



Your Green Guide
Residential Real Estate 2018



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This guide was prepared in partnership with the Queensland University of Technology.



Queensland University of Technology

RESIDENTIAL PROPERTY SUSTAINABILITY FEATURES OVERVIEW

Sustainable buildings outperform their conventional competitors in all relevant areas — environmentally, socially and financially. Increased communication by real estate agents to potential buyers/sellers about sustainability features is likely to improve the price and time to sell. Records indicate that houses with sustainable features achieve the most competitive market price.

This guide is backed by extensive research by experts across the Queensland University of Technology (QUT) and industry agents, through Australian Research Council (ARC) Linkage project funded by Federal Government and industry partners. This guide provides a way to ensure buyers and sellers are fully aware of the importance of sustainable housing when they buy or sell. Investigations involved 215 houses, which were sold multiple times between 2004-2014, in Kelso, Townsville, QLD.

Among 215 houses with repeated sales, 22 houses had documented sustainability features. These 22 houses took less days to sell from 2011-2013 and achieved higher sales price from 2010, compared to the other houses without documented sustainability features.

The practicality of this guide is to support real estate agents in communicating sustainability features to potential buyers and sellers. Another intention is to raise awareness in general so people realise there is huge untapped potential for sustainable property as investment products.

KEY POINTS

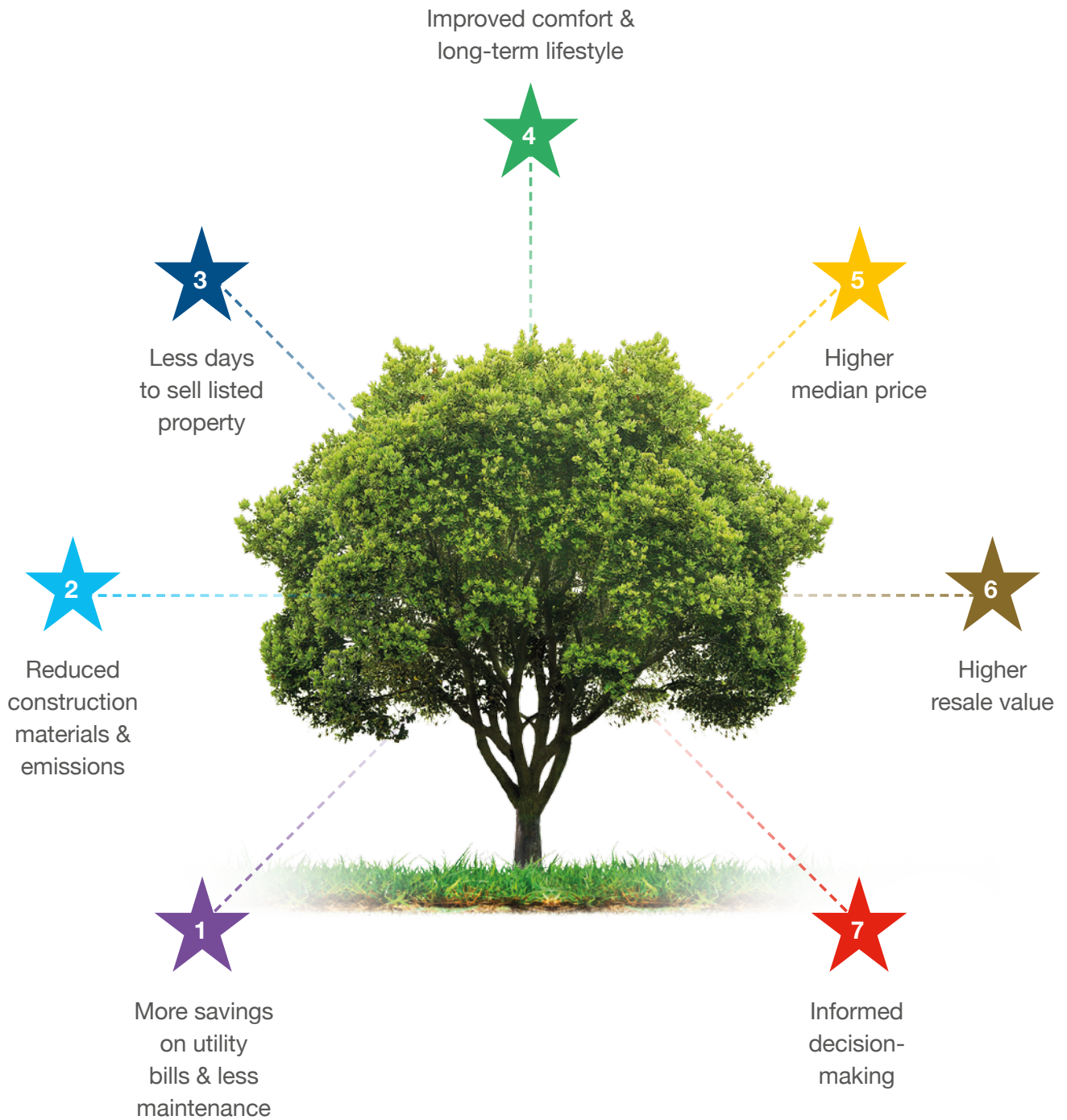
- Home buyers as well as sellers need information about the economic benefits of sustainability features.
- 51% of Australian household wealth was held in residential property in 2016.
- Residential property buyers and sellers need valuable information to help guide their decision making in transactions.
- Properties with recorded sustainability features took up to 13 days less to sell*.
- House median price was 10% higher for properties with sustainability features*.

