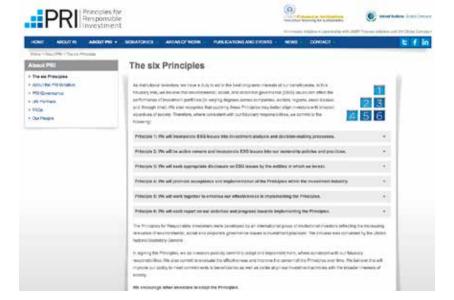
Valorização da sustentabilidade





SUSTAINABLE STOCK EXCHANGES

A Report on Progress

A Paper Prepared for the Sustainable Stock. Exchanges 2012 Global Dialogue

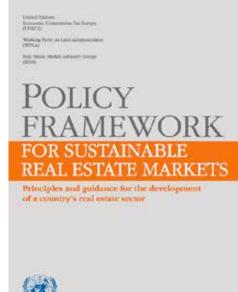












SUSTAINABLE STOCK EXCHANGES

Real Obstacles, Real Opportunities

Discussion paper prepared for the Sustainable Stock Exchanges 2010 Global Dialogue







RICSRESEARCH

Anstentabilidade (B)

IS SUSTAINABILITY REFLECTED IN COMMERCIAL PROPERTY PRICES: AN ANALYSIS OF THE EVIDENCE BASE

The search for a link exists between the sustainability credentials of a building and its rental or/and capital value began some ten years ago, but is still in its infancy. Early attempts at a business case were founded on low additional cost, lower risk and reputational benefit.

There was also a strong view that cost savings in the hands of the tenant would result in rental differentiation, leading in turn to a reduction of long-term risk and better 'futureproofing' of investments. The argument also turns on their ability to support investors' and occupiers' CSR policies.

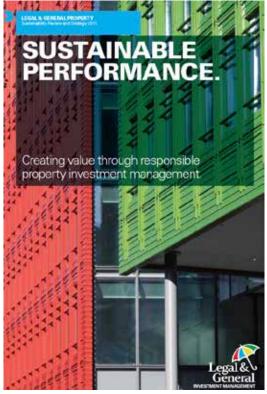
Opinion was abundant and formed a significant part of the study. Most of this work has been undertaken by real estate consultants, and stretches from the UK, to Europe, the USA and Australia. Many of these surveys indicate that potential occupiers state that they would be prepared to pay more for green or sustainable buildings, even in the downturn, on the grounds of potential cost savings However, when tested in actual behaviour there is not the evidence that this is happening (Dixon et al, 2009).

For now the value and sustainability link is argued strongly in theory and in opinion, but in terms of hard evidence it is very limited and restricted to rental differentiation within a tight geographical area and within one sub-sector of the market













'Building Better Returns'





in comparation with leases lawy laterly and CREE







CASE BUSINESSN CASE FORGING WORLD GREEN BUILDING COUNCIL

A Review of the Costs and Benefits for Developers, Investors and Occupants









To promote, develop and represent the publicly listed real estate sector



A key contributor to the built environment, economic growth and financial performance

Real estate plays a critical role in virtually all aspects of human activity. Property companies serve business and community alike by actively developing, managing, maintaining and improving the built environment. A built environment that operates efficiently provides a launch pad for the efficient operation of all businesses. Conversely, an inefficiently operated built environment sets a 'speed limit' on the ability for all business sectors to reach their full potential.

Publicly listed property companies are the major players in the delivery of an efficiently operated and managed built environment. They provide large and small investors with regulated, transparent, and liquid exposure to bricks & mortar. The listed nature of these property companies means they have a vested, and public, interest in innovative and sustainable practices. The listed real estate sector is currently underrepresented in Europe. Its growth potential is high, as are the wider commercial and societal benefits associated to the sector.

Employment & Social Contributions

Commercial property developments such as shopping centres and offices represent an important pool of direct and indirect employment in Europe. As an example, large shopping centres in France represent about 3,500 direct jobs per unit and about as many indirect jobs. In France alone, this adds up to more than 100,000 jobs. Europe-wide, the sector houses millions of jobs.

