In tandem with economic development in China, a large number of commercial buildings have sprung up in its major cities. The rapid development has brought an array of unresolved environmental issues to the fore, leading to increasing popularity of and mainstream focus on, the green building concept. In 2015, CBRE Research conducted a break-through study consolidating a variety of green building standards in China, and assessing the overall market environment. A year later, many new developments and issues worthy of discussion have emerged. In the face of a state of prevalent oversupply in the commercial real estate market, among other challenges facing the industry, green building performance is undeniably a topic of interest among investors, owners and other stakeholders. This paper will address the topic as it applies to the Greater China region, which includes Hong Kong and Taiwan. As more mature overseas markets that are further along in their development, the status and performance of commercial green buildings in Hong Kong and Taiwan should serve as a good reference point for the prospective outlook of the green building market on the mainland.

CHANGES IN THE MACRO MARKET ENVIRONMENT

On the policy front, new, stricter environmental protection regulation was implemented last year, and is expected to be a significant force in the market. The new and revised Air Pollution Protection Provisions were approved in Q3 2015, and implemented in 2016, stipulating that local governments should take responsibility for ensuring the quality of air according to targets set for specific periods. Against this backdrop, municipal governments are expected to roll out more issue-relevant regulations. Another hot topic is the Paris Climate Change Conference (COP21), which concluded in late 2015, where nearly 200 parties unanimously agreed to adopt the Paris Accord. The Accord contains five key elements that the various parties in the climate political circle have strived to promote within the next 20 years: “long-term goals”, “climate funds”, “related efforts”, “transparency” and “adoption measures”. This is the first legally binding agreement for all parties involved. China participated in reaching the agreement and committed to the following goals: striving to achieve a peak in carbon dioxide emissions by around 2030 or sooner; a drop in unit GDP carbon dioxide emissions of 60% - 65% by 2030, compared to 2005 numbers. These goals, together with the National New Urbanization Plan (2014 - 2020) released in 2014, indicate that the number of green buildings in China is set to increase from 2% of total new constructions in 2012 to 50% in 2020.

Increasing support and awareness of the importance of environmental protection among both the public and regulators is allowing for the formulation of a more clear-cut plan for green building development in China, including the addition of quantitative indicators to measure achievement by commercial and public sector participants in promoting development. The positive social impact of green buildings in China is growing.

THE ACTIVE PROMOTION OF ENVIRONMENT-FRIENDLY BUILDINGS BY REGULATORS

In recent years, the government has continued to increase investment in environmental protection. Outside of their promotion of China Green Standard certification, regulators have also promoted the use of LEED, a more widely accepted international standard of green building that is also gradually becoming recognized and adopted by an increasing number of municipal governments in China. Last year saw an increasing number of instances of the central government supporting these initiatives. For example, in 2015, the Chaoyang District Government in Beijing introduced a subsidy policy to reward projects with LEED certification, becoming the first government branch to incorporate LEED into a green building incentives policy. Meanwhile, due to the increasing popularity of the environmental protection concept, as well as
increasing reliance on the building economy as a pillar industry in the city center, more and more local government departments have come to realize the importance of the environmental certification system in promoting the development of high-quality buildings. The Guangzhou Tianhe District Government has also been quite active in its promotion of a building economy within the district, and has been willing to take on new initiatives in the field of green buildings, regarding the field as a new path for promoting economic restructuring and sustainable development.

**OFFICE BUILDING PERFORMANCE IN A TRANSFORMING MARKET**

The positive social impact of the green building movement has grown in sync with broader market performance. We reviewed the market performance of various property types in the report “The New Era of Green Buildings in China” published last year. Many countries have developed industry standards to promote the development of green buildings. China has also been very active in this area. China first launched and then updated the “Green Building Evaluation Criteria” in 2006 and 2014, respectively. However, from a market point of view, China Green Standard certified buildings are mainly residential and public facilities, both of which are the government’s core focus. In the field of commercial buildings, by contrast, Leadership in Energy and Environmental Design (LEED), which was put forward and is globally promoted by the U.S. Green Building Council (USGBC), is widely recognized by many international tenants and businesses due to its strong reputation globally. As a result, a large number of high standard commercial buildings chose to become LEED-certified buildings. Therefore, the market performance of LEED-certified office buildings can be regarded as an indicator of the recognition of green buildings in the commercial market.