*Disclaimer: This guide is based on expert investigations of 215 houses that were sold multiple times within a top-selling suburb (Kelso) with the highest number of sales transactions in Townsville from 2004-2014.

Note: The term “Sustainability features” is used for brevity, and represents sustainability-related features that were recorded in relation to each property.

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SUSTAINABILITY FEATURES: TOP 7 BENEFITS FOR RESIDENTIAL PROPERTY



Source: BCA 2010. Wong, 2017; Lorenz & Lützendorf, 2008; Pilkington et al, 2011; APM Pricerfinder, realestate.com.au; CoreLogic RPData; Real Estate Institute of Australia

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IDENTIFYING SUSTAINABILITY FEATURES: RESIDENTIAL PROPERTY

The most well-known definition for sustainable development is “development which meets the needs of the present without compromising the ability of future generations to meet their own needs” (World Commission on Environment and Development, 1987).

Sustainability features mean different things to different people. Here, we have considered the function and layout of the space that will be used, the health and safety of occupants, how comfortable occupants are, the costs to occupants, and the lifespan of the building.



TOP 7 SUSTAINABILITY BENEFITS FOR RESIDENTIAL PROPERTY



1 More savings on utility bills & less maintenance



2 Reduced construction materials & emissions



3 Less days to sell listed property



4 Improved comfort & long-term lifestyle



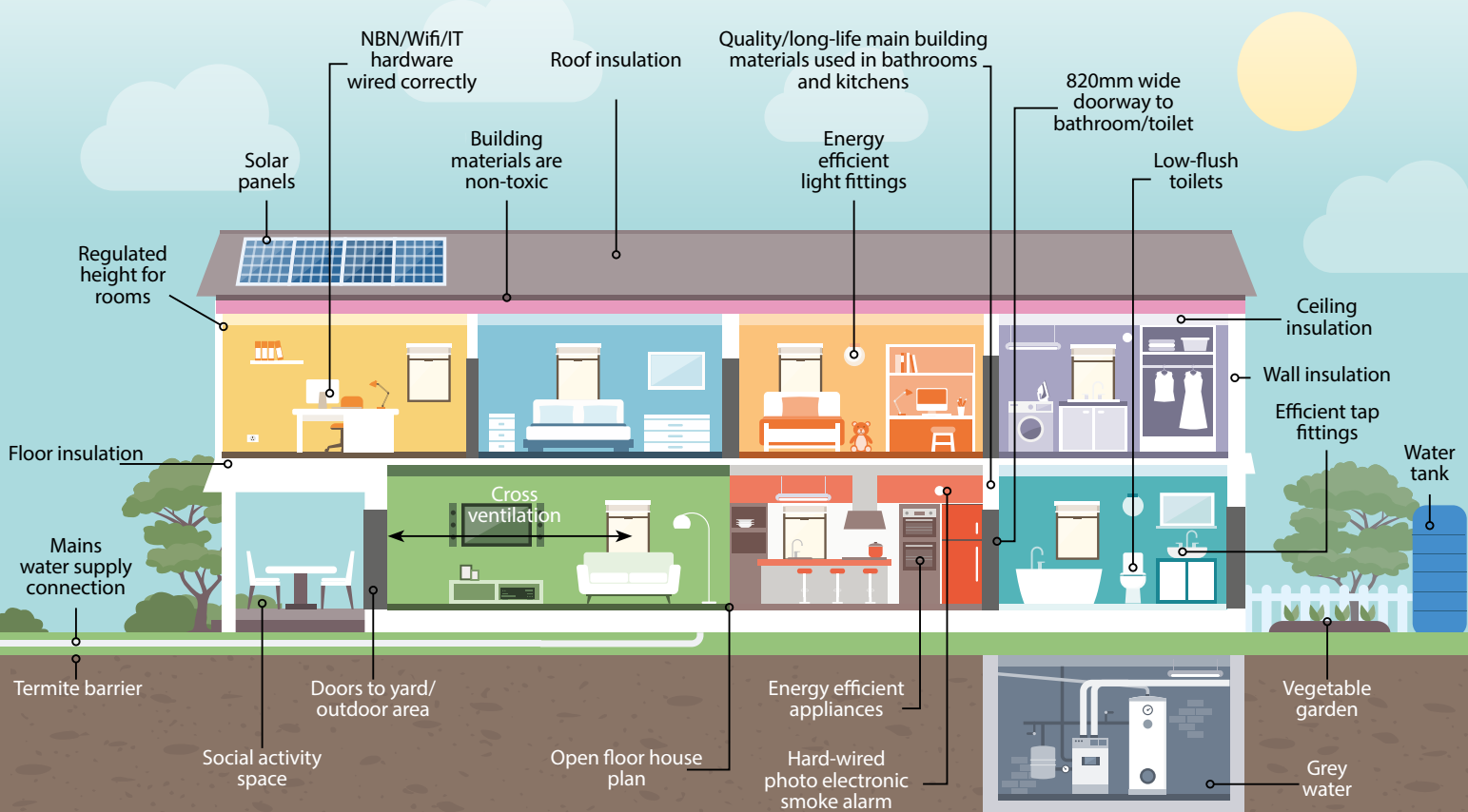
5 Higher median price



6 Higher resale value



7 Informed decision-making



Additional Sustainability Features

- Site located away from threats of landslide, soil slip and flooding
- Site block is rectangular allowing for the most efficient land use
- House designed by architects and/or developer
- Ideal ratio of bedrooms/bathrooms
- Bathroom/toilet is located on lowest level
- Each room fits a suitable need
- Property usage is in accordance with the regulated zone as defined by the city council
- There are adequate boundary setbacks for the property
- House is connected to the mains electricity network
- Easy to install items that will assist those with less mobility without causing major structural change
- Kitchen and bathroom main features can be easily renovated
- Kitchen and or bathroom/s been updated within the last 10 years