The listed sector contributes important tax revenue for governments, in the form of corporate tax, withholding tax, VAT, transfer tax, and local property tax.

Economic Value Creation

In Europe, the Real Estate market represents an estimated EUR 6 trillion, i.e. about 45% of GDP. Publicly listed property companies alone represent about EUR 400 billion of property assets or about 6.5% of Europe's GDP. In comparison, the agriculture sector is estimated at 2.1% of Europe's GDP.

But the real estate sector's contribution to economic growth cannot be captured in direct GDP figures alone. As a key factor of production, real estate has a significant effect on the operational capabilities of virtually all economic sectors. The efficiency of the real estate sector therefore directly affects economic value creation; the listed tier is considered its most efficient.

Sustainability & Innovation

Listed property companies offer a better environmental performance than their private counterparts. Investors are often obliged only to finance verifiably 'green' companies. The more profitable, larger property companies, whose focus is on the office and retail sector' tend to be the most 'green'. Of course there still is much room for improvement in this area, but once again, the listed sector is seen as leading the way.

Listed property companies also act as innovation drivers; in their efforts to anticipate customers needs they are leaders in conceptual design, facilities management, urban regeneration and infrastructure.

Positive Impact on Financial Market Stability

The listed real estate sector supports long-term stability in the financial market:

It favours long-term value-creation strategies over shortterm returns;

It is more accountable to investors, regulators and communities at large;

It represents a source of liquidity in an illiquid asset class, which enables small and medium size investors to buy a share in a building without the requiring large capital sums for a direct investment.



Impacts on Financial Market Stabilit

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April 12, 2010

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Green buildings

A niche becomes mainstream

The building sector has immense environmental impacts. It accounts for 42% of the EU's final energy consumption and for about 35% of all greenhouse gas emissions. The residential sector, with a share of 26% of overall energy consumption, has more potential for improvement than the commercial buildings sector.

Green building techniques save resources. These techniques are especially relevant to reducing the energy consumption used for heating, lighting and cooling. Energy savings for green buildings average 30% over conventional buildings. In addition, green buildings use less water and offer lower maintenance costs.

Several compelling factors drive spread of green buildings. Growing tenant demand due to lower operating costs, higher worker productivity and reputational issues forces the real estate sector to adopt efficient building techniques. Overall, operating costs for leadership in Energy and Environmental Design (LEED) certified buildings are 8-9% lower than for regular buildings. Over the life cycle of a building these savings pay for higher initial costs. Investors also seek more socially conscious investments.

Building codes and regulation becoming stricter. Having recognised the advantages of green buildings, national governments and the EU have mandated higher efficiency standards for new construction and renovations with the EU Energy Performance of Buildings Directive of 2002 (EPBD 2002). EPBD 2010, the follow-up directive, is likely to make "near-zero" energy buildings mandatory by 2021.

Limiting factors remain. The real estate industry lacks a universal definition of what constitutes a green building as well as consistent data sources and metrics on green buildings. These deficits make an assessment of the profitability of green building investments difficult and therefore hold back stronger investor interest. Potential misalignments between landlord costs and tenant benefits also hinder faster adoption of green building standards.

Certification systems send market signals. The number of certification systems has surged in the last decade, although their usage remains limited outside the UK and the US. Nonetheless, they help facilitate the move to greener buildings by enhancing the transparency of building operating costs and other



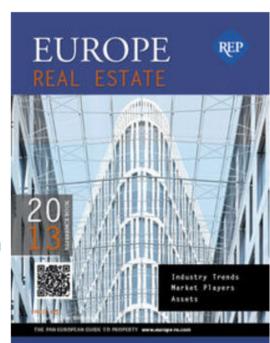
New edition of Europe Real Estate is in production!

Tuesday 5 February 2013

10th EDITION

This edition of the comprehensive guide to European real estate markets is currently in production - due to be launched at MIPIM in March. This book provides a unique, targeted opportunity to reach real estate decision makers right across Europe.

