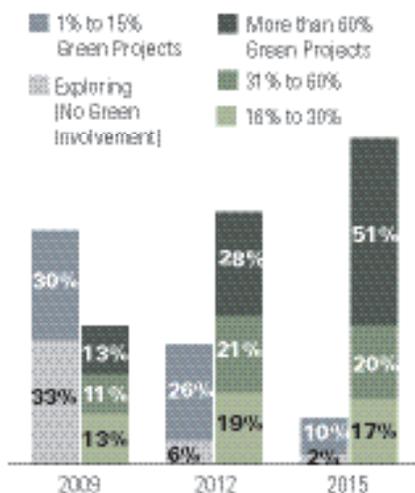


# WORLD GREEN BUILDING TRENDS: Business Benefits Driving New and Retrofit Market Opportunities In Over 60 Countries

## Key Findings from a New McGraw-Hill Construction *SmartMarket* Research Study

**Green building has become a long-term business opportunity with 51 percent of study firms planning more than 60 percent of their work to be green by 2015, up from 28 percent of firms in 2012.**

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



Source: McGraw-Hill Construction, 2012 to be published in the 2013 *World Green Building Trends: Business Benefits Driving New and Retrofit Market Opportunities in Over 60 Countries SmartMarket Report*

### 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 (60% or more of their work green). 28% of firms report engaging in green at these levels in 2012, up from only 13% in 2009. Looking forward, more firms (51%) expect to be dedicated to green.

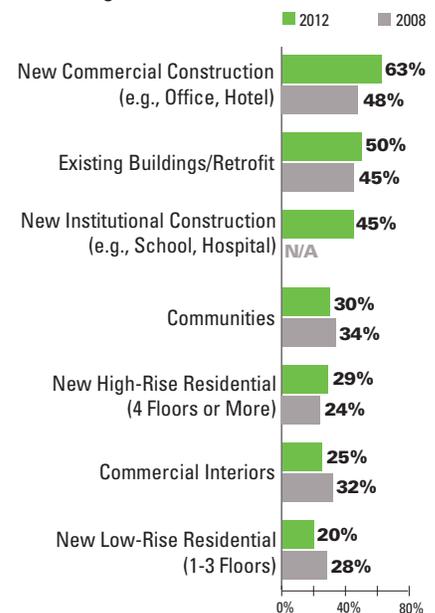
#### Variations by Location

In the 9 countries with a statistically significant number of respondents for analysis—U.S., Australia, Germany, Norway, United Kingdom, Singapore, South Africa, United Arab Emirates (UAE) and Brazil—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.

#### 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 opportunity 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.

### Sectors with Planned Green Building Activity Over the Next Three Years According to Global Firms



Regionally, there are some notable differences:

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

There is also green work 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.

## BUSINESS BENEFITS DRIVING FUTURE GREEN BUILDING ACTIVITY

A major sea change has occurred since McGraw-Hill Construction's 2008 study of the green building market globally. At that time, doing the right thing was the primary trigger to green building. The focus on market transformation in 2008 also indicates that those doing 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 have 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 that are heavily involved in green work (doing over 60% of projects green) compared to those that are not doing any green work. For those 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.

There are a number of benefits reported by those engaging in green building, supporting the financial motives for building green (see chart at right for median reported benefits).

## Triggers Driving Growth of Green Building Around the World



*Improved health and well-being are more important reasons behind green building in 2012 compared to 2008.*

## SOCIAL AND ENVIRONMENTAL REASONS FOR BUILDING GREEN

Improved health and productivity benefits are driving green building more today compared to three years ago—55% rate greater health and well-being as the top social reason for green (tied with encouraging sustainable business practice), 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 UAE, U.S. and Brazil.
- **Lower Greenhouse Gas Emissions:** Second most important environmental factor to the European and Australian respondents.
- **Natural Resource Conservation:** Second most important environmental reason in South Africa and Singapore.

BENEFIT	NEW GREEN BUILDING	GREEN RETROFIT RESPONSE
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

These findings are drawn from a McGraw-Hill Construction survey of firms across 62 countries around the world. Firms include architects, engineers, contractors, consultants and building owners. The sample was drawn from firm members of the World Green Building Council around the world, other global industry associations and the ENR Top Lists. Of the respondents, 92% are members of Green Building Councils around the world. The results include a feature of 9 countries around the world with sufficient sample for statistical analysis. The study expands and contrasts against McGraw-Hill Construction's 2008 *Global Green Building Report* study. Given the survey sample source, McGraw-Hill Construction compared the sample against a non-GBC member audience, which was comparable in terms of involvement in green and planned activity. Further, the U.S. sample was consistent with McGraw-Hill Construction's extensive analysis of the U.S. construction market through its Dodge project data. However, the results are not intended to be viewed as representative for every market analyzed.

The study was produced in partnership with United Technologies and in association with the World Green Building Council and the U.S. Green Building Council. Other research association partners include the Chartered Institute of Buildings, International Federation of Consulting Engineers (Fédération Internationale Des Ingénieurs-Conseils), Association for Consultancy and Engineering, Conseil International du Bâtiment (International Council for Building), Architect's Council of Europe and the Royal Institution of Chartered Surveyors. A separate survey of global manufacturing firms was also conducted.

The full results of this research will appear in the *World Green Building Trends: Business Benefits Driving New and Retrofit Market Opportunity in Over 60 Countries SmartMarket Report*, part of the continuing McGraw-Hill Construction SmartMarket Report series, to be published in the first quarter of 2013 at [http://construction.com/market\\_research](http://construction.com/market_research).