	14	4	7	7	3	4	14	9	8	70
neighbours	13	5	7	4	3	5	11	8	10	66
planned developments for area	3	3	4	6	3	5	5	5	17	51
noise	5	1	6	5	3	2	4	8	6	40
flood area/bushfire risk	4	3	3	7	1	2	4	4	2	30
internet services/phone reception	1		1		2	1	3	1	4	13
local council	3		1	1		1		2	2	10
pets			2		1	1	2	1		7
house (specifics)	35	52	43	39	52	51	37	52	36	397
insulation	11	12	7	9	15	9	12	10	6	91
heating/cooling	6	10	8	5	15	16	4	13	5	82
garden/irrigation	6	2	4	3	3	9	6	4	2	39
bedrooms	1	5	3	5	6	2	4	7	3	36
gas/utilities	5	2	6	1	3	3	2	6	6	34
bathrooms	1	4	3	6	3	2	2	3	4	28
parking/garage	1	1	2	3	2	2	1	3	6	21
kitchen	1	5	2	4	3	2		3		20
pool	1	5	1	2	1	5	1	1	1	18
glazing	2	3	5	1	1	1	3		1	17
sewerage		2					2	1	1	6
hot water		1	2					1	1	5
sales info	28	22	33	21	24	26	39	27	31	251
how does it compare to other houses	6	4	8	6	7	6	9	7	8	61
guarantee/warranty	6	3	10	4	5	3	8	3	7	49
building inspection report	5	6	5	2	4	5	8	2	8	45
can I request modifications	3	4	1	1	1	3	4	3	1	21
why/how much extra cost for green inclusions	2	3	1	1	3	1	5	1	1	18
building approval/restrictions	4		3		1	1	1	5	3	18
agents opinion	1	1	3	2	1	3		4	1	16
title	1	1		4	1	2	2		2	13
certification			2	1	1	2	2	1		9
awards								1		1
other	14	9	15	12	13	19	15	11	9	117
where is location	8	7	8	4	4	11	9	8	3	62
local environment	2		3	1	5	1	1	3		16
view	1		3	2		4	1			11
disabled/easy access	1			4	1				3	9
comfortable	2		1		1	1	3		1	9
deaths/crime in house				1	2	2	1		2	8

	Energy efficiency	Rating 1	Rating 2	Rating 3	Liveability (icons)	Rating 1 Liveability	Rating 2 Liveability	Rating 3 Liveability	Liveability (no icons)	Total
religious intolerance		2								2
null	154	153	117	136	159	139	138	141	99	1236
missing	121	116	86	113	117	112	109	111	82	967
don't know	21	22	23	6	26	15	12	21	9	155
NA	12	15	8	17	16	12	17	9	8	114
Total	690	666	651	603	705	633	729	708	639	6024

4.8 Predicting preferences for EnergyFit homes

The results from the home comparison evaluations reveals the importance of trade-offs. Specifically, asking potential buyers to choose between EnergyFit features and other home features important to the buyer (rather than assessing the appeal of EnergyFit features in isolation), attenuates the relative appeal of EnergyFit homes. Trade-off scenarios are also a much more accurate reflection of decision-making processes and choices in real life. For these reasons, in this section we base our analyses on preferences for EnergyFit homes on the third home comparison: the evaluation of the EnergyFit home when compared with the Features home.

Four questions were used as the basis for indicating preferences for the EnergyFit home:

- i. The estimated asking price of the EnergyFit home.
- ii. The appeal of the EnergyFit home when compared with the Features home.
- iii. The likelihood of visiting the EnergyFit home compared with the Features home.
- iv. The willingness to pay the estimated price of the EnergyFit home (in the context of evaluating this home alongside the Features home).

Income, age, gender, and location

Table 24 displays the relationships between preferences for the EnergyFit home, and the income levels and age of the respondents. Personal income was negatively related to estimated asking price of the EnergyFit home, but household income was positively related (although in both cases the relationships were small). Those with a higher personal income were slightly more likely to visit the EnergyFit home, while those with a higher household income were slightly less likely to visit it, when compared with a Features home. On average, older respondents thought the EnergyFit home would be worth less, although older respondents found the EnergyFit home more appealing, would be more likely to visit it than a Features home, and were more willing to pay their estimated asking price.

Table 24 Pearson correlations between income and age with price estimates preferences for EnergyFit home

ATTRIBUTE	PERSONAL INCOME (n=1615)	HOUSEHOLD INCOME (n=1740)	AGE (N=2008)
Estimated price	-.09**	.09**	-.10**
Which do you find more appealing?	.02	-.02	.08**
Which are you more likely to visit?	.05*	-.05*	.09**
Are you willing to pay estimated price?	-.04	.04	.07**

* $p < .05$; ** $p < .01$

There were no statistically significant differences in estimated price, appeal, likelihood of visiting, and willingness to pay based on gender.¹⁷

¹⁷ Estimated price: $t(2006) = -1.84, p = .07$; More likely to visit: $t(2006) = 1.20, p = .23$; Appeal: $t(2006) = .52, p = .61$; Willingness to pay: $t(2006) = 1.07, p = .29$.

Those in rural towns estimated the asking price of the EnergyFit home to be lower than those in capital cities, but the significance was marginal. There were no statistically significant differences in likelihood of visiting, appeal, or willingness to pay based on location (rural, regional, or city).¹⁸

Housing preferences

Figure 20 displays differences in the likelihood of visiting the EnergyFit home, compared to the Features home, based on the house type respondents selected in the home selection exercise. There was a small but statistically significant difference in likelihood of visiting the EnergyFit home based on selected home type.¹⁹ Those who selected a townhouse as their preferred home type were more likely to visit the EnergyFit home than were those who selected a standalone house or an apartment/unit.

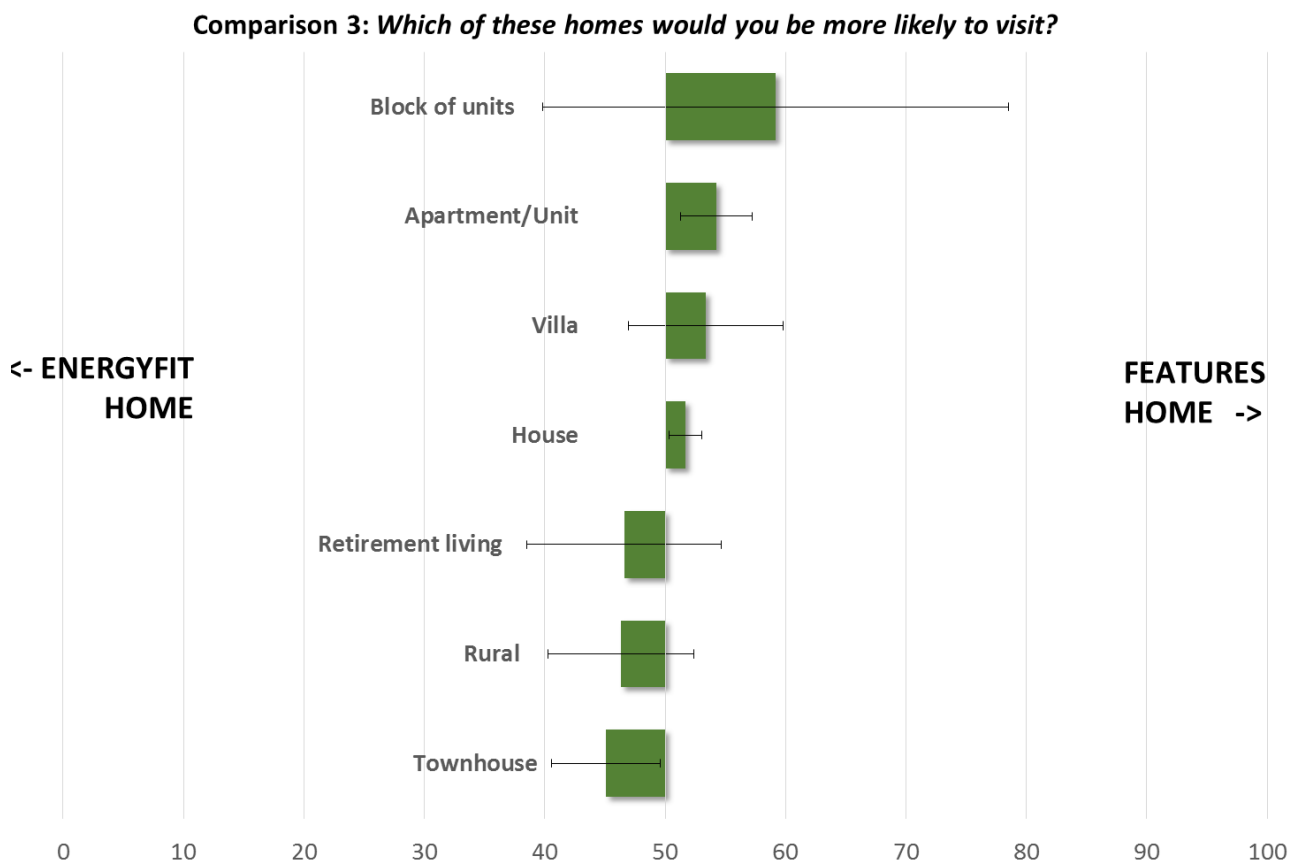


Figure 20 Respondents' ratings of likelihood of visiting the EnergyFit home versus the Features home, by selected home type preference (N=2008)

¹⁸ Estimated price: $F(3, 2004) = 3.17, p = .02$; More likely to visit: $F(3, 2004) = 1.39, p = .24$; Appeal: $F(3, 2004) = .83, p = .48$; Willingness to pay: $F(3, 2004), p = .92$.