Including all the latest trends, developments and major players in the European real estate sector, Europe Real Estate 2013 reference book will be an essential guide for every real estate professional. The book will feature sections on Thought Leaders, Industry Trends, Dealmaking and over 30 individual country markets in Europe, with a new section on sustainability.



















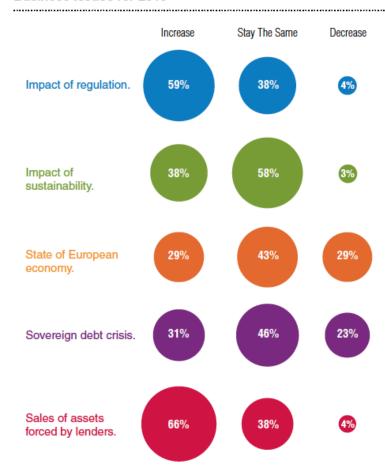




Contents

- 3 Executive Summary
- 4 Ten Years of Emerging Trends Europe
- 6 Chapter 1 Business Environment 9 Who Are the Optimists?
- 10 Globalisation Meets Specialisation
- 12 Nosing Out Niches
- 12 Levering Out the Assets
- Sustainability Gets a New Agenda
 Old Products in a New World
- 13 Asia: A Force for Europe
- 14 Value-Sapping Regulation
- 14 Best Bets 2013
- 16 Chapter 2 Real Estate Capital Markets
- 19 Debt Drought
- 19 The New Lenders
- 20 Banking on Sales
- 21 Small Can Be Beautiful
- 21 Ireland: Action Stations
- 21 The Spanish Sell-Down
- 21 European Buyers: Where's the Opportunity?
- 22 Banks: It's the Relationship
- 23 Equity Seeks Opportunity
- 23 CMBS Rises from the Ashes?
- 24 Chapter 3 Markets to Watch
- 29 City Rankings and Returns
- 30 The Office
- 42 Chapter 4 Property Types in Perspective
- 44 Retall
- 45 Offices
- 45 Industrial
- 3 Residential
- Alternatives
- 7 Best Bets
- 48 Appendices
- 58 About the Survey

Business Issues for 2013



Source: Emerging Trends in Real Estate Europe 2013 survey.

Nosing Out Niches

Hunting for opportunities is also about identifying interesting medium- and long-term trends. Below the scary country-level stats, local trends and niches are being investigated. What will the growing numbers of Chinese tourists to Paris mean for retail concepts? Does the emergence of the "digerati" mean old loft space in London will rise in value as these tech entrepreneurs shun modern steel-and-glass offices? "We seem to be sufficiently distant from the crisis to pick up on niches. There should be

Sustainability Gets a New Agenda

Sustainability is still rising up the corporate agenda. Interviewees, be they REITs, residential developers, banks, or investors, say environmental concerns are now intrinsic to their due diligence. In the consumer world, brands are considering how to manage down carbon footprints and how to supply more sustainable products – an agenda which is beginning to influence retail development.

"We are looking at asset management initiatives that seek to refurbish good assets with green credentials." "It's the only thing tenants want to talk about."

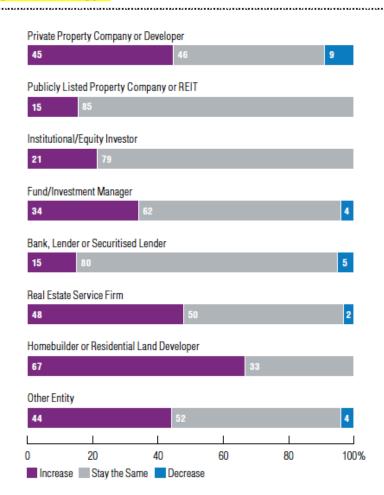
"Government will force people to make buildings greener. There is a cost associated with that, and occupiers will be taxed if they aren't green." Sustainable properties are increasingly commanding higher rents and values, say interviewees. "We are looking at asset management initiatives that seek to refurbish good assets with green credentials." "It's the only thing tenants want to talk about," says another. "We are designing room for bikes and doing everything else we can."