TOP SUSTAINABILITY FEATURES: FOR RESIDENTIAL PROPERTY

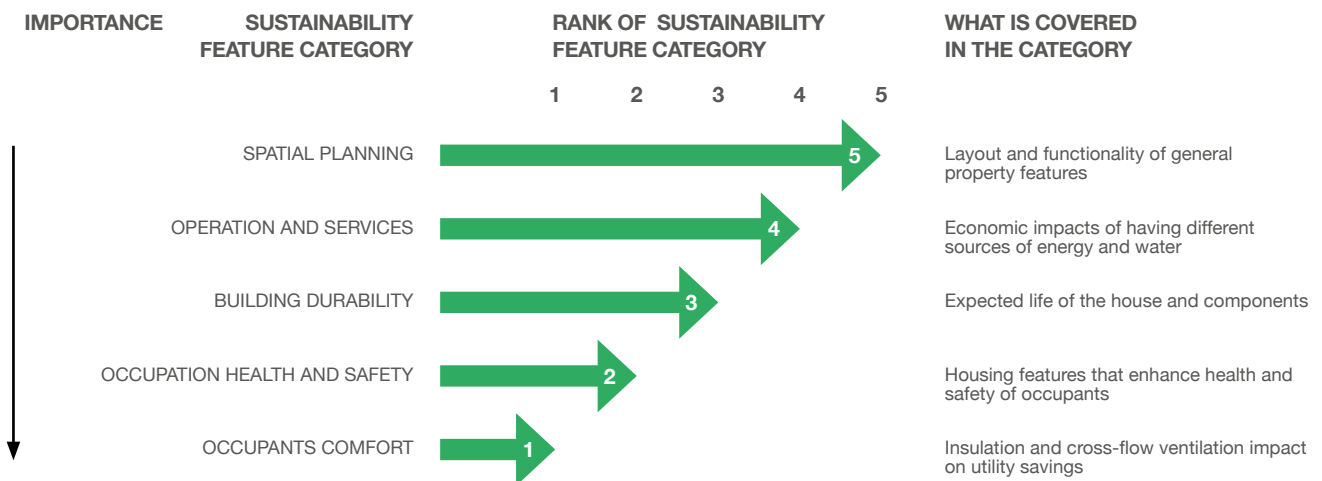
What makes a house sustainable? To find out, we have formulated the Green Housing Scorecard, which takes into consideration real estate agents' top 3 sustainability features in the 5 categories below. To find out your green house rating visit [PRD.com.au/green](https://www.prd.com.au/green).

- **Spatial planning** - Considers the function and layout of the space that will be used
 1. **Site area** - Entire area within the property boundary and house is situated well on the block e.g. away from threats of landslide, soil slip and flooding.
 2. **Number of key rooms** (bedrooms/bathrooms) - The number, placement, functionality and flexibility of key rooms e.g. the house has an open floor plan that allows for multiple uses and can be easily adapted to a changing lifestyle.
 3. **Zoning/land use** - Regulated zone/land use is permitted by city council, as well as interconnection of internal rooms and external spaces e.g. adjoining or direct entries/exists from internal rooms to the yard/outside.
- **Occupant health and safety** - Considers the health and safety of occupants
 1. **Smoke alarms** - Installed hard-wired photoelectric smoke alarm.
 2. **Pest control measures** - Method of controlling/destroying pests such as termites and rodents e.g. traps to monitor insects, termite protection barrier, documentation of chemical or non-toxic substance treatments.
 3. **Building materials** - Materials used consider the impact on health (e.g. low volatile organic compound (VOC) materials, glues and furnishings used to help improve indoor air quality) and design (e.g. safety measures to avoid trip and fall hazards such as railings)
- **Occupant comfort** - Considers how comfortable occupants are
 1. **Building orientation** - With a northern orientation (minimal east/west exposure) the building can take advantage of the sun's natural lighting at different times of the day. Also, by installing shading/sun control you can minimise direct sunlight in summer and bring it in during winter.
 2. **Insulation** - Insulation in the roof, ceiling, walls and floor will enhance comfort & reduce energy consumption.
 3. **Cross-flow ventilation** - Allows cooler/warmer outdoor air to freely move through the house for natural cooling/warming, enhancing comfort and reducing energy consumption.
- **Operation and services** - Considers the costs to be incurred by occupants
 1. **Water service connections** - Connection to the mains water supply and/or grey water systems and rain water tanks. As well as water efficient tap fittings and low flush toilets.
 2. **Type of communication/data service connections** - Existence of reliable communication/data services such as NBN or Wi-Fi and all IT items are wired properly.
 3. **Type of energy service connections** - Connection to the main electricity network and/or rooftop solar panels and battery storage systems as well as energy efficient lights and fixed appliances.
- **Building durability** - Considers expected lifespan of the house, component structures, and flexibility
 1. **Non-toxic building materials** - that can be re-used without being harmful to people or the environment.
 2. **Accessible bathroom/toilet** - Barrier-free access for people with varying levels of mobility e.g. doorways are at least 82 mm wide and grab rails can be easily installed if needed.
 3. **Kitchen/bathroom materials lifespan and durability** - Long-life and highly durable main building materials that enable the room's features to be easily updated and can be re-used without being harmful.