In the 2015 report, we investigated and found that in the five major urban markets, i.e., Beijing, Shanghai, Guangzhou, Shenzhen and Chengdu, LEED-certified Grade A office projects enjoyed higher average rental performance than that of non-LEED-certified Grade A office projects and were in a better defensive position in a weak downward market – the former either maintained relatively high occupancy rates or saw continuous improvement in occupancy.

During the past year, office supply in 17 major domestic cities increased significantly while the pace of domestic economic development continued to slow, posing increasingly severe challenges to the performance of demand for office space in second tier cities. For example, the rental of premium office buildings in Chengdu has experienced a downward trend for 14 consecutive quarters. In such a weak market, both real estate developers and government departments have sought to develop unique points of competitive strength in order to improve their market positioning.

**OVERVIEW OF LEED-CERTIFIED OFFICES IN THE GREATER CHINA REGION**

**MARKET VOLUME**

In spite of its recent launch, the LEED certification program has enjoyed a rapid pace of expansion in Greater China. According to ‘LEED in Motion: Greater China’ by USGBC, by the end of February 2015, Mainland China, Hong Kong and Taiwan, registered 566, 90 and 61 commercial buildings, respectively, that were certified under LEED status. A total of more than 2,200 projects have either already achieved or are under the process of LEED certification. Looking at the development of LEED certification standards throughout the Greater China region, as the office markets in China’s first tier cities quickly mature, the hardware facilities of traditional office properties have undergone rapid improvement and homogenization. At the same time, commercial green building certification is considered to be an embodiment of social responsibility, as well as a way to boost the brand image of projects and businesses, an effective means to attract a high-quality tenant mix by creating a differentiating aspect to help define a building’s unique position in the market. As such, LEED certification has been attracting more and more attention from
developers, with a greater number of them willing to try to develop projects that satisfy the certifications’ standards and requirements.

By 2015, LEED-certified Grade A office buildings exceeded 5.6 million sq. m. across ten select major cities in Greater China, an increase of 7.4% compared to the same period in 2014. This accounts for 28% of the total market, and reveals a development trend of steady growth. Among them, Mainland China tier I cities top the market with the fastest pace of increase in the number of certified buildings. LEED-certified Grade A office buildings in Beijing, Shanghai, Guangzhou and Shenzhen aggregately amount to 3.84 million sq. m., accounting for more than 70% of LEED-certified buildings among the ten select cities. In the four tier II cities of Chengdu, Tianjin, Hangzhou and Wuhan, LEED-certified Grade A office buildings cover a floor area of nearly one million sq. m., accounting for an average of 18% of total Grade A office area. The second tier city market as a whole is still in the emerging stage.

In this report, we include Hong Kong and Taipei as two major business hubs in Greater China. Similar to a later stage in Mainland China, Hong Kong and Taiwan launched their respective green building standards in the late 1990s – Hong Kong BEAM Plus and Taiwan EEWH, which each obtained administrative support and promotion in their respective locales. The standards were launched at an early stage and enjoyed policy support, while LEED promotion and certification started rather late, appearing in the market only around 2010. However, since then, LEED has recorded considerable development over the past two years. LEED-certified Grade A office space in Hong Kong and Taipei reached 840 thousand sq., m. by the end of 2015, registering a rapid increase over the past three years, with an average annual growth rate of approximately 28%.