For lenders, the green agenda is tied up with refinancing risk. "The most important aspect of lending today is how that asset will look five years down the line. In five years' time, will I get my money back? For that reason sustainability is very, very important."

The approach to green buildings is maturing. "The market needs to move away from box-ticking and think about what sustainability means in the context of 100 years into the future". "The most green thing is reactivating assets. This should be taken into account in the scoring." Or as one retailer says: "Sustainability is also about how that shopping centre works with the community around it. What role are you playing in the local life of that place? This is the next stage of the sustainability debate."



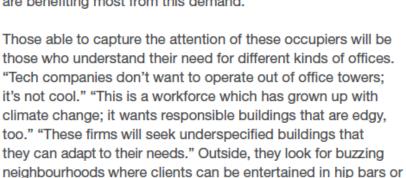
Exhibit 1-8
Impact of Sustainability on Real Estate Business in 2013,
by Business Type



Source: Emerging Trends in Real Estate Europe 2013 survey.

Sustainability is also about cities; local government will increasingly engage with its residents on this issue. It's a challenge being embraced by Copenhagen, which is exploring how green initiatives can boost economic growth long term (see chapter 3).

As smartphones, tablets, and cloud computing drive growth in the sector, tech capitals such as London, Berlin, and Dublin are benefiting most from this demand.



"We must all look at the tech world, with its different needs, and start taking that as the norm. We need to look forward as an industry."

cafés. "They want local experiences, places that are individual

and quirky. They aren't looking for globalised streetscapes."

This could open up opportunities in the urban suburbs or close to the central business district, making previously overlooked locations an attractive bet; the transformation of London's Shoreditch is a case in point. Transport infrastructure must be solid and provide quick links to the city centre.

Polycentric rather than compact cities could be a theme in years to come as people seek work, live, and play environments that provide access to green spaces – though some interviewees believe inner-city locations are best for retail, allowing shoppers to access centres in a more eco-friendly way.

"What buildings do people really want and need? Those that are inventive, that have public realm, space, and comfort."

Asia: A Force for Europe



we can make slight adjustments on the back of it. Through Twitter, we're learning what's going right and what's going wrong."

Offices

Europe's office market is a two-tiered one. Offices in CBD prime pitches and other core locations are benefiting from the flight to safety. With supply constrained and building starts low, their rents are rising and values are holding up; investors compete for prime. But secondary offices are unloved.

Against this backdrop, the best bets for 2013 are in core space that caters to the small- to medium-sized occupier: 3,000 square metres and below dominate take-up. Office buildings in good locations sold by stressed owners will also provide opportunities. In troubled southern European markets like Lisbon and Madrid, refurbishing existing stock is a risk-averse way of delivering new space to market, while in Rome, offices are being converted to other uses.

Environmentally sound properties will attract the best tenants and score plus points with lenders and investors, who like the "increasingly differentiated rents and values" compared with those offered by nongreen assets.

Long-term investors are looking for urban offices with mixeduse angles; they like city centre submarkets that offer business space "intertwined" with "lifestyle uses". "The occupier doesn't want to be in a building by itself. It's about campuses and a return to cities. Single-building offices will be turned into residential."

"It's not about being stuck in an office in the middle of nowhere."

Tenants want to be where employees can bike to work or hang
out in quirky cafés at lunchtime. "Office developers these days
need to know what their occupiers want to eat for lunch and
how they want to spend their time before and after work," says one.

"Do they eat sushi? Where do they want to drink their coffee?"

be too overspecified." They look for buildings with variety that allows for socialising, quirky meeting spaces, and "an interesting public realm".

Exhibit 4-3 Office Yield Spreads to Government Bonds

	10-Year Government Bond	Office Yield	Spread
Italy	4.4%	7.2%	122
Spain	5.3%	7.4%	127
Ireland	4.6%	8.6%	179
France	2.0%	6.7%	380
Sweden	1.6%	5.5%	473
United Kingdom	2.0%	6.4%	496
Germany	1.4%	6.9%	507

Source: Real Capital Analytics.