SUSTAINABILITY FEATURES: INDUSTRY RANKING

Sustainability ratings create additional market value for houses. Investors, owners and property managers are starting to explore the value of certified buildings through concepts such as risk, life cycle costing, and operational efficiency.

**To Share Your View
Go to:**
survey.qut.edu.au/f/190298/ad81/



SUSTAINABILITY FEATURES: COST SAVINGS AND BENEFITS

Undoubtedly, market value is affected by the supply and demand forces of the willing buyers and willing sellers. Increasing recognition of improved market performance associated with sustainability rating schemes means that in order to achieve an agreed and accurate price estimation of sustainable housing, both suppliers and buyers need to be well-informed about the benefits and cost savings of buying such properties. This knowledge could be included in the marketing of the property.

The median house price of properties with recorded sustainability features (e.g. solar panel and/or watering systems) are at least 10% higher than properties without recorded sustainability features.

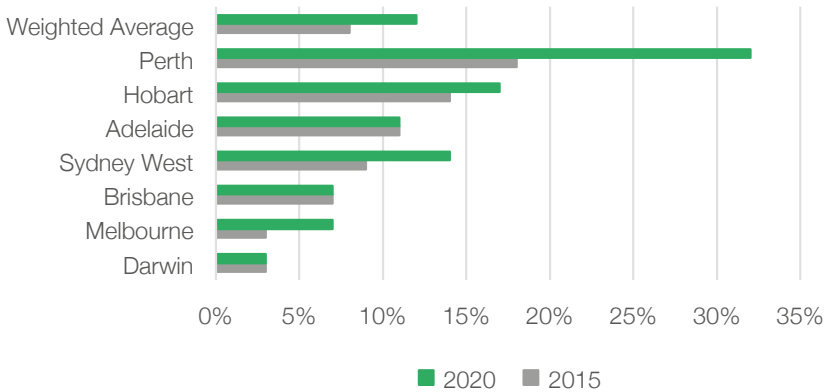
SUSTAINABILITY FEATURES

House median prices are at least 10% higher for properties with recorded sustainability features than properties without recorded sustainability features.

FORECASTED ENERGY SAVINGS BEYOND MINIMUM 6 STAR RATINGS

Projected energy savings range from 3-18% in 2015 and from 3-32% in 2020 based on 6 star sustainable, energy efficient residential property across Australia. The residences had solar photovoltaic cells and triple glazing on windows, which are in addition to 6 star sustainability features.

Purchasers can save even more money when they buy properties with sustainability features beyond minimum 6 stars.



SHORTER TIME ON MARKET - SELL PROPERTY SOONER

Properties with recorded sustainability features in Kelso, Queensland, took fewer number of days on the market to be sold in 2011-2013 (13 days less) than 2004-2010 (4 days more), when compared to properties without recorded sustainability features.



Properties with recorded sustainability features are on the market for less days than properties without recorded sustainability features.



Note: The term "Sustainability features" is used for brevity, and represents sustainability-related features that were recorded in relation to each property.

