

We need to r.e.Design our buildings, and also r.e.Design the way in which we transact, develop, value and manage real estate.

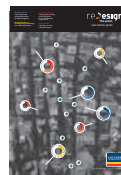
Green Real Estate A Design Challenge

We have now reached an exciting and critical phase in real estate development. We are beginning to redesign our built environment to be environmentally sustainable and, in order to achieve that, we are redesigning how we conduct our real estate practices.

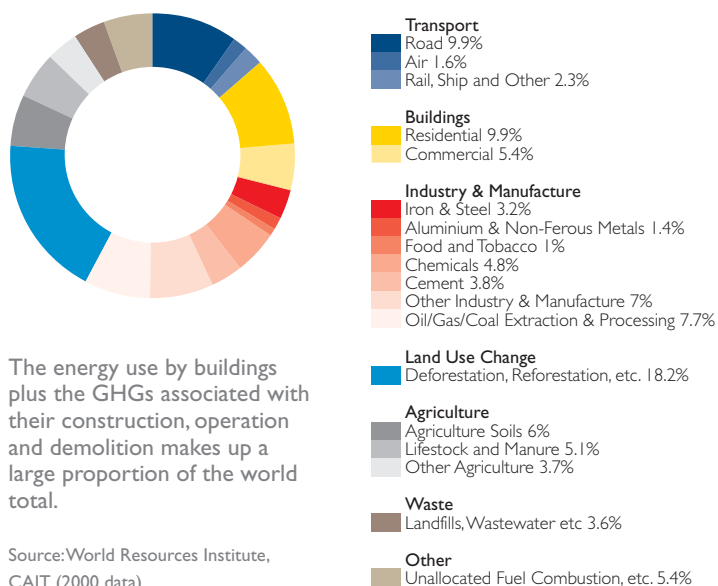
Our global society has reached a juncture in its progress. We are looking for increasing economic growth and improvements in our lifestyles while the ecological systems of our planet have exceeded their capacity to support us. This is fundamentally a design challenge. How do we create expanded built environments and strong real estate value, and address an unfolding environmental crisis at the same time?

Different markets around the world are at different stages in their adoption of Green Real Estate practices. With early adopters having already proven the viability and value of green buildings, the next wave of markets are set to transform very quickly.

This is a summary of Colliers 32 page r.e.Design green real estate guide.



World Greenhouse Gas (GHG) Emissions By End Use/Activity



The energy use by buildings plus the GHGs associated with their construction, operation and demolition makes up a large proportion of the world total.

Source: World Resources Institute, CAIT (2000 data)

The winners in the emerging 'carbon economy' will typically be those who prepare early. Governments and economies will soon turn to buildings to achieve deep emission cuts quickly.

r.e.Design is intended to assist you to design strategies that manage the risks and leverage the opportunities associated with this change in real estate. It will help you understand why and how the change in buildings and real estate is occurring, where the value in green buildings lies, current best practice, mistakes that can be avoided, what the jargon means and, most importantly, what you can do.

Colliers International wishes to share our knowledge to help accelerate your success during this most important phase of evolution in buildings, real estate and our global society.

The full version of r.e.Design has four core guides that act as starting points for strategy design:

Guide 1. Managing Green
Improving existing building performance through management

Guide 2. Developing Green
Creating new green buildings and refurbishing existing

Guide 3. Occupying Green
Leasing a green building, creating a green fitout and operating a green office

Guide 4. Living Green
Improving your own individual footprint



The Transformation of Markets

It is now clear that real estate markets around Asia and the world will transform quickly and adopt green as standard practice, both in developing new buildings and in improving existing ones.

This transformation will be driven by various combinations of regulation, government incentives and changing market dynamics. Some markets, such as the office sector in Australia, have already transformed to a significant extent and much can be learned from them by other markets.

Forward-thinking developers and landlords in the second wave of markets to transform are now preparing themselves to lead, rather than follow, the change.

Factors for Market Transformation – the Australian Experience

In Australia, Green Real Estate slowly unfolded for most of a decade before adoption accelerated quickly in recent years to the point of having almost become the standard. The following key events helped

accelerate progress in Australia and the emergence of some of them in other markets is probably a strong indicator of an imminent turning point.