Industrial

Demand for high-quality, efficiently managed, and well-located industrial property is healthy. "Industrial is a strong performer in a zero-growth environment." Heavy-duty investors are placing faith in the sector, which is relatively underdeveloped compared with that in the United States.

Although values have scarcely moved since their postcrisis plunge, the sector's ten-year track record of returns is second only to retail. Interviewees believe its credentials can only improve, as it looks well positioned to take advantage of changing patterns in global trade, distribution, and consumption – and demand for prime space increases.

"Industrial is the best sector because the drift to online produces demand for big storage sheds." International distribution giant



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by DAN BILLINGHAM March 01, 2013

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ANALYSIS

Tackling sustainability in emerging markets



Global CIO survey: lowered expectations

by AMANDA WHITE February 13, 2013

Connecticut-based financial services management



DAN BILLINGHAM









investing easily rank as two of the most substantiated of the many investment trends of the past decade. However, the two styles of investing are far from natural bedfellows. Christian Ragnartz, as chief investment officer of the \$17-billion-plus Swedish pension fund AP7 — which has 13 per cent of its equities invested in emerging markets – knows all about the pitfalls. "Environmental, social and governance (ESG) challenges remain huge in

some emerging markets as some are very

non-transparent," he says.

Emerging market investing and sustainable

March 1, 2013 | D 0 comments

ESG challenges remain huge in some emerging markets as some are very non-transparent," says Christian Ragnartz.

As a gauge of the issue, Brazil and South Africa are the best performers in Transparency International's 2012 Corruption Perception Index from the popular BRICS grouping. They both rank a modest sixty-nineth place, level with Macedonia but behind Lesotho and Romania. That is not to assume that all emerging market companies neglect sustainability norms, that developed market firms are immune from environmental, human rights or governance breaches or indeed that all established markets are better. Italy, for instance, is ranked behind Brazil and South Africa on the 2012 Corruption Perception Index.

So, how can funds continue to persuade a skeptical public of their sustainable investing credentials while taking advantage of the emerging market boom?

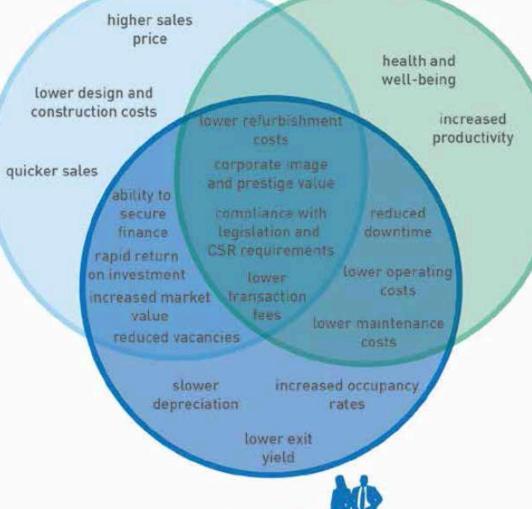
Ragnartz concedes that while sustainable investing considerations were a factor AP7 discussed "at some length" when defining its emerging market strategy in 2007, there was not a "huge impact" on its initial investment choices. Part of the reason for this, he says, is that the lack of transparency made it more difficult for AP7's sustainable investing experts to perform their usual filtering work.











OWNER Why would I want to own this green building?











SmartMarket Report



World Green Building Trends

Business Benefits Driving New and Retrofit Market Opportunities in Over 60 Countries







Executive Summary

Green Building Taking Hold Around the World

Despite the Economic Downturn

Around the world, green building is accelerating as it becomes viewed as a long-term business opportunity. Fifty-one percent of the architects, engineers, contractors, owners and consultants participating in the study anticipate that more than 60% of their work will be green by 2015, up from 28% of firms in 2012. And the growth of green is not limited to one geographic region or economic state—it is spreading throughout the global construction marketplace.

This study assesses the attitude and trends in green building expanding on McGraw-Hill Construction's 2008 Global Green Building SmartMarket Report study.