Source: PRDnationwide 2017. Australian Building Code Board (ABCB; 2010) State of South Australia (2014); Wong et al, 2017; Deng & Wu, 2014; Hurst, 2012

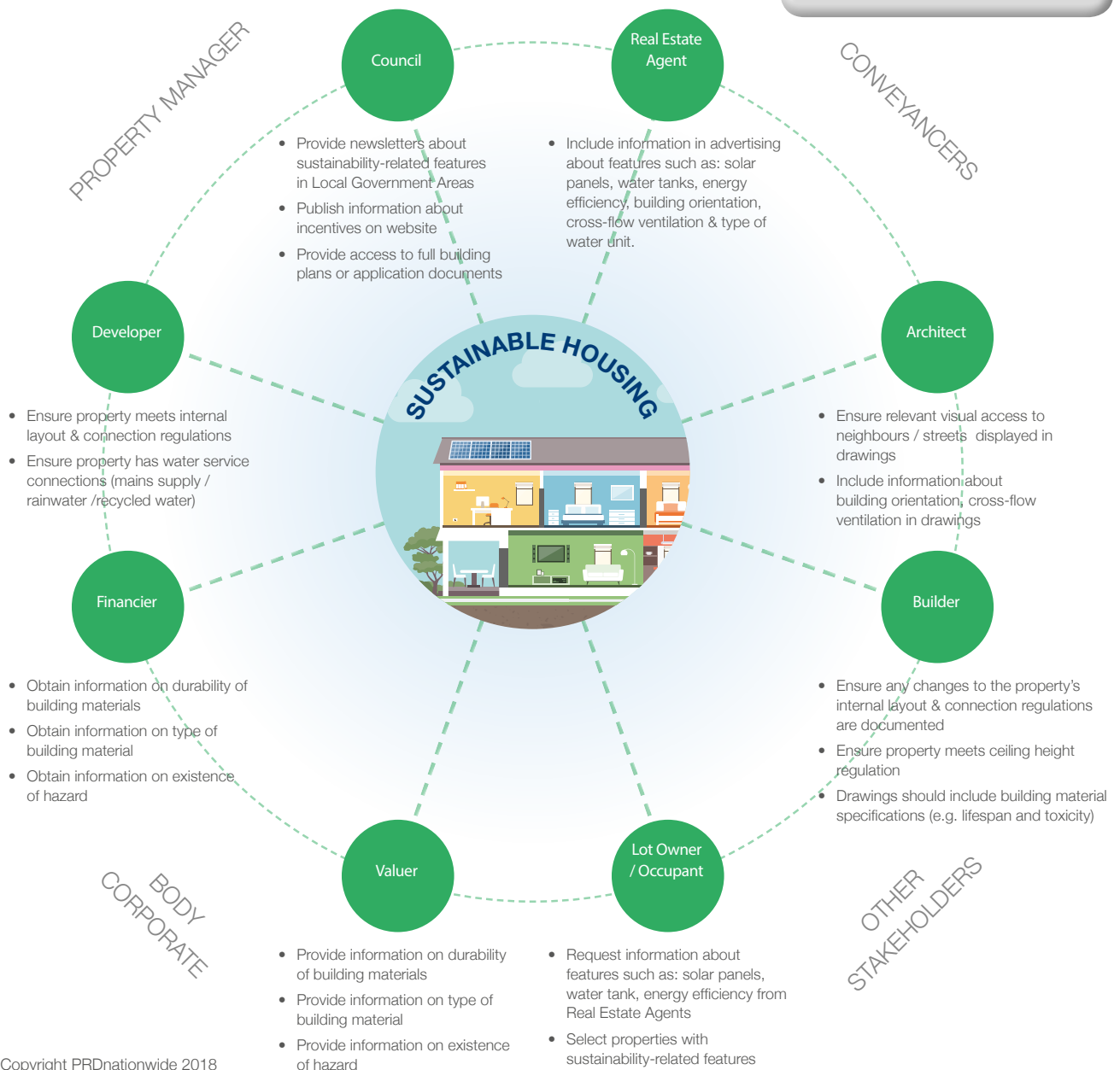
SELLING THE BENEFITS OF SUSTAINABILITY FEATURES

IMPORTANCE OF INFORMATION FLOW

Real estate agents can play an important communication role in informing the decision-making process for both sellers and buyers.