1. Landmark Event to Focus Attention (2000 Olympics)
2. Green Building Council for Market Leadership

Five Key Points About Green Real Estate

1. Be Prepared for Rapid Transformation

Our shift to green buildings has only just begun, and will now accelerate very quickly as new government policies drive progress towards addressing key environmental issues. Governments will increasingly turn to combinations of regulation and incentives to drive greater improvements.

In turn, tenants will help drive Green Real Estate through their Corporate Social Responsibility programmes, and desire to attract and retain quality employees.

Markets can transform in a very short amount of time, with green buildings quickly going from being

unique to being standard practice. For example, this was demonstrated in the Australian office sector in mid-2007.

2. Focus on Value, Not Just Cost

Over-focusing on the cost of green developments can be greatly misleading. When markets transform, it is the cost of not having a green building in terms of ability to lease or sell that is of the greater importance.

Developers must manage costs, but they should do so in balance with careful examination of their market to understand potential increases or decreases in value due to changing market expectations.

3. Knowledge is Money

Organisations working with green buildings go through a learning process. Those that invest in learning quickly and comprehensively find that dealing with green buildings becomes easy, and that they can drive down the costs of doing so and increase their returns.

For developers, the expertise and depth of experience of their design and development team will be instrumental in managing costs.

4. Collaborate for Best Results

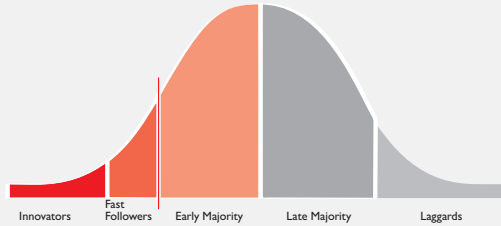
Because the behaviour of one party can affect the environmental performance of the other, the owners

and occupiers of real estate need to collaborate in order to share both the risks and the opportunities associated with the move to Green Real Estate.

It is important that in the design and development phase, key stakeholders, including sustainability experts, collaborate from the outset of the project.

5. The Technology is Available

The technologies and design approaches of green buildings and their ability to perform in operation have now been demonstrated in various locations around the world. It is now just a matter of how this knowledge is shared and adapted.



Adopters' Curve

Where do you sit on the curve in terms of your preparedness for Green Real Estate? Where do your clients and customers sit? Where will your clients and customers sit in one year's time?



Hong Kong York House (2006, Hongkong Land Ltd.)
Achieved the maximum BEAM green building rating of Platinum. One of the first to do so.
Image courtesy Hongkong Land Ltd



Singapore One George Street (2005, Capital Land Commercial)
With a high performance facade and sky gardens, One George Street achieved a Green Mark green building rating of Gold.



Shanghai, China Eastern Harbor International Tower (under development, Shanghai Eastern Harbour Development Co. Ltd.)
One of a rapidly increasing number of high-tech Chinese developments working to achieve LEED (US) ratings.



Cebu, Philippines Robinland Business Centre (under development, Robinland)
This building employs a high-performance facade, an advanced building management system, energy efficient lighting, water recycling, rainwater use and operational waste management facilities.



Delhi, India Wipro Technologies Development Centre (2006, Wipro Technologies)
This building provides excellent IEQ for its 1,300 occupants and achieved a top LEED rating of Platinum with the US Green Building Council.

The Sixth Technological Wave

It can be said that we are on the cusp of our sixth wave of technological revolution. The first five were:

1. Mechanisation
2. Steam
3. Electricity
4. Mass Production
5. Information and Communications

The sixth wave will focus on our use of resources: shifting from harvesting resources that are plentiful to managing resources that are scarce. Given the resources that our built environment consumes, the effects of the sixth wave in real estate will be considerable, with a rapid move to zero – or even positive – footprint buildings.

Green Real Estate Value

The Benefits: Green buildings offer a range of benefits to their stakeholders, the value of each differs by building type and market and will inevitably change over time.

Key Benefits for Landlords

1. Future-proofed Assets

Green buildings can be 'future-proofed' against changing government regulations and shifting tenant demands as tenants increasingly understand the benefits of green buildings. Given that it can be difficult to change the design of a new building once development is advanced, it is important to be prepared for a rapidly changing market.