CHART 1: TOTAL MARKET SIZE (AREA) OF LEED-CERTIFIED GRADE A OFFICE STOCK AND PERCENTAGE BREAKDOWNS IN THE GREATER CHINA REGION

![Chart showing total market size and percentage breakdowns of LEED-certified Grade A office stock in the Greater China region.](chart1.png)

**Source:** CBRE, Q2 2016

MARKET PERFORMANCE

In the 2015 CBRE report “The New Era of Green Buildings in China”, we observed that in the five major cities in the country, LEED-certified Grade A offices enjoyed higher rental performance and were in a better defensive position in a weak market. A year later, in light of the general slowing-down of the economy, which has brought with it a growing number of challenges, the current report will distinguish between a comparison among eight major cities, including first and second tier cities, as well as among the more developed markets in Hong Kong and Taiwan. The resulting study aims to analyze green certification performance according to the different levels of competition and competitive momentum across the market.
Rental Premium
Looking at the specifics of various markets, we can see that the absolute value of LEED-certified Grade A office rental is still above the market average, which is in line with our findings in the 2015 report. In select major cities of Greater China in Q1 2016, rentals of LEED-certified Grade A office are 2-55% higher than non LEED-certified samples. The rental gap is in the range of 10-30% in most cities. Beijing, which saw rental hovering at a plateau for several years, recorded the narrowest gap, due in part to the restrained rental affordability of tenants who are only able to support stable levels of rental.

Rental Growth and Occupancy Rate
The extent to which LEED-certification can quantify a project’s rental growth and occupancy rate is far from certain. Of course, LEED certification was not the only factor resulting in changes in market performance. Rather, performance trends are often subject to the situation of supply and demand in a local market, including the timing of a building’s launch in the market cycle, as well as other factors such as trend variation caused by too small of an overall sample during the initial stage of market development. We can summarize that LEED-certification has had a marginal effect on boosting rental growth and occupancy rate in landlord markets that are characterized by a shortage of supply. All mainland first-tier cities, Hong Kong and Taipei fall under this category. Even so, the measurability of the high quality of LEED-certified project supports an above market average pricing strategy, which brings a competitive advantage and rental premium along with it. The four select tier II cities in this report are categorized as tenant or balanced markets. LEED certification, as an indicator of environmental and sustainable development, will allow buildings to stand out from the competition in the eyes of tenants, boosting competitive and tenant-retaining ability.

CHART 2: PREMIUM OFFICE STOCK, VACANCY RATE AND ANNUAL RENTAL INCREASE IN VARIOUS CHINESE CITIES IN Q1, 2016

ATTRACTION OF HIGH-QUALITY TENANTS
LEED-certification is seen as an indicator for segmentation in the office market, which can help to explain the distinct performance of certified projects. In a few cities, we have found that the ratio of MNCs in LEED-certified Grade A office buildings is 100-150% higher than other buildings completed during the same period. This can be attributed to the stage of development of MNCs, which requires them to adopt a socially
responsible stance and demonstrate care and participation in environmental sustainability efforts. This also promotes the sustainable performance of their business and provides a stable source of income, which is also beneficial to the leasing performance of buildings.

**PERFORMANCE OF LEED-CERTIFIED OFFICES BY REGIONS**

**Beijing**

**CHART 3: RENTAL INDEX AND OCCUPANCY RATE OF BEIJING GRADE A OFFICES**

Following the first Beijing launch of a LEED-certified Grade A office building in Q1 2008, the 2008-2010 period saw significant growth in office supply, including of many LEED-certified buildings, such that the local market experienced what may be termed a “blowout” of the building economy. With the worsening of the economic crisis, the entire market entered an adjustment stage, putting a large number of new buildings in the market under an increasing amount of pressure. At that time, LEED certification was a new concept in the market that participants were only slowly coming to understand. Some developers tested the waters and obtained the certification. Performance of LEED buildings, however, was largely in line with that of the broader market.