Real estate agents, along with property valuers, financiers, and other stakeholders in the residential property purchase cycle need to have a deeper understanding of the benefits and outcomes of sustainable housing for informing decision making practices for home owners and investors.

The diagram below highlights the opportunities to access information throughout the property purchase life cycle from a variety of different view points. To find out more opportunities visit PRD.com.au/green



REFERENCES

1. Australian Building Code Board (2010). BCA 2010, Complete Series.
2. Deng, Y. and Wu, J. (2014) Economic returns to residential green building investment: the developers' perspective, *Regional Science and Urban Economics*, 47, pp. 35-44.
3. Hurst, N. (2012) Energy efficiency rating systems for housing: an Australian perspective, *International Journal of Housing Markets and Analysis*, Vol. 5 Issue: 4, pp.361-376, <https://doi.org/10.1108/17538271211268501>
4. Lorenz, D., Lützkendorf, T. (2008) Sustainability in property valuation: theory and practice, *Journal of Property Investment & Finance*, Vol. 26 Issue: 6, pp.482-521, <https://doi.org/10.1108/14635780810908361>
5. Real Estate Institute of Australia. Welcome to the Real Estate Institute of Australia. Retrieved October 13, 2017, from <https://reia.asn.au/>
6. Pilkington, B., Roach R., & Perkins, J. (2011) Relative benefits of technology and occupant behaviour in moving towards a more energy efficient, sustainable housing paradigm, *Energy Policy* 39(9), 4962–4970
7. Wong, S.Y., (2017). Improving property practitioners' involvement in information flow of sustainability features of residential property. Submitted in fulfilment of the requirements for the degree of Doctor of Philosophy, Queensland University of Technology. https://eprints.qut.edu.au/view/person/Wong,_Shi_Yee.html
8. Yates, A. (2001). Quantifying the business benefits of sustainable buildings. Centre for Sustainable Construction, BRE.

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ABOUT PRDNATIONWIDE RESEARCH

PRDnationwide’s research division provides reliable, unbiased, and authoritative property research and consultancy to clients in metro and regional locations across Australia.

Our extensive research capability and specialised approach ensures our clients can make the most informed and financially sound decisions about residential and commercial properties.

OUR KNOWLEDGE

Access to accurate and objective research is the foundation of all good property decisions

As the first and only truly knowledge based property services company, PRDnationwide shares experience and knowledge to deliver innovative and effective solutions to our clients.

We have a unique approach that integrates people, experience, systems and technology to create meaningful business connections. We focus on understanding new issues impacting the property industry; such as the environment and sustainability, the economy, demographic and psychographic shifts, commercial and residential design; and forecast future implications around such issues based on historical data and fact.

OUR PEOPLE

Our research team is made up of highly qualified researchers who focus solely on property analysis

Skilled in deriving macro and micro quantitative information from multiple credible sources, we partner with clients to provide strategic advice and direction regarding property and market performance. We have the added advantage of sourcing valuable and factual qualitative market research in order to ensure our solutions are the most well considered and financially viable.

Our experts are highly sought after consultants for both corporate and government bodies and their advice has helped steer the direction of a number of property developments and secured successful outcomes for our clients.

OUR SERVICES

Our research services span over every suburb, LGA, and state within Australia; captured in a variety of standard and customized products

We have the ability and systems to monitor market movements, demographic changes and property trends. We use our knowledge of market sizes, price structure and buyer profiles to identify opportunities for clients and provide market knowledge that is unbiased, thorough and reliable.

OUR SERVICES

- Advisory and consultancy
- Market Analysis including profiling and trends
- Primary qualitative and quantitative research
- Demographic and target market analysis
- Geographic information mapping
- Project Analysis including product and pricing recommendations
- Rental and investment return analysis
- Property Research Speaker



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