For this study, green building is defined as a construction project that is either certified under any recognized global green rating system or built to qualify for certification. The average share of green work reported in 2012 by respondents is 38%. (See page 65 for a full methodology.)

Global Green Building Market Indicates Strong Growth Expected

Professionals from firms around the world report plans to conduct green work at higher levels compared to their current levels of green activity.

This is particularly true of firms that are dedicating their work to be green, meaning 60% or more of their work is green, with 28% of firms reporting engagement in green at these levels in 2012, up from only 13% in 2009. Looking forward, more firms (51%) expect to be dedicated to green.

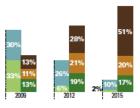
VARIATIONS BY LOCATION

In the nine countries with a statistically significant number of respondents for analysis—the United States (US), Australia, Germany, Norway, United Kingdom (UK), Singapore, South Africa, the United Arab Emirates (UAE) and Brazili—growth is expected across the board, with firms in countries reporting the lowest current levels today more than doubling their activity by 2015. The growth around the world suggests that the green building market is not isolated to one particular region, economic condition or culture.

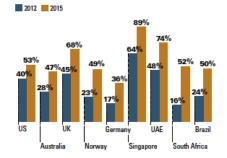
Levels of Green Building Activity by Firms Around the World (2009–2015 Expected)



Source: McGrew-Hill Construction, 2013



Percentage of Firms With More Than 60% of Work Green (2012 and Expected for 2015)



Executive Summary CONTINUED



Sectors With Expected Growth

The future for green building is not exclusive to one building or project type. However, there are some areas with higher expected growth.

Overall, between 2012 and 2015, the sectors with the largest opportunities for green building around the world include new construction and renovation projects. Between now and 2015, 63% of firms have new green commercial projects planned, 45% have plans for new green institutional projects, and 50% have plans for green renovation work.

Regionally, there are some notable differences:

- In the UK and Singapore, green retrofit and renovation projects are planned by the greatest number of firms, at 65% and 69%, respectively.
- In Brazil, 83% of firms are planning to work on new green commercial projects over the next three years.
- In the UAE, 73% have new green institutional projects planned.

Green work is also planned in other sectors—62% of firms in Singapore are planning green high-rise residential projects, 36% of firms in South Africa are planning green low-rise residential projects, and 46% of UAE firms are planning green community projects.

Triggers Driving Future Green Building Activity

A major sea change has occurred since McGraw-Hill Construction's 2008 study of the global green building market. At that time, "doing the right thing" was the primary trigger for green building. The focus on market transformation in 2008 also indicates that those building green were driven primarily by an idealistic desire to have a positive impact.

However, green building is increasingly seen as a business opportunity. Client demand and market demand have become the dominant forces in the market, despite the fact that the number who consider them important drivers has remained relatively consistent from 2008. Combine this with the dramatic growth in those who consider lower operating costs and branding/public relations to be important drivers, and it becomes clear that the market is being motivated by the bottom line.

This shift is supported by looking at the difference between those firms that are heavily involved in green work (doing over 60% of their projects green) compared to those that are not doing any green work. For those

SmartMarket Report

Top Sectors with Planned Green Building Activity Over the Next Three Years (According to Global Firms in 2008 and 2012)









New Institutional Construction (e.g., School, Hospital)

45% N/A

Top Triggers Driving Growth of Green Building Around the World (According to Respondents Over Time)

Source: McGrew-Hill Construction, 2013







17% Branding/Public Relations

30% 22%





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SmartMarket Report

firms not involved in green, their top two triggers mimic the results of 2008. Clearly, these firms have yet to recognize the business value that green projects can offer.

Social and Environmental Reasons for **Building Green**

Improved health and productivity benefits are driving green building more today compared to three years ago-55% of firms rate greater health and well-being as the top social reasons for building green (tied with encouraging sustainable business practices), up from only 29% in 2008. It is also notable that for every country assessed, these were the top two most-important social reasons to build green.

Though energy savings are by far the most critical environmental reason to build green for all respondents, there are some differences regionally for the second most-important environmental factor.

- Water-Use Reduction: Second most-important environmental factor in the UAF, US and Brazil.
- Lower Greenhouse Gas Emissions: Second mostimportant environmental factor for European and Australian respondents.
- Natural Resource Conservation: Second mostimportant environmental reason in South Africa and

Firms Are Expecting Green Building to Yield Financial Business Benefits

There are a number of benefits reported by those engaging in green building-both for new green buildings as well as the greening of existing buildings through retrofits and renovation projects (see the chart at right for median reported benefits).

With these expected benefits, measuring the success of green building investments will become increasingly important-particularly to the investment community. Despite this need, a sizable 37% of firms are not using any metric to track performance. This is a critical gap and a need the industry must address in the future.

Business Benefits Expected From Green Building Investments (Median Reported by All Respondents)

Source: McGrew-Hill Construction, 2013

Benefit	New Green Building	Green Retrofit
Decreased Operating Costs Over One Year	8%	9%
Decreased Operating Costs Over Five Years	15%	13%
Increased Building Value for Green versus Non-Green Projects (According to AEC Firms)	7%	5%
Increased Asset Value for Green versus Non-Green Projects (According to Owners)	5%	4%
Payback Time for Green Investments	8 Years	7 Years

Summary: Country Findings

Global Regional Observations

As green building takes hold around the world, there are different factors driving different markets. Manufacturers, professional firms and service providers looking to capitalize on the green building market opportunities will need to understand key market differences. Below are summary observations for the nine countries that yielded sufficient respondents rate to be statistically valid. (See pages 26-41 for more information.)

Australia

With a long-established green building market. commercial construction is the leading sector for green activity in the next three vears, though other projects are also planned.

With a multitude of drivers motivating the market, it is key to orient messages appropriately, so offering easy-to-understand intelligence on the benefits of green will be important. Australian firms are driven by health and well-being and lower energy use as the top social and environmental reasons to build green. They also value the greenhouse gas emission reductions that green buildings can lead to.

Brazil

tors are motivating the green building market today, and as a result, the commercial building types pose the sectors with the greatest opportunity, overshadowing plans in any other sector. Key to the growth of green in the country will be in demonstrating the advantages of green to keep private

Market and business fac-

mitted to green. With a lack of reported government involvement to date, increasing government buy-in could also be critical.

owners and investors com-

European Nations: United Kingdom (UK), Germany and Norway

UK: An established marketplace, there is an expectation that firms will have green building experience as part of their capabilities. With an older building stock, the greatest opportunity for green is in retrofit and renovation projects. Both the market and government will be important to growth.

NORWAY With the most green activity planned in the commercial and institutional building sectors, both the public and private sectors will be important targets to increase adoption levels.

GERMANY German firms are most heavily planning green work in commercial sectors, for both new and existing projects. With the

branding benefits of green deemed the most important trigger prompting future growth, firms will be able to capture opportunity by highlighting their green expertise, products or services.

Singapore

There has been a high level of engagement by the government in driving green building in Singapore. However, planned activities are notably focused on green retrofits and commercial projects, suggesting that private investment in green building is also occurring in the country. The need to increase public awareness is key, so firms will be receptive to information and data aimed at demonstrating green building's advantages.

South Africa

Newer to green building. South African firms are, however, planning to embrace it in the coming vears, notably in the commercial markets, for both new and retrofit projects. This suggests outside investors, developers and owners will have an important role to play in increasing activity in the country. Firms also recognize the need to engage government decision makers as well to expand the market.

United Arab Emirates (UAE)

Comprised of firms specializing in green, the UAE sample firms are overwhelmingly planning green in new green institutional projects, indicating heavy influence of the government on the market today-and in the future. They are also the country with the most green neighborhood projects planned. Education will be important across stakeholder groups.

United States (US) An established green build-

ing market, there is planned green activity in all types of US construction projects, including commercial interiors and retrofits, Probably one of the most important shifts is the increased importance of the health and well-being benefits as a reason to build green. Evidence of these benefits will help move the US market.

McGraw-Hill Construction SmartMarket Report SmartMarket Report McGraw-Hill Construction