¹⁹ $F(6, 2001) = 2.86, p = .01, \eta^2 = .008$

Figure 21 shows respondents' ratings of the appeal of the EnergyFit home over the Features home, broken down by their selected house type. Again, there was a small but statistically significant effect for home type preference.²⁰ Once more, those who selected a townhouse as their preferred home type found the EnergyFit home more appealing than were those who selected a standalone house or an apartment/unit.

Comparison 3: Which of these homes do you find more appealing?

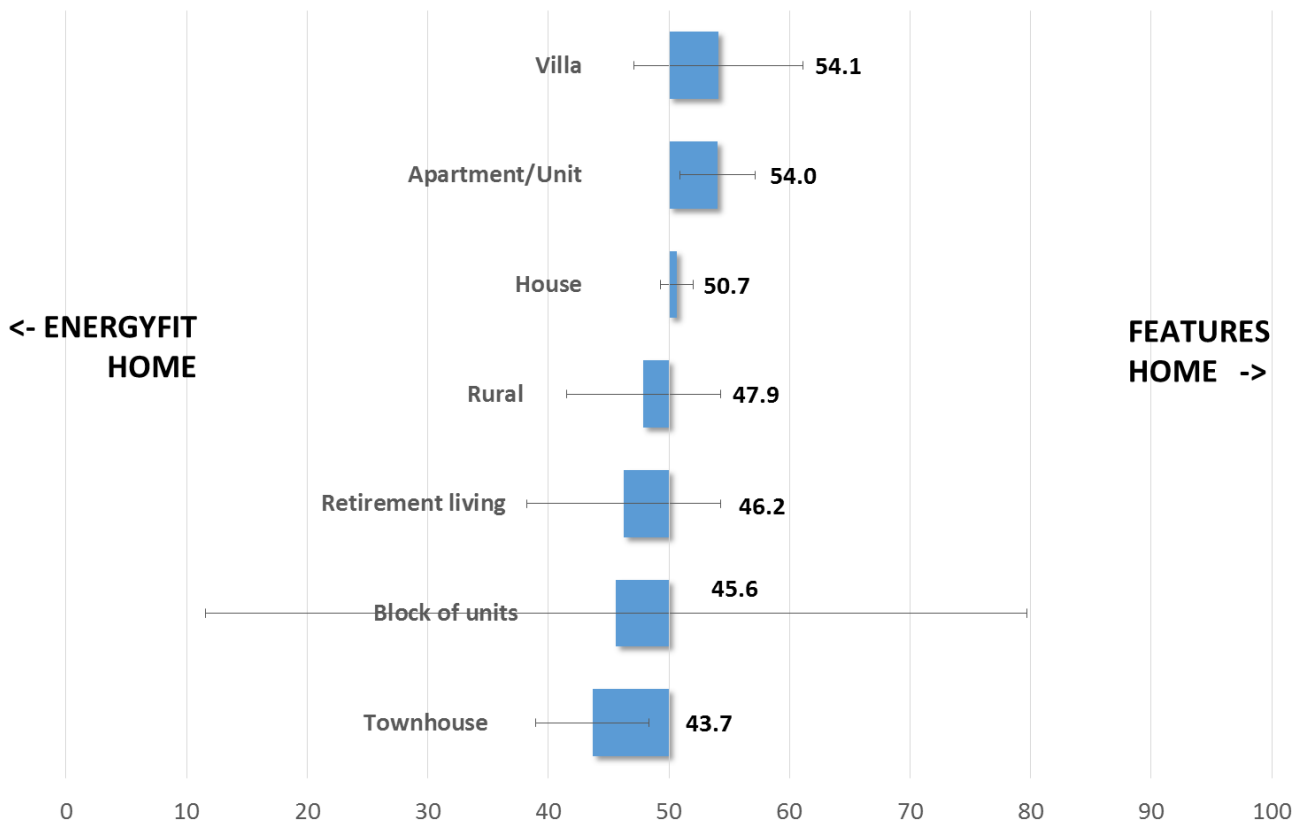


Figure 21 Respondents' rating of the appeal of the EnergyFit home versus the Features home, by selected home type preference (N=2008)

There were no statistically significant differences in willingness to pay the estimated asking price for the EnergyFit home based on the home type respondents selected in the home selection exercise.²¹

²⁰ $F(6, 2001) = 2.85, p = .01, \eta^2 = .009$

²¹ $F(4, 2003) = 1.76, p = .11, \eta^2 = .005$.

Liveability profile

Figure 22 displays ratings of the appeal of the EnergyFit home broken down by the respondents' Liveability profile. Differences did not reach statistical significance, possibly due to the small sample sizes in some of the profile types. The most detectable trend was those with a True Believer profile rating the EnergyFit home as more appealing than those with a Look at me profile.

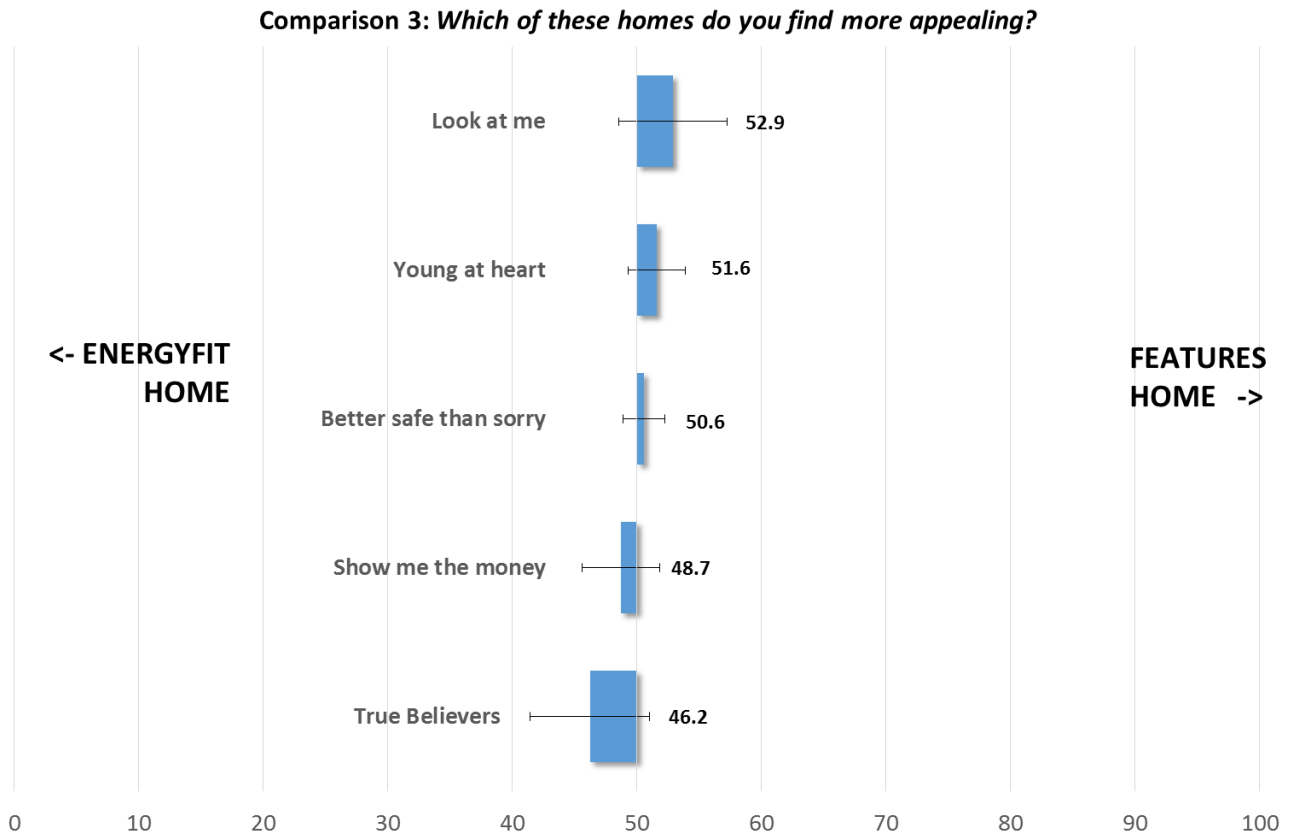


Figure 22 Respondents' ratings of the appeal of the EnergyFit home versus the Features home, by Liveability Profile (N=2008)

A separate series of analyses were conducted for only those respondents who were assigned to a condition with a Liveability message (Conditions 5, 6, 7, 8, and 9). This analysis was conducted to assess whether differences between the tailored messages themselves influenced preferences for the EnergyFit home. There was a significant effect for profile type on estimated asking price, with those in the True believer profile estimating a significantly higher asking price (\$1,325,455 on average) than those in the Young at heart profile (\$775,126 on average).²³ There were no statistically significant differences between profile types on likelihood of visiting, appeal, or willingness to pay the estimated asking price.²⁴

Current home ownership status, and future home purchasing intentions

Figure 23 shows ratings of the appeal of the EnergyFit home broken down by respondents' current home status. There was a marginally significant effect for home ownership status.²⁵ On average, those who were home owners not for the first time were more likely to find the EnergyFit home appealing than were those who were renting for the first time. There was no statistically significant effect for when people were considering purchasing their next home.²⁶

²² $F(4, 2003) = 1.73, p = .14, \eta^2 = .003$.

²³ $F(4, 1133) = 4.01, p = .003$

²⁴ Likelihood of visiting: $F(4, 1133) = .16, p = .96$; Appeal: $F(4, 1133) = 1.45, p = .22$; Willingness to pay: $F(4, 1133) = .46, p = .76$.