2. Differentiated Tenant Product

Tenants who understand the benefits of green buildings may prefer them over competing conventional stock. Good green building performance can also be seen as an indicator of building quality, and a commitment to good management practices. Buildings that are more attractive to tenants can also enjoy stronger tenant retention and shorter lease-up and vacancy periods.

3. Differentiate the Landlord's Brand

Enjoy associated public and industry recognition.

4. Eligibility for Investment

Some investors with strong Corporate Social Responsibility (CSR) agendas or long investment horizons, such as super or pension funds, will invest in green buildings to help ensure the sustainability of their investment.

5. Reduced Costs

Efficiency in energy and water consumption can reduce out goings, which can either be retained or used to incentivise tenants.

6. Simplified Reporting

Green buildings can provide the data required for voluntary or mandatory environmental reporting

Key Benefits for Occupiers

1. Attraction and Retention of Talent

It is increasingly important to be able to offer a high-quality work environment in order to compete for

available talent. In particular, younger employees around the world are often exhibiting an aspiration to work for companies known to be socially and environmentally responsible.

2. Enhanced/Protected Reputation

With the rapid growth of CSR, especially among many multi-national corporations, green buildings are recognised as excellent tangible signifiers of a corporation's commitment to the well-being of its people, the environment.

3. Enhanced Productivity

Research has shown a clear linear relationship between occupants perceiving that they have high levels of comfort in a building and perceiving that they are more productive. Good IEQ in green buildings assists in increasing comfort and, by providing a healthier environment, can reduce sick leave.

4. Assisted Learning

For organisations looking to develop strong levels

of knowledge about sustainability within their organisation, occupying a green building or tenancy can provide a powerful learning environment.

5. Reduced Liability

In places where directors and managers of companies have a personal liability associated with the well-being of their employees, excellent IEQ and, especially, Indoor Air Quality can help reduce that risk.

6. Reduced Costs

Green buildings and tenancies typically consume much less energy than conventional options.

7. Better Management

In order to maintain good levels of environmental performance, green buildings are often better managed than conventional buildings.

8. Simplified Reporting

Green building can provide the property related data required for voluntary or mandatory environmental reporting.

Asian Green Building Peak Bodies and Rating Tools

Colliers International is a Global Partner of the World GBC.



WORLD GREEN BUILDING COUNCIL

The Impact of Buildings

In the US, buildings account for:

- 65% of electricity consumption
- 36% of energy use
- 30% of greenhouse gas emissions
- 30% of raw materials use
- 30% of waste output
- 12% of potable water consumption

Source: US Green Building Council

	China	Hong Kong	India	Philippines	Singapore
Peak Body	China Green Building Council (CGBC)	BEAM Society www.hk-beam.org.hk 	India Green Building Council (IGBC) (Official member of the WorldGBC) www.igbc.in 	Philippines Green Building Council (PhilGBC) www.philgbc.org 	Building Construction Authority (BCA), (Agency of the Singaporean Govt.) www.greenmark.sg 
Green Building Rating Tool	LEED – US (Leadership in Energy and Environmental Design) Adopted market standard while awaiting national standard	BEAM (Building Environmental Assessment Method) National standard as set by the BEAM Society	LEED – India (Leadership in Energy and Environmental Design) National standard as set by the IGBC	LEED – US (Leadership in Energy and Environmental Design) Adopted market standard while awaiting national standard	Green Mark Mandated for building projects from 15 April 08 National standard as set by the BCA



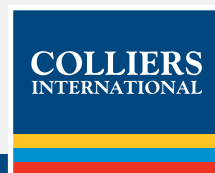
The information in this leaflet is a summary of the material found in Colliers **r.e.Design** guide. The full guide also includes extensive information and best practices in the following four areas.

<p>Managing Green Improving existing building performance through management</p>	<p>Occupying Green Leasing a green building, producing a green fit-out and operating a green office</p>
<p>Developing Green Creating new green buildings and refurbishing existing</p>	<p>Living Green Improving your own individual footprint</p>

If you would like a copy of the full guide please contact a Colliers International broker to organise a meeting. Contact details can be found at www.colliers.com

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r.e.Design Author: Simon Carter,
Regional Head of Sustainability – Asia Pacific,
Colliers International