The market experienced rapid development during 2010 to 2011, after which it began to experience a long-term supply shortage such that the average vacancy rate remained relatively low. As rental levels had already reached a high plateau, however, property owners had limited ability to further raise rents; tenants generally chose to compress per capita office space in order to meet their business needs. Against this backdrop, it is apparent that LEED certification is not the driving factor of better market performance. Even so, LEED certification has gradually become a popular choice for new buildings. LEED-certified Grade A offices amounted to more than 1.3 million square meters, accounting for 38% of the total Grade A office floor area in Beijing in Q1 2016, as compared to only 17% in Q1 2008.

The rapid rise of LEED certification in Beijing can be partly attributed to a reaction to frequent, serious incidences of air pollution, including days of severe smog in the city. Only 186 days out of the full year were rated as meeting the necessary air-quality standard in Beijing during 2015, the lowest rate among the eight cities in Mainland China. In 2015, CBRE Research conducted a survey of Beijing office buildings and found that 68% of the tenants expressed a high degree of concern regarding air quality. According to the results of the Beijing survey, we found that 62% of tenants considered the concept of improved building air quality to be merely a selling point being utilized for marketing purposes. It is apparent that, in spite of their serious concerns regarding air quality, users often view efforts by developers to improve air quality for building promotion as merely marketing strategies that lack substantive changes. When filtering among site selection...
factors, we observed that market indicators, including rental costs, transportation facilities and regional maturity, are still the main determining factors in the performance of a building in the leasing market. We can conclude from our above analysis that the further development of green buildings is dependent not only on support and funding from both government and companies, but also on increased recognition of ‘green’ technology and greater public awareness of the concept of a healthy work environment.

**Shanghai**

**CHART 4: RENTAL INDEX AND OCCUPANCY RATE OF SHANGHAI GRADE A OFFICES**

[Graph showing rental index and occupancy rate trends for LEED-certified and non-LEED-certified Grade A offices in Shanghai.]

Occupancy by foreign companies accounts for a relatively high portion of the Grade A office market in Shanghai. Even with the gradual rise in take-up of space by domestic enterprises, foreign companies have still accounted for over half of tenant office occupancy in the city in recent years. The relatively high proportion of foreign enterprises not only carries with it differences in business philosophy, but also different requirements for the office environment, as well as different requirements on the sustainability of building amenities and facilities.

The market has undergone significant adjustment since the world financial crisis in 2008. Since 2010, however, the overall economy has seen a rapid return to health, including the rapid rise of rental. In Q2 2009, the first LEED-certified Grade A office building was launched onto the market. From Q2 2009 until Q1 2016, rental increased by 56%, 15 ppt higher than that of non-LEED certified samples. The occupancy rate also rose rapidly over the same period, allowing it to rise above the market average.

In our analysis of the development trends and distribution of LEED-certified Grade A office buildings, we observed that, during the 2008-2011 period, LEED-certified projects were mostly developed by foreign developers, who generally demonstrated greater familiarity with and recognition of the international standard. The certified buildings are mainly located in the core office cluster areas such as Nanjing West Road, Huaihai Road and Lujiazui. Since 2012, newly-certified buildings have spread to more new districts, including Shanghai Intercity Bus Terminal, Sichuan Road North, South of the Bund and New Hongqiao CBD. During this period, a wider range of developers began to participate, including a number of domestic developers that chose to engage in the promotion of green environmental protection certification. The spread of the use of LEED certification among a wider range of developers demonstrates greater recognition of the certification in the market. The growing recognition of the program has seen LEED-certified office properties in Shanghai benefit from corresponding strong performance and rental growth.

It is worth noting that, similar to the trend in Beijing, LEED certification has gradually become a widely accepted standard for premium buildings in Shanghai. The floor area of LEED-certified offices rose from accounting for just over 10% of the Grade A office market in Q22009 to 23% in Q1 2016.
The Guangzhou office market has a number of distinct features that see it stand apart from the markets in Beijing and Shanghai. As a regional city hub, foreign enterprises accounted for around 25% of new tenants in 2015, lower than the 40% average proportion in the premium office markets in Beijing and Shanghai, and more similar to the rates in Suzhou and Tianjin, which are both second tier cities. Nonetheless, in the Guangzhou market, a high percentage of office buildings, including Grade A offices, are sold to individual owners – more than 35%, as compared with only 10%-20% in the other first tier cities. This signifies that, as a result of a relatively smaller number of medium to large tenants, a lower percentage of commercial real estate is held and operated by developers themselves, as compared with the situation in other tier I cities.

LEED-certified Grade A offices take up a relatively small proportion of the Guangzhou market. As of Q1 2016, LEED-certified Grade A offices in the Guangzhou market accounted for about 15% of total Grade A office space in the market. What is more, the development history of the market is relatively short: the first LEED-certified Grade A office building was launched in the market in Q3 2011. Looking at rental performance trends, we found that the overall rental of Grade A offices in Guangzhou saw a round of adjustment from Q3 2011 to Q1 2016, without experiencing a substantive increase, whereas during the same period of time, the rental of LEED-certified projects increased by more than 5%, demonstrating a measurable market advantage over non-LEED-certified projects.

Recently, however, we have begun to observe more upbeat market sentiment, as regulators and market participants in Guangzhou have begun to accelerate the pace of development of some of the new CBDs, including Zhujiang New Town, the future Pazhou CBD and Financial City. Each of these CBDs has experienced significant building of new supply. The city of Guangzhou is committed to creating a new building economy, and has, in the process, gradually come to realize the value-add of employing new technological advancements and environmental protection measures in office buildings. The city is expected to participate in the promotion of green building development.
Shenzhen

Similar to the situation in Guangzhou, LEED certification in Shenzhen began in 2011, albeit at a swifter pace. As of Q1 2016, LEED-certified Grade A office buildings accounted for nearly 24% of the total office market in area coverage terms, reflecting the wider acceptance of the environmental protection concept by developers in this market.

In recent years, in spite of the downturn in the national economy, the Shenzhen market appears to be rather strong. Driven by robust growth of demand, from the financial and TMT sectors in particular, the overall market rental of Grade A office enjoyed a strong upward trend, coupled with low vacancy rates. During the past three years, rental increased by about 15%, the strongest performance for rental of any major city in China during this time period. As mentioned previously, review of building performance in this market did not demonstrate evidence of significantly strong performance in terms of rental growth and occupancy rates for LEED-certified projects over the rest of the market. Even so, LEED-certified Grade A office projects did manage to record a rental premium of 13%. The mediocre performance of green buildings in the market may be attributed to the city’s high-quality, ambient atmosphere, which is comparatively better than that of the city of Beijing, another landlord market.

Chengdu

Source: CBRE, Q2 2016
As a representative of the second tier city markets, Chengdu, providing both rapid economic development and a strategic geographical location, is a highly valued as an office location by a wide variety of domestic and foreign enterprises. For instance, taking foreign enterprises as an example, according to CBRE’s report “2015 A Census of Occupier Demand for Chengdu Grade A Office”, by 2015, 268 of the world’s 500 largest enterprises had already established an office presence in Chengdu, ranking first among second tier cities in Mainland China. Even with the rapid uptake, premium office supply in the Chengdu market has continued to grow rapidly over the past 3 years. By the end of Q1 2016, overall office stock surpassed 6.8 million square meters, almost on par with the level of total office stock in the Guangzhou market. The continued build-up of excessive supply during the current period has resulted in a downward trend for rental for the 14th consecutive quarter, as the market continues to come under tremendous pressure. Both owners and the local government have devised a number of measures to cope with the situation, including offering more flexible leasing conditions and even providing financial subsidies, among other methods.

Although the rental of LEED-certified buildings will adjust in line with the general downward trend, the adjustment is expected to be rather mild. In spite of the rise of the average vacancy rate in the Chengdu market to about 40%, the occupancy rate of new LEED-certified offices continues to beat the market average, maintaining a steady upward trend. According to our analysis, LEED-certified offices can attract a larger number of foreign enterprises, which offer stronger rental bearing capacity than many domestic enterprises. As for buildings that were launched onto the market from 2012 onwards, the proportion of foreign tenants accounted for only 24% in LEED-certified offices and 13% in non-LEED offices.

In spite of their late entrance to the market, LEED-certified Grade A offices experienced rapid growth in Chengdu, rising from accounting for only 8% of the market in 2011 and to 21% by Q1 2016.

Tianjin

Due to the large quantity of new supply in the new business district, rental performance has been relatively weak in the Tianjin market. Although there are more than 10 office buildings with LEED certification in Tianjin, these projects are mainly for self-use as headquarters for companies or else are, for other reasons, temporarily not open for leasing on the market. As a result, the number of Grade A office buildings that can be tracked for performance is rather limited, reflecting a distinct feature of this market – owners obtain environmental certification mainly to enhance their corporate image and work towards long-term sustainability goals rather than in an effort to differentiate their office buildings from the competition.
LEED-certified projects launched over the past two years in Hangzhou can be divided into traditional business center projects and projects launched in the new business districts of Qianjiang New Town and the Canal Business District. The rental of the former group experienced significant growth in 2012 and 2013, thus driving up the overall index. Over the past two years, both the old and the new business district projects had entered a consolidation and digestion stage. Due to the large volume of new supply in 2014 and 2015, the occupancy rate experienced a significant decline, followed by a prominent rebound in market performance. The performance of the occupancy rate during this period revealed that, facing an increasing amount of pressure from the competition, developers have turned to factors such as environmental certification to attract tenants.

By Q1 2016, the average rental of LEED-certified Grade A office buildings in Hangzhou remained 19% higher than non-LEED certified samples. The attraction of LEED-certified buildings to foreign tenants has also been demonstrable in the market. According to our survey, MNCs in LEED-certified Grade A office buildings account for 22% of tenant occupancy, notably higher than their 11% occupancy for non-LEED certified office buildings.

**Wuhan**

CHART 10: RENTAL INDEX AND OCCUPANCY RATE OF WUHAN GRADE A OFFICES

LEED-certified projects launched over the past two years in Hangzhou can be divided into traditional business center projects and projects launched in the new business districts of Qianjiang New Town and the Canal Business District. The rental of the former group experienced significant growth in 2012 and 2013, thus driving up the overall index. Over the past two years, both the old and the new business district projects had entered a consolidation and digestion stage. Due to the large volume of new supply in 2014 and 2015, the occupancy rate experienced a significant decline, followed by a prominent rebound in market performance. The performance of the occupancy rate during this period revealed that, facing an increasing amount of pressure from the competition, developers have turned to factors such as environmental certification to attract tenants.

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Compared to other major second tier cities, Wuhan has experienced a relatively stable rate of development of office properties. Premium office stock in Wuhan is less than half of the stock in Chengdu in terms of area, in spite of the fact that there is little difference between the total measures of value-added from each of the cities’ tertiary industries. Due to the limited level of supply, the overall Wuhan market remains quite healthy, and rental of Grade A offices has maintained healthy growth over the past 5 years. The Wuhan market also experienced a degree of agglomeration among MNCs choosing to locate in LEED-certified projects. In the full stock of Wuhan Grade A offices, occupation by foreign tenants account for 18% of total leasing, significantly below the proportion of total space leased by foreign tenants in LEED-certified offices; according to incomplete statistics, 30-45% of LEED-certified Grade A offices in Wuhan are occupied by foreign tenants. Strong interest from foreign tenants saw rental increase by 58% from Q2 2011 to Q1 2016. Over the same period, rental increase of non-LEED Grade A offices was around 42%.