²⁵ $F(4, 2003) = 2.87, p = .01, \eta^2 = .006$.

²⁶ $F(5, 2002) = 0.55, p = .74, \eta^2 = .001$.

Comparison 3: Which of these homes do you find more appealing?

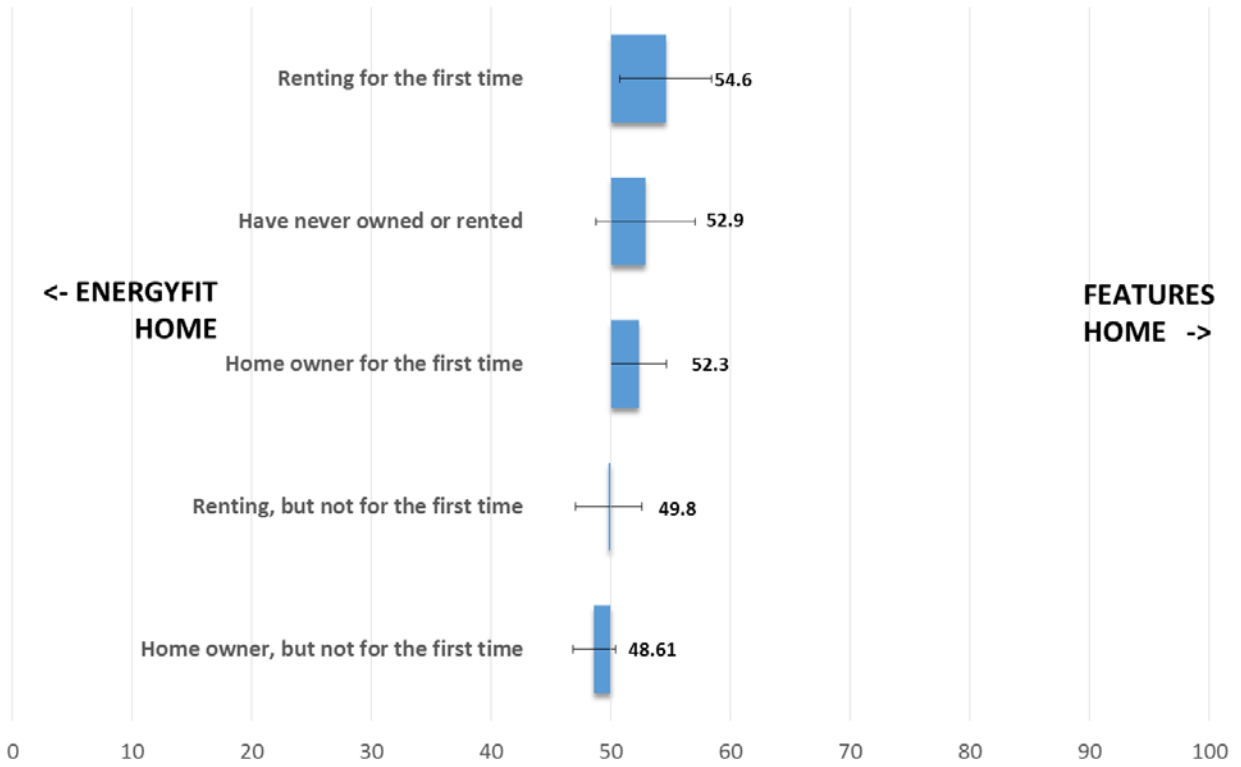


Figure 23 Respondents' ratings of the appeal of the EnergyFit home versus the Features home, by current home status (N=2008)

Home comfort preference and housing criteria

Figure 24 displays respondents' ratings of the appeal of the EnergyFit home, broken down by what they consider is the most important characteristic of a comfortable home. There was a statistically significant effect for comfort preference.²⁷ People who considered a comfortable home to be one that says something about their values, or one that is easier and more healthy to heat and cool, found the EnergyFit home more appealing than those who thought a comfortable home was an entertainment venue, one that suits their lifestyle, or one that reflects their personal style.

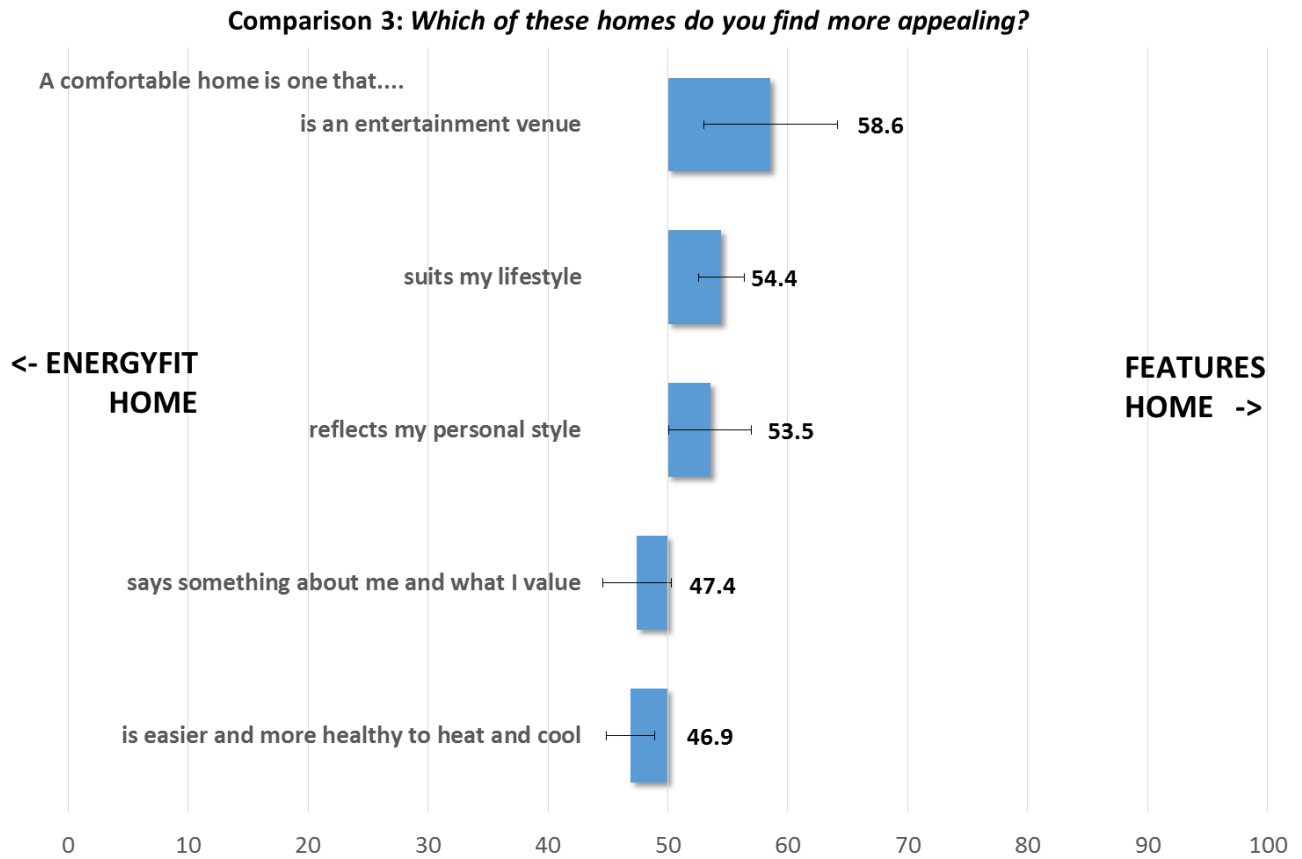


Figure 24 Respondents' ratings of the appeal of the EnergyFit home versus the Features home, by home comfort preference (N=2008)

²⁷ $F(4, 2003) = 10.38, p < .001, \eta^2 = .02$.

These patterns were similar for respondents' ratings of the likelihood of visiting the EnergyFit home over the Features home (Figure 25), where statistically significant differences on the basis of comfort preference also emerged.²⁸ Respondents who considered a comfortable home to be one that reflects their values, or one that is easier and more healthy to heat and cool, were more likely to visit the EnergyFit home than were respondents who considered a comfortable home to be an entertainment venue.

Comparison 3: Which of these homes would you be more likely to visit?

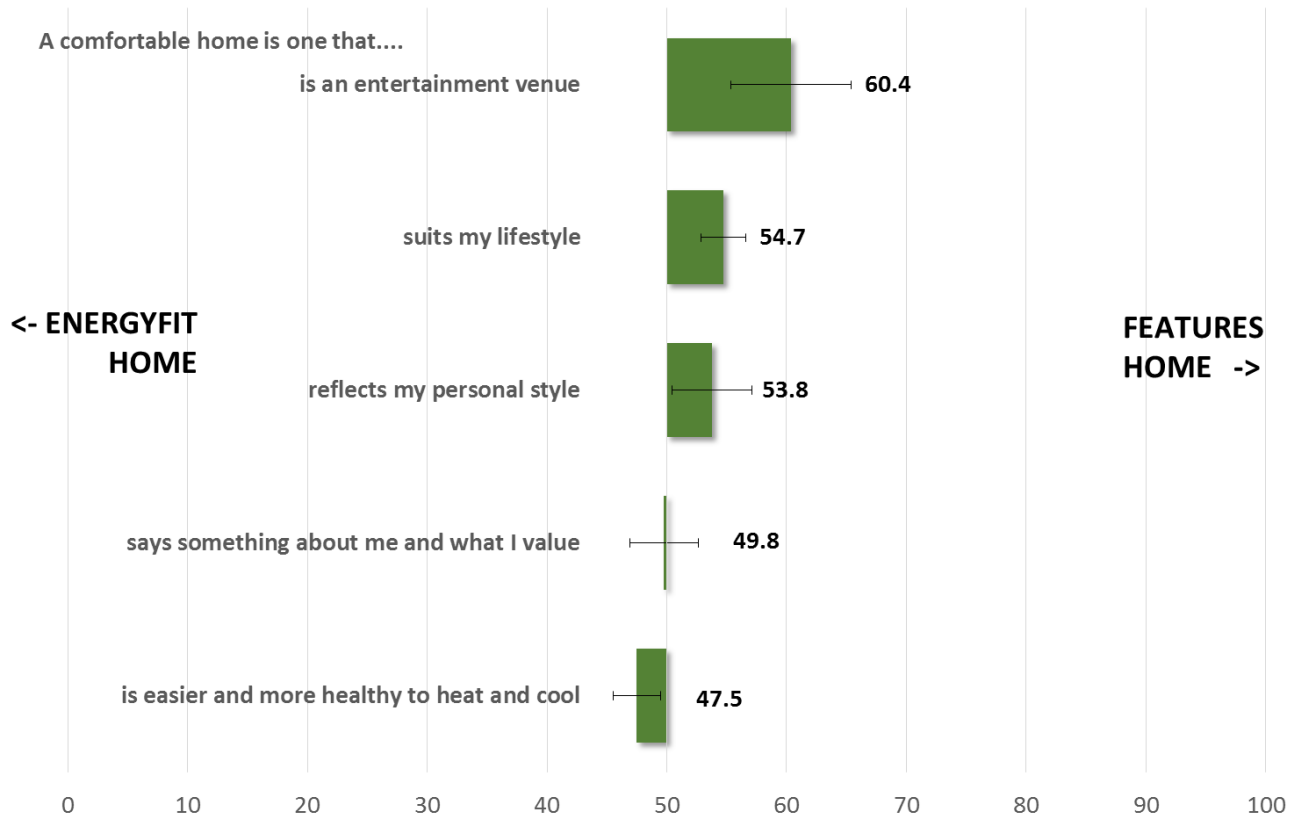


Figure 25 Respondents' ratings of the likelihood of visiting the EnergyFit home versus the Features home, by home comfort preference (N=2008)

²⁸ F (4, 2003) = 9.62, p = <.001, η² = .02.

Figure 26 displays ratings of respondents' willingness to pay their estimated asking price for the EnergyFit home, broken down by comfort preference. Respondents who considered a comfortable home to be one that reflects their values, or is easier and more healthy to heat and cool, were significantly more willing to pay the asking price than were respondents who considered a comfortable home to be one that suited their lifestyle.²⁹

Comparison 3: Given what you know, would you be willing to pay the asking price you have indicated for this home (EnergyFit home)?

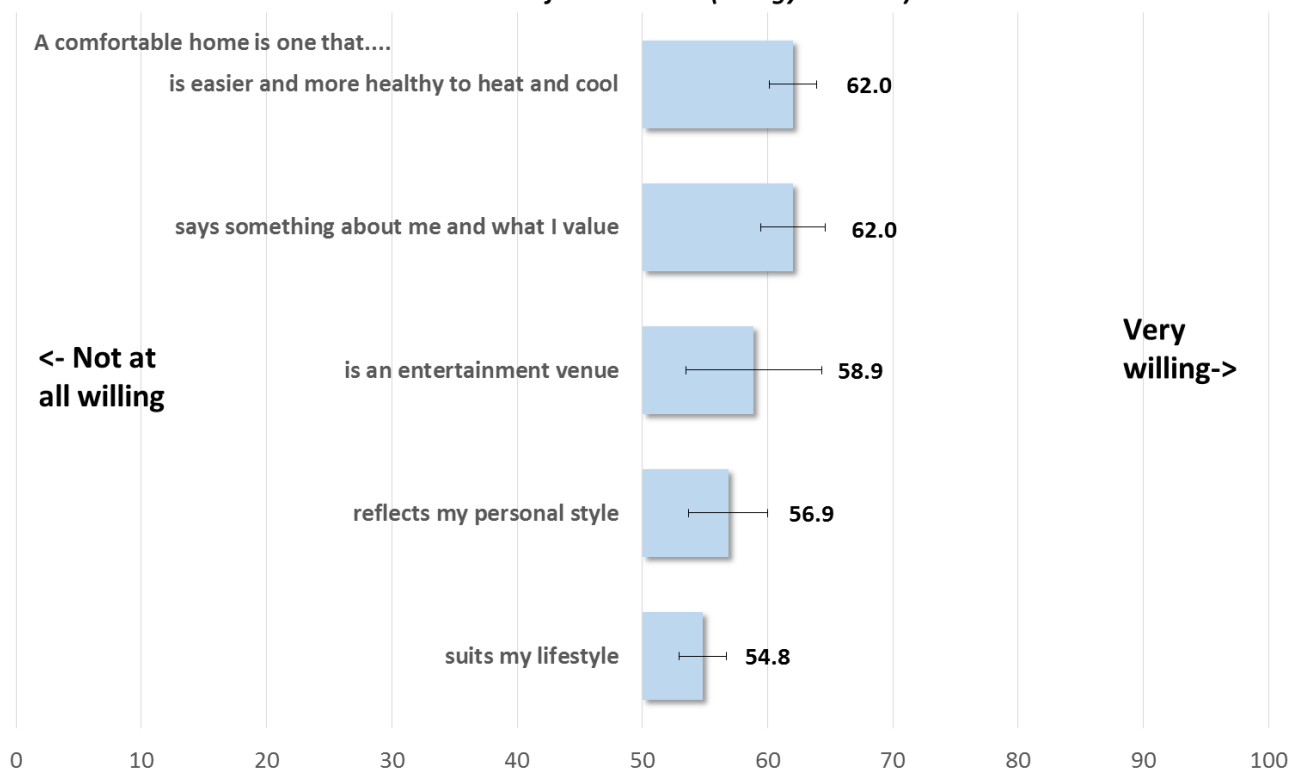


Figure 26 Respondents' rating of willingness to pay their estimated asking price for the EnergyFit home, by home comfort preference (N=2008)

Table 25 displays the relationships between the importance of different housing criteria when purchasing a home, and measures of preference toward the EnergyFit home. Cells shaded in green represent instances where higher ratings of the importance of this housing criterion were significantly associated with a higher preference for the EnergyFit home. Cells shaded in red represent instances where higher ratings of the importance of this housing criterion were significantly associated with lower preference for the EnergyFit home. The most consistently predictive housing criterion across the different measures of preference was the maximum mortgage. People who rated this criterion as more important were likely to think the asking price of the EnergyFit home was lower, but they were also more likely to find the EnergyFit homes more appealing, were more likely to visit it over the Features home, and were more willing to pay their estimated asking price.

Table 25 Correlations between the importance of housing criteria and appeal of the EnergyFit home (N=2008)

²⁹ F (4, 2003) = 8.96, p = <.001, η² = .02.

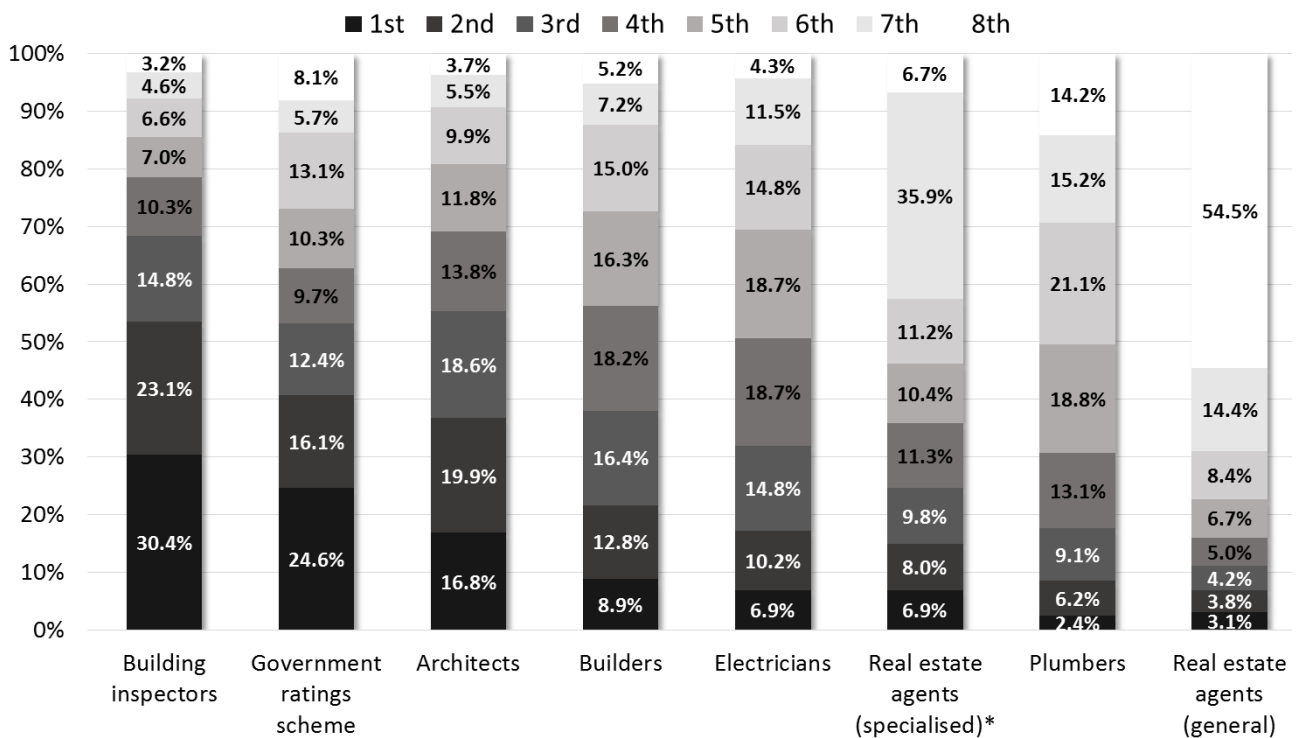
HOUSING CRITERION	MEAN*	SD	ESTIMATE D PRICE	APPEAL	LIKELIHOOD OF VISITING	WILLINGNESS TO PAY
House size	3.98	.88	.03	-.01	-.00	.06*
Number of bedrooms	4.00	.89	.04	-.03	-.03	.03
Number of bathrooms	3.67	1.06	.07**	-.05*	-.07**	.03
Accessible garage	3.96	1.01	.03	-.02	-.02	.09**
Low maintenance	4.09	.90	-.02	.08**	.04	.10**
Interior décor and design	3.66	1.01	.01	-.04	-.05*	.07**
Manageable garden	3.80	1.03	.00	.03	.01	.07**
Well built	4.44	.79	-.03	.06*	.07**	.08**
Layout	4.07	.85	.00	-.00	-.02	.05*
Distance to work	3.35	1.35	.09**	-.03	-.05*	-.01
Distance to school	2.76	1.50	.11**	-.03	-.08**	.02
Distance to local shops	3.75	.99	.01	-.00	-.01	.04
Distance to shopping centre	3.68	1.03	.01	.01	-.01	.03
Distance to central business district	3.28	1.19	.03	-.05*	-.06**	-.01
Proximity to amenities	3.58	1.27	.05*	.02	-.02	.03
Distance to public transport	4.16	.87	.00	-.00	-.00	.04
Condition of neighbourhood	3.93	.89	.03	.01	.01	.05*
Attractiveness of the area	3.54	1.04	.03	-.00	-.02	.10**
Steepness/topography of the land	2.63	1.32	.05*	-.06*	-.08**	.03
Attractive views	4.30	.87	-.03	.01	.01	.05*
Open space	2.85	1.53	.12**	-.05*	-.08**	.01
Vacant sites nearby	3.74	1.30	.05*	-.00	-.02	.00
Traffic noise	4.43	.79	-.05*	.03	.05*	.03
Security from crime	3.80	1.00	.00	-.00	-.03	.03
Quality of schools	3.67	1.02	.05*	-.04	-.04	.03
Interest rate	3.65	1.02	.03	-.06**	-.07**	.06**
Max mortgage (absolute amount)	4.12	.89	-.06**	.11**	.11**	.13**
Maximum monthly repayments	4.05	.98	.01	.04	.03	.07**

* Scale: 1=Not at all important–5=Extremely important

Trust in different sources

Respondents were asked to rate, in order of most trusted to least trusted, how much they would trust different sources to tell them truthful information about a home the respondent might potentially buy (Figure 27). The most trusted source overall was building inspectors, followed by a government ratings scheme and architects. The least trusted sources were plumbers and real estate agents. General real estate agents were rated lower in trust rankings than real estate agents with specialised knowledge in energy-lifestyle-comfort design features.

Ranking: How much you would trust each to give you truthful information about a home you might potentially buy?



* Refers to real estate agents with specialised knowledge in energy-lifestyle-comfort design features

Figure 27 Ranking order of trust in each source to give truthful information about homes for purchase (N=2008)

Table 26 displays the relationships between rankings in trust in different entities to tell the truth about a home for purchase, and preference for the EnergyFit home. On average, the higher the respondent ranked government ratings schemes as a trusted source, the more appealing they found the EnergyFit home and the more likely they were to visit it, compared to the Features home. The higher people ranked real estate agents as a trusted source, the more likely they were to find the Features home appealing over the EnergyFit home, and the more likely they were to visit the Features home rather than the EnergyFit home. There was no significant effect, however, for rankings of real estate agents with specialised knowledge in energy-lifestyle-comfort design features.

Table 26 Correlations between respondents' rankings of trust in different entities to tell the truth about homes for purchase, and appeal of the EnergyFit home (N=2008)

HOW MUCH DO YOU TRUST....	ESTIMATED PRICE	APPEAL	LIKELIHOOD OF VISITING	WILLINGNESS TO PAY
Architects	-0.00	.03	.03	.01
Electricians	-0.00	.03	-.02	-.06**
Building inspectors	-.01	.03	.05*	.02
Real estate agents (general)	.04	-.10**	-.11**	.00
Government ratings scheme	-.02	.10**	.08**	.03
Builders	-.04	-.03	.00	.00
Real estate agents (with specialised knowledge in	.05*	.02	.01	.05*

HOW MUCH DO YOU TRUST....	ESTIMATED PRICE	APPEAL	LIKELIHOOD OF VISITING	WILLINGNES S TO PAY
energy-lifestyle-comfort design features)				
Plumbers	-.01	-.04	-.05*	-.06*

Social norms

Table 27 displays the relationships between social norm statements (designed to measure beliefs about other people's sentiments about energy-efficient homes) and preferences for the EnergyFit home. There were no significant relationships between social norms and estimated asking price. Appeal and likelihood of visiting were both negatively related to beliefs that others wouldn't consider energy efficiency in their purchasing decisions, or that others would not care about energy ratings. In other words, people who thought others wouldn't consider energy efficiency as important were themselves less likely to view EnergyFit homes as appealing, and less likely to report that they would visit them. Willingness to pay was weakly to moderately associated with all social norm statements, such that willingness increased with beliefs that others would find energy efficiency and comfort levels important, and would pay more because of it. In other words, individuals' own reactions to EnergyFit homes were generally in line with their perceptions of social norms.

Table 27 Correlations between social norm statements and appeal of EnergyFit home (N=2008)

social norm statement	MEAN ***	SD	ESTIMATE D PRICE	APPEAL	LIKELIHOOD OF VISITING	WILLINGNES S TO PAY
Most people I know would pay more for a home that was energy efficient	3.50	.81	-.01	.03	.00	.15**
For most people I know, how much it cost to run a home would be an important consideration	3.81	.77	.00	.03	.01	.09**
For most of the people I know, the energy efficiency of a home wouldn't matter much in their decision to purchase it	3.13	.95	.01	-.09**	-.10**	-.05*
Most people I know would pay more for a home that was always a comfortable temperature	3.59	.76	.02	.05*	.03	.13**
I think people in general wouldn't care whether a home had a good energy rating or not	2.97	1.01	.04	-.12**	-.12**	-.06**

* p < .05; ** p < .01

*** Scale: 1=Strongly disagree–5=Strongly agree

Worldviews

Table 28 displays the relationship between respondents' importance ratings of a series of values as life-guiding principles, drawn from a short-form version of the Schwartz Values Survey (Lindeman & Verkasalo, 2005; Schwartz, 1992)³⁰, and preference for the EnergyFit home. The strongest relationships were with the principle universalism (that is, valuing principles such as broad-mindedness, social justice, equality, and environmental protection), where people who thought universalism was important found the EnergyFit more appealing, were more likely to visit it, and more willing to pay the estimated asking price. By contrast, respondents rating hedonism as important (valuing principles such as the gratification of desires, enjoyment in life, and self-indulgence) had lower preferences for the EnergyFit home, as did respondents who rated power as an important life-guiding principle.

Table 28 Correlations between importance of life-guiding values and appeal of EnergyFit home (N=2008)

PERSONAL VALUE	ESTIMATE D PRICE	APPEAL	LIKELIHOOD OF VISITING	WILLINGNES S TO PAY
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³⁰ Mean responses from the Schwartz Value items were person-centered, to indicate the *relative* importance of each value in an individual's value system (Schwartz, 2005).

Power (that is, social power, authority, wealth)	.06**	-.09**	-.13**	-.10***
Achievement (that is, success, capability, ambition, influence on people and events)	.07**	-.07**	-.08**	-.03
Hedonism (that is, gratification of desires, enjoyment in life, self-indulgence)	.04	-.11**	-.12**	-.11**
Stimulation (that is, daring, a varied and challenging life, an exciting life)	.02	-.04	-.05*	-.01
Self-direction (that is, creativity, freedom, curiosity, independence, choosing one's own goals)	-.04	.08**	.11**	.04
Universalism (that is, broad-mindedness, beauty of nature and arts, social justice, a world at peace, equality, wisdom, unity with nature, environmental protection)	-.04	.13**	.14**	.11**
Benevolence (that is, helpfulness, honesty, forgiveness, loyalty, responsibility)	-.09**	.09**	.11**	.07**
Tradition (that is, obedience, honouring parents and elders, self-discipline, politeness)	-.02	.02	.02	.04
Security (that is, national security, family security, social order, cleanliness, reciprocation of favours)	-.03	.04	.06**	.05*

* p < .05; ** p < .01

Attitudes toward willingness to pay

Respondents were asked to rate their level of agreement with a series of attitudinal statements assessing their willingness to pay for homes with particular features. Table 29 displays the relationship between these general willingness to pay statements and preference toward the EnergyFit home when compared with the Features home. Estimated price of the EnergyFit home was not significantly related to any of the general willingness to pay statements. The appeal of the EnergyFit home (relative to the Features home) was negatively related with willingness to pay for homes that suited one's personality, was a comfortable temperature, or that suited one's lifestyle. The likelihood of visiting an EnergyFit home over the Features home was positively related to willingness to pay for an energy efficient home and a home with low running costs, and negatively related to willingness to pay for a home that suited one's personality or lifestyle. Willingness to pay for an EnergyFit home was significantly and positively related to all general willingness to pay attitudes.

Table 29 Correlations between general willingness to pay attitudes and preference for the EnergyFit home (N=2008)

"if all other things about two different homes were the same..."	MEAN ***	SD	ESTIMATED PRICE	APPEAL	LIKELIHOOD OF VISITING	WILLINGNESS TO PAY
Would you pay more for a home that felt like it suited your personality?	62.23	18.67	.01	-.07**	-.08**	.20**
Would you pay more for an energy efficient home?	65.48	18.09	-.00	.04	.08**	.31**
Would you pay more for a home that was a comfortable temperature?	63.10	17.90	.01	-.06**	-.05*	.24**
Would you pay more for a home with low running costs?	66.46	18.01	-.04	.02	.05*	.29**
Would you pay more for a home that suited your lifestyle?	65.85	18.21	.01	-.11**	-.10**	.21**

* p < .05; ** p < .01

*** Responses were measured on a scale from 0=I would pay a lot less - 100=I would pay a lot more

This section will be structured in order of the research questions we set out to answer, as detailed in Section 2 of this report.

5.1 Research questions 1 and 2

RQ1: What message frames are the most effective in buyer acknowledgement of the benefits of low carbon EnergyFit homes?

RQ1a: What is the influence of energy ratings information on perceived benefits?

RQ1b: What is the influence of Liveability information on perceived benefits?

RQ1c: What is the influence of Liveability and energy rating combinations on perceived benefits?

RQ2: Trade-offs: Are people prepared to forego non-EnergyFit related, quality features, for an EnergyFit home?

Results from the current study suggest that all the frames tested here are effective in buyer acknowledgement of the benefits of EnergyFit homes. This is the case for both Liveability information and energy ratings information. In fact, the perceived financial and non-financial benefits were rated so strongly in this study that it was difficult to find more subtle effects that framing may have had on perceptions.

Importantly, the failure to find significant differences between the framing conditions may be an indication of a ‘demand effect’—that is, when the EnergyFit home is presented in comparison with a control home equivalent in all respects bar energy efficiency information, participants may have felt pressure to rate the home with extra attributes (in this case, energy efficient attributes) as better. Indeed, it was only when EnergyFit homes were compared with non-EnergyFit, quality features selected by the respondent that differences across message frame emerged. In this trade-off scenario, respondents were much less willing to preference the EnergyFit home. This finding highlights the importance of testing EnergyFit messaging in a trade-off scenario with other home features important to the potential buyer—as our findings suggest that, in many instances, buyers are not willing to forego non-energy related features that are important to them. Even in these trade-off scenarios, a highly-consistent pattern between the effectiveness of message frames does not immediately and definitely emerge.

Table 30 presents a multi-criteria assessment of the relative performance on each message frame across a range of dependent variables (or preference indicators). For the first two comparisons, ticks and crosses are awarded where a message frame condition has performed statistically significantly better or worse than other message frames. The open-ended comparisons are based on examples where certain conditions have demonstrated greater performance on assessment criteria that might reflect greater receptivity of the buyer to a message frame.

Table 30 Multi-criteria assessment of the relative effectiveness of each of the EnergyFit message frame conditions

COMPARISON	energyfit INDICATOR	PREFERENCE	PREFERENCE								
			Energy efficiency	Rating 1	Rating 2	Rating 3	Liveability (icons)	Rating 1 Liveability	Rating 2 Liveability	Rating 3 Liveability	Liveability (no icons)
vs. Control home	Estimated asking price	-	-	-	-	-	-	-	-	-	-
	Likelihood of visiting	-	-	-	-	-	-	-	-	-	-
	Appeal	-	-	-	-	-	-	-	-	-	-
	Willingness to buy	-	-	-	-	-	-	-	-	-	-
	Willingness to pay	-	-	-	-	-	✓	✓	✗	-	-
vs. Feature home	Estimated asking price	-	-	-	-	-	-	-	-	-	-
	Likelihood of visiting	✗	✗	-	✗	✓	✓	✓	✓	✗	✗
	Appeal	✗	✗	-	✗	✓	✓	✓	✓	✗	✗
	Willingness to pay	✗	✓	-	-	-	✓	✓	✗	✗	✗
Open-ended	Image recollection rate	N/A	✓	✗	✗	-	✓	✓	✓	N/A	N/A
	Cheaper running cost	-	✓	✓	✓	-	-	-	-	-	-
	Endorsement and	-	-	-	-	✓	✓	✓	✓	-	-

accreditation

Environmentally friendly	-	-	-	-	✓	✓	✓	✓	-
Perceived positive influence	-	✓	✓	✗	-	-	✓	✗	✗
Score	-3	+2	+1	-3	+4	+7	+8	+2	-4

Overall, the Rating 1 and Rating 2 energy rating images, when presented in conjunction with a Liveability message, appear to have the greater all-round effectiveness in promoting the benefits of EnergyFit houses. The poorest performing frames appear to be a standard energy efficiency message, the Rating 3 energy rating image in isolation, and a Liveability message with no associated imagery. More generally, imagery seems to have a positive impact, especially when paired with a message tailored to the individual buyer.

5.2 Research questions 3 and 4

RQ3: Financial benefits: What financial benefits do people perceive accompany EnergyFit homes (as measured by estimated asking price)?

RQ4: Non-market benefits: To what extent do people find homes with EnergyFit features more appealing, and to what extent is this associated with willingness to pay, or visit?

Our results suggest that people perceive a very substantial financial benefit to accompany an EnergyFit home. Overall, the estimated asking price of an EnergyFit home represented an increase of 42% in value to an analogous Control home. The enormity of this benefit might be attributable to a ‘halo effect’—that is, if the potential buyer associates energy efficiency with quality, then that quality is extrapolated to other, non-energy-related aspects of the home. Put another way, the increase might be attributable to people associating energy efficiency with a home’s all-round quality.

It is important to note that the addition of non-energy related features selected by the respondent also afforded a substantial financial benefit of 36%. Equally noteworthy is the fact that this was a lower financial benefit than that afforded to the EnergyFit home.

On average, willingness to pay was slightly reduced by the presence of a Features home as a comparison. This reduction was strongest for the standard energy efficiency condition. This suggests that in the presence of non-energy related features, a standard energy efficiency message will not be as effective as one promoting the co-benefits (such as in the Liveability messages) of an EnergyFit home.

5.3 Research question 5

RQ5: What is the influence of ‘type’ of buyer (as defined by ‘stage of journey’, and basic home preferences) on benefits attached to EnergyFit homes?

RQ5a: Is the effectiveness of different frames aligned with the ‘type’ of buyer?

The influence of the ‘type’ of buyer on the acknowledgements of benefits was, as a general rule, not strong. Demographics, even income, only made small differences, suggesting EnergyFit homes have appeal across market segments.

Some small differences did emerge. Greater preferences toward an EnergyFit home were generally associated with the following buyer attributes:

- experienced home owners
- those looking for townhouses
- those who fit a True Believer Liveability profile
- those who defined the most important elements of a comfortable home as being easy to heat and cool, or as reflecting one’s values
- those who consider a maximum mortgage an important decision-making criterion when purchasing a home
- those who think other people are more likely to find energy efficient homes appealing
- those who universalism as an important life-guiding principle.

5.4 Research question 6

RQ6: What is the effect of combining message framing with non-energy features? That is, does the inclusion of EnergyFit messaging alongside non-energy features amplify the perceived benefits of an EnergyFit home?

Our results suggest that including EnergyFit messages in addition to non-energy related features does not have an additive effect. Rather, price estimates tend to remain relatively static. This could be due to respondents hitting a 'ceiling' of price estimation, at which point the inclusion of additional features does not significantly increase the perceived value of the home (as it is already perceived as a premium value home). It may also reflect the overall effectiveness of the Liveability messages when used in conjunction with the energy rating images. Specifically, because of the more generalised terminology of the Liveability messages, potential buyers imbue these homes with features beyond energy. This is supported by the open-ended findings that these message conditions were more likely to be associated with features beyond energy efficiency considerations.

5.5 Limitations and future research

Several design elements were incorporated in the current study to increase the level of realism of the experimental survey, including pre-screening questions designed to eliminate those who realistically are not in the home purchasing market, simulating online real estate drop-down menus to define home choices, mimicking language commonly employed by the real estate industry to sell homes on an online environment, and forcing respondents to choose between competing sets of desirable home characteristics. Even with these steps, we acknowledge that such a survey instrument can never fully simulate how decisions are made in real life. We note in particular the high levels of willingness to pay estimated asking prices well in excess of an earlier nominated maximum asking price. As such, results from the current study should be extrapolated to the real world with some caution, and we suggest further field-based research be conducted to assess the replicability the present findings.

A further limitation regards the energy efficiency rating for the conditions accompanied by images. Each of the image ratings was set at 80% of a possible 100% energy efficiency rating.³¹ While it was beyond the capacity of the current study to incorporate manipulations of rating levels, this would be a beneficial manipulation to test in future. Specific research questions might include the following: what incremental increase in perceived benefits of an EnergyFit home is associated with the addition of, for example, a star, or half star? Similarly, is there a corresponding decrease in perceived benefit with the removal of a star? At what point do low ratings become counter-productive to the sale of a property? That is, at what point does a rating decrease perceived benefits beyond providing no information on energy ratings at all? Is the relationship between rating levels and perceived benefit linear?








Last, and importantly, the utilisation of the Liveability profile and attendant language for the purposes of the current research comes with some caveats, and caution should be taken in extrapolating the present findings to the broader marketplace with regard to Liveability message framing. First, the current study incorporated a design whereby the Liveability segment (or profile) of the respondent was known (albeit on the strength of a screening question with its own limitations), and the message respondents' received was subsequently tailored to them in an online environment. Critically, the Liveability messaging was restricted to this online environment. In reality, the five Liveability customer profiles were developed and refined over a four year period to be elements of an interconnected features-based value proposition of a property. They are context dependent to the real estate moment: the point of sale or rent and the value proposition delivered by the property marketing industry during this time. This study, restricted as it was to the single online instance, removes the Liveability message from the more holistic language context of the real estate value proposition it was designed for. Removing context-specificity also risks removing the essence of what gives the Liveability words, phrases, and icons their 'meaning'.

Testing the efficacy of the Liveability message in, for example, face-to-face interactions between estate agents and potential buyers would enhance our understanding of the importance of message framing at point of sale. Further, it is not known whether these scripts and customer profiles may need to be adjusted to enable the message framing to be as effective at other stages of consideration, such as when a property owner is considering renovation, or building anew. Future research might investigate how best to frame messages that appeal to multiple profiles concurrently, or to see whether message frames that vary over time influence the amount of online interest in particular homes as a product of those variations. This research might also incorporate tests of 'message fatigue', or the possibility that phrases employed too frequently, or at the wrong time, will lose effectiveness over the course of time with potential buyers of renovators. A complementary avenue of future research is to systematically test the influence (positive and negative) of message length of the perception of benefits associated with EnergyFit homes.

³¹ This 80% setting was chosen as one that reflects a highly efficient home, but not so energy efficient that it would occupy a very small fraction of the market (as a 100% setting would denote).

References

- Hall, N., Jeanneret, T., & Romanach, L. (2014). The EnergyFit homes initiative: Focus group results. CSIRO, Australia.
- Hartley, T.W. (2003). Water reuse: Understanding public perception and participation. Water Environment Research Foundation.
- Instinct and Reason (2014). Comfort Study. Department of Environment and Heritage.
- Koltko-Rivera, M.E. (2004). The Psychology of Worldviews. *Review of General Psychology*, 8(1), 3-58.
- Lindeman, M., & Verkasalo, M. (2005). Measuring values with the Short Schwartz's Value Survey. *Journal of Personality Assessment*, 85(2), 170-178. doi:10.1207/s15327752jpa8502_09
- Moser, S.C. (2010). Communicating climate change: history, challenges, process and future directions, *Wiley Interdisciplinary Reviews: Climate Change*, 1 (1), 31-53.
- Ratchatakulpat, T., Miller, P., & Marchant, T. (2009), 'Residential real estate purchase decision: is it more than location?', *International Real Estate Review*, 12(3), 237-294. Publisher's version of article available at <http://www.umac.mo/fba/irer/>
- Schwartz, S. H. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. *Advances in Experimental Social Psychology*, 25(1), 1-65.
- Schwartz, S. H. (2005). Robustness and fruitfulness of a theory of universals in individual human values. *Valores e trabalho*.
- Sheeran, P. (2002). Intention—behavior relations: A conceptual and empirical review. *European Review of Social Psychology*, 12, 1-36.
- Vaughan, E. (1995). The significance of socioeconomic and ethnic diversity for the risk communication process. *Risk Analysis*, 15 (2), 169-180.
- Zehr, S.C. (2000). Public representations of scientific uncertainty about global climate change. *Public Understanding of Science*, 9, 85-103.

Message	Liveability icons	Energy rating image	Condition
Standard energy efficiency message	no icons	no image	1 A standard energy efficiency message
			2 A standard energy efficiency message with Rating Image 1
			3 A standard energy efficiency message with Rating Image 2
			4 A standard energy efficiency message with Rating Image 3
Tailored 'Liveability' message (based on respondents' market profile)		no image	5 A Liveability message tailored to the respondent with Liveability icons
			6 A Liveability message tailored to the respondent with Liveability icons and Rating Image 1
			7 A Liveability message tailored to the respondent with Liveability icons and Rating Image 2
			8 A Liveability message tailored to the respondent with Liveability icons and Rating Image 3

	no icons	no image	9	A Liveability message tailored to the respondent
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Appendix B

Experimental survey

ENHANCING THE MARKET FOR LOW-CARBON HOMES AT POINT OF SALE AND LEASE

Dear participant,

Thank you for agreeing to take part in this 25-minute survey.

This project is being conducted for CSIRO: Australia's national science research agency. CSIRO has received funding to explore the key information and behavioural factors as well as the market structures that influence the purchase and leasing of new and existing homes with better health, comfort and sustainability benefits and lower running costs. We want to understand the thoughts and opinions of people from all over Australia about what's important to them when deciding on a place to live. The information will be used to assess what sort of information Australians need about attributes and features of residential homes. Outcomes from the survey will be presented in a publicly available report and research publication. No identifying information from participants will be contained in these publications.

The project is funded by the Low Carbon Living Cooperative Research Centre, the NSW Office of Environment and Heritage, CSR, AGL Energy, Australian Windows Association, Clean Energy Council, Energy Efficiency Council, Stockland, Fletcher Insulation, Knauf Insulation, the Centre for Liveability Real Estate, and the Energy Efficiency Certificate Creators Association. CSIRO is the project leader, and will be guided by a Steering Committee comprised of the funding and other partners

Participation in this survey is voluntary and you are free to withdraw at any time. Your responses and personal information will be kept confidential. You are free to stop the survey at any time. Should you choose to stop the survey, the information you have given us will be discarded. If you have any questions, about the survey, please contact project officer Dr. Zoe Leviston on (08) 9333 6169 or for any concerns or complaints please contact the CSIRO Ethics Office at csshrec@csiro.au. This study has received ethical approval from the CSIRO Human Research Ethics Committee.

We hope you enjoy taking part in our survey

Sincerely,

The Research Team

Do you consent to take part in this survey?

YES

NO

Step 1–Pre-screening

Q: Might you consider, or are you considering, buying a home (either as an investment, or as somewhere to live) in the next 5 years?

- Yes (go to next question)
- No (go to next question)

Q: Have you bought a home in the last 12 months?

- Yes (go to next question)
- No (if NO to both screening questions, thank them for their time and exit survey)

Liveability profile sorting question

Q: Please rank the following in order of how well they describe what you're looking for in a home, from '1–describes me best' to '5–describes me least well' (randomise order):

- A house that reflects my commitment to sustainability (True believer)
- Concerned about running costs (Show me the money)
- I'm an innovator: I want a house that reflects that (Look at me)
- A safe and healthy home for my family (Better safe than sorry)
- A house that's simple and comfortable to run in retirement (Young at heart)

Step 2–Home selection exercise

We would like you to imagine you are looking for a place to purchase. Using each of the dropdown boxes below, please make the selections that reflect the type of place you would be most likely to look for

Q: Please select your house type

Select house type... ▼

- house
- apartment & unit
- townhouse
- villa
- rural
- block of units
- retirement living

Q: Please select your minimum number of bedrooms

Min bedrooms... ▼

- studio
- 1 bedroom
- 2 bedrooms
- 3 bedrooms
- 4 or more

Q: Please select your minimum number of bathrooms

Max bathrooms... ▼

- 1 bathroom
- 2 bathrooms
- 3 or more

Q: Please select the number of garage spaces

Min spaces... ▼

- none
- 1
- 2
- 3 or more

Q. Please select your maximum price

Max price... ▼

- 150,000
- 200,000
- 250,000
- 300,000
- 350,000
- 400,000
- 450,000
- 500,000
- 550,000
- 600,000
- 650,000
- 700,000
- 750,000
- 800,000
- 850,000
- 900,000
- 950,000
- 1,000,000
- 1,250,000
- 1,500,000
- 1,750,000
- 2,000,000
- 2,500,000

Q: Please select up to 4 features from the drop-down list below that you would like to have in your home

Select up to four... ▼

- stone benchtops
- timber flooring
- a pool
- a house that looks good
- a good view
- up-to-date kitchens
- up-to-date bathrooms

Q: Again, please select up to 4 features from the drop-down list below that you would like to have in your home

Select up to four... ▼

- living locally
- climate zone of the property
- orientation
- cross-ventilation
- zoning
- insulation
- density of building materials
- windows (glazing)
- shading or sun control
- efficient heating and cooling devices
- energy efficient lighting
- efficient hot water system
- solar photovoltaic system
- low water garden
- water efficiency devices
- rainwater tanks
- energy rating


Step 3–Home comparison evaluations

Based on your selections, you will now be presented with a series of homes and asked several questions about them

Comparison 1: Control vs EnergyFit test frame

(Control Frame A.)

HOUSE 1




Control text passage

Asking price: \$XXX,000

(EnergyFit Test Frame)

HOUSE 2



1 of 9 EnergyFit message frame conditions

Asking price: \$---,---

Asking price to be determined by selection of maximum asking price in previous section minus 5%

House icon to be determined by selection of home type x minimum bedrooms in previous section

Dependent variables:

Q. Given what you know about the price of House 1, how much do you think the asking price of House 2 is? \$---,---

Q. Assuming the asking price of the two houses was about the same, which of these houses would you be more likely to visit for a home open?

Definitely House 1 <-----about the same likelihood ----->Definitely House 2 1-100 sliding scale

Q. From the information given, which house do you find more appealing?

Definitely House 1 <-----no difference ----->Definitely House 2 1-100 sliding scale

Q. Would the extra features of House 2 make you...

Much less willing to buy it <-----no difference ----->Much more willing to buy it 1-100 sliding scale



Q. Given what you know, would you be willing to pay the market price you have indicated for House 2?

Not at all willing<-----> Very willing 1-100 sliding scale

Comparison 2: Control vs Features frame

Asking price for house 1 carried over from previous comparison

Features home contains generic information plus four non-energy features selected in previous section

<p>(Control Frame)</p> <p style="text-align: center;">HOUSE 1</p>  <p>Control text passage</p> <p>Asking price: \$XXX,000</p>	<p>(Features House)</p> <p style="text-align: center;">HOUSE 2</p>  <p>Control text passage</p> <p>Features information</p> <p>Asking price: \$---,---</p>
---	---

Dependent variables

Q. Given what you know about the price of House 1, how much do you think the asking price of House 2 is? \$---,---

Q. Assuming the asking price of the two houses was about the same, which of these houses would you be more likely to visit for a home open?

Definitely House 1 <-----about the same likelihood ----->Definitely House 2

Q. From the information given, which house do you find more appealing?

Definitely House 1 <-----no difference ----->Definitely House 2

Q. Would the extra features of House 2 make you...

Much less willing to buy it <-----no difference ----->Much more willing to buy it

Q. Given what you know, would you be willing to pay the market price you have indicated for House 2?


Not at all willing<-----> Very willing

Comparison 3: EnergyFit frame vs Features frame

Both asking prices to be left blank

(EnergyFit Test Frame House)

HOUSE 1




1 of 9 EnergyFit message frame conditions

Asking price: \$---,---

(Features House)

HOUSE 2



Control text passage
Features information

Asking price: \$---,---

Dependent variables

Q. Again, estimate the asking price of the House 1: \$---,--- and House 2: \$---,---

Q. Assuming the asking price of the two houses was about the same, which of these houses would you be more likely to visit for a home open?

Definitely House 1 <-----about the same likelihood ----->Definitely House 2

Q. From the information given, which house do you find more appealing?

Definitely House 1 <-----no difference ----->Definitely House 2

Q. Would the extra features of House 2 make you...

Much less willing to buy it <-----no difference ----->Much more willing to buy it

Q. Given what you know, would you be willing to pay the market price you have indicated for.. House 1?

Not at all willing<-----> Very willing

and for House 2?

Not at all willing<-----> Very willing

Comparison part 4: The Ultimate Home: EnergyFit Frame + Features Frame

This pairs EnergyFit message with four non-energy Features

(Ultimate Home: EnergyFit + Features)

HOUSE 1



3 1 of 9 EnergyFit message frame conditions

Features information

Asking price: \$---,---

Dependent variables

Q. How much do you think the asking price of House 1 is? \$---,---

Q. How appealing do you find House 1?

Not at all appealing <-----Mildly appealing ----->Extremely appealing

Q. Given what you know, would you be willing to pay the market price you have indicated for House 1?

Not at all willing<-----> Very willing

Step 4b–Open-ended assessments

We now want to ask you a series of questions about the homes you were just asked to compare

Q. In addition to the pictures of the homes at the top of each pair of comparisons, did you notice any additional images (e.g. logos, visuals, ratings)?

Yes

No (skip next 3 questions)

Q. Can you briefly describe the additional image(s)?

Q. What do you think the image(s) meant?

Q. Do you think the image(s) influenced how you made decisions between the two homes, and if so how?

No, it made no difference

Yes, it made the home more appealing

Yes, it made the home less appealing

Q. If you went to an inspection for one of these houses, what questions might you ask an agent selling the home? (include up to three questions)

Step 5–Individual differences

We now want to ask you a series of questions about the sorts of things you might consider when looking for a home to purchase

Attitudinal questions

Q. Using the following sliding scale, if all other things about two different homes were the same, I would pay a lot less <-----it would make no difference ----->I would pay a lot more 0-100 sliding scale

- would you pay more for a home that felt like it suited your personality?
- would you pay more for an energy efficient home?
- would you pay more for a home that was a comfortable temperature?
- would you pay more for a home with low running costs?
- would you pay more for a home that suited your lifestyle?

Q. What sort of features do you think would be included in a home that was accredited as ‘more energy efficient than minimum building code’?

Social norms

Q. Using the scale below, please indicate the extent to which you agree or disagree with the following statements

1	2	3	4	5
Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree

- Most people I know would pay more for a home that was energy efficient
- For most of the people I know, the energy efficiency of a home wouldn't matter much in their decision to purchase it
- Most people I know would pay more for a home that was always a comfortable temperature
- For most people I know, how much it cost to run a home would be an important consideration
- I think people in general wouldn't care whether a home had a good energy rating or not

Information sources/trust

Q. Please rank the following sources, in order of most trusted to least trusted, according to how much you would trust each to give you truthful information about a home you might potentially buy

Architects

Electricians

Building inspectors

Real estate agents (general)

Government ratings scheme

Builders

Real estate agents (with specialised knowledge in energy-lifestyle-comfort design features)

Plumbers

Step 6–Market profile

Q. A comfortable home is one that (select one only):

- suits my lifestyle
- is an entertainment venue
- reflects my personal style
- reflects my values, says something about me and what I value
- is easier and more healthy to heat and cool

Q. Which of the following best describes your position at the moment?

- renting for the first time
- home owner for the first time
- have never owned or rented
- home owner, but not for the first time
- renting, but not for the first time

Q. Which of the following best describes you?

- May consider purchasing a property to live in within the next 6 months
- May consider purchasing an investment property within the next 6 months
- May consider purchasing a property to live in within the next 2 years
- May consider purchasing an investment property within the next 2 years
 - May consider purchasing a property to live in within the next 5 years
- May consider purchasing an investment property within the next 5 years

Q. Again, which of the following best describes you currently?

- Owner without a mortgage
- Owner with a mortgage
- Renter Private
- Renter state/territory housing authority
- Other

Q. How important are the following considerations to you when deciding on a place to live?

1	2	3	4	5
Not at all important		Somewhat important		Extremely important

- House size
- Number of bedrooms
- Number of bathrooms
- Accessible garage
- Low maintenance
- Interior décor and design
- Manageable garden
- Well built
- Layout
- Distance to work
- Distance to school
- Distance to local shops
- Distance to shopping centre
- Distance to central business district
- Distance to public transport
- Condition of neighbourhood
- Attractiveness of the area
- Attractive views
- Vacant sites nearby
- Security from crime
- Quality of schools
- Interest rate
- Overall cost
- Rateable value of the house
- Image of locality
- Image of property
- Running costs
- Amount of upgrade work required

Q. How many people usually live in your home?

Adults ____

Children ____

Step 7–Demographics

To conclude, we would like to ask you a few general questions about yourself

Q. Using the scale below, rate the importance of the following values as a life-guiding principle for you

0	1	2	3	4	5	6	7	8
Opposed to my principles	Not important			Important			Very important	Of supreme importance

- Power (that is, social power, authority, wealth)
- Achievement (that is, success, capability, ambition, influence on people and events)
- Hedonism (that is, gratification of desires, enjoyment in life, self-indulgence)
- Stimulation (that is, daring, a varied and challenging life, an exciting life)
- Self-direction (that is, creativity, freedom, curiosity, independence, choosing one's own goals)
- Universalism (that is, broad-mindedness, beauty of nature and arts, social justice, a world at peace, equality, wisdom, unity with nature, environmental protection)
- Benevolence (that is, helpfulness, honesty, forgiveness, loyalty, responsibility)
- Tradition (that is, obedience, honouring parents and elders, self-discipline, politeness)
- Security (that is, national security, family security, social order, cleanliness, reciprocation of favours)

Q. What is your year of birth?

Q. What is your sex?

- Female Male Not otherwise stated

Q. What is the total income (including all wages and government benefits) that you personally receive?

- \$2000 or more per week (\$104,000 a year)
- \$1,600 - \$1,999 a week (\$83,200 - \$103,999 a year)
- \$1,300 - \$1,599 a week (\$67,600 - \$83,199 a year)
- \$1,000 - \$1,299 a week (\$52,000 - \$67,599 a year)
- \$800 - \$999 a week (\$41,600 - \$51,999 a year)
- \$600 - \$799 a week (\$32,000 - \$41,599 a year)
- \$400 - \$599 a week (\$20,800 - \$31,199 a year)
- \$250 - \$399 a week (\$13,000 - \$20,799 a year)
- \$150 - \$249 a week (\$7,800 - \$12,999 a year)
- \$1- \$149 a week (\$1 - \$7,799 a year)
- Nil income
- Negative income
- Prefer not to respond

Q. What is your household's gross annual income before tax?

- | | |
|--|---|
| <input type="checkbox"/> Less than \$30,000 | <input type="checkbox"/> \$30,000 - \$59,999 |
| <input type="checkbox"/> \$60,000 - \$89,999 | <input type="checkbox"/> \$90,000 - \$119,999 |
| <input type="checkbox"/> \$120,000 - \$149,999 | <input type="checkbox"/> More than \$150,000 |
| <input type="checkbox"/> Prefer not to respond | |

Q. Move the cursor below to the place on the slide which best represents your political views (100% sliding scale)

Left Wing ←-----→ Right Wing

Q. Which of the following best describes the area in which you live?

- Capital city
- Regional town
- Rural town
- Other—please specify:

Q. Which State or Territory do you live in?

- Australian Capital Territory
- New South Wales
- Northern Territory
- Queensland
- South Australia
- Victoria
- Western Australia

Q. What is your postcode?

Q. What is the highest level of education you have attained?

- Some of primary school
- Completed primary school
- Some of high school / tertiary school
- Completed tertiary school
- Some of trade / TAFE qualification
- Completed trade / TAFE qualification
- Some of undergraduate degree
- Completed undergraduate degree
- Some of postgraduate qualification
- Completed postgraduate qualification

	Studio	1 bed	2 bed	3 bed	4+ bed
House					
Apartment/Unit					
Townhouse					
Villa					
Rural					
Block of Units					
Retirement Living					