Taipei

The promotion of LEED standards in Taipei began 5 years ago. Taipei 101 was both the landmark green building in Taipei and the tallest green building in the world at that time. It was awarded LEED Platinum certification in 2011. In tandem with increasing market awareness of environmental protection, a growing number of tenants want to use the LEED certification symbol for interior decoration. LEED certification of commercial buildings will help the tenants of the respective properties obtain other, related certifications for themselves and their own operations. As such, LEED certification is viewed as a helpful measure to attract such tenants. In the Taipei market, the average rental of LEED-certified Grade A offices is 31.2% higher than the rest of the sample, reflecting a rental premium from the high quality of these buildings as compared with the rest of the market. The growing number of buildings in the market that are choosing to apply for LEED certification demonstrates the rapid build-up of interest and momentum in the market.
Hong Kong

CHART 12: RENTAL INDEX AND OCCUPANCY RATE OF HK GRADE A OFFICES

There has been a limited supply of Grade A offices in Hong Kong in recent years. In 2015, office stock amounted to more than 6.8 million sq. m., an increase of only around 8% compared with five years ago. However, with the influx of Chinese enterprises, the market is facing a state of short supply. LEED promotion in Hong Kong began relatively late compared with other markets. The first LEED-certified project was launched onto the market in 2011. Since then, the spread of LEED-certified projects has become quite rapid. By the end of Q1 2016, LEED-certified area amounted to nearly 450,000 square meters. LEED-certified Grade A office buildings in Hong Kong include both landmark buildings and old buildings that were renovated to meet LEED standards. In regards to area, the average annual growth rate has been about 20% during the past 3 years.

Similar to the markets in Beijing and Shenzhen, the Hong Kong Grade A office market has continued to register an occupancy rate above 95% in recent years. As was observed in Beijing and Shanghai, LEED-certified projects did not notably outperform the broader sample in a tight market that was experiencing limited rental growth. In spite of the lack of evidence of stronger performance, a rental premium nonetheless exists for LEED-certified projects in the market. By Q1 2016, the average rental of LEED-certified Grade A office buildings rose to a level 55% above non-LEED certified samples. In fact, a significantly higher level of rentals among the former group remained a major factor capping rental growth. Although the overall rental rebound in recent years has allowed for a period of consolidation, the increase in rental among LEED-certified projects has tended to lag behind the overall sample even while the overall occupancy rate starts to rapidly catch up.

Source: CBRE, Q2 2016
CONCLUSION

According to the report "World Green Building Trends 2016" published by Dodge Data & Analytics, a North American company specializing in the research of commercial real estate, results from a survey of professionals from 69 countries reveal that China is still an emerging market for green buildings. Even so, China is likely to experience rapid development of green buildings over the next three years. In the field of commercial buildings in China, the majority (55%) of architects will dedicate themselves to the future construction of green buildings. This percentage is higher than the global percentage of 46%. The primary factor serving as the driving force behind this trend is market demand; in China, which accounts for 43%, much higher than the global average of 30%. Other factors supporting development of green buildings include policies and regulations and environmental protection measures, among others.

Although the impact to investment yield for a commercial building receiving green certification has yet to undergo sufficient quantitative analysis and tracking, information obtained in the markets of developed countries, including the U.S., U.K. and Germany demonstrate that green buildings enjoy higher yields with non-certified buildings. The rental of buildings with green certification is 0-30%\(^1\) higher than that of buildings without green certification. Even though the above survey result may not directly apply to the commercial building market in the Greater China Region, which is currently in a different stage of development, the study results nonetheless demonstrate that, in a more competitive market environment, LEED-certified Grade A offices provides a certain degree of improvement and assurance over non LEED-certified projects, in terms of absolute rental value and relative growth margins, as well as in terms of increases in the occupancy rate. Boosts to performance are based on the reasoning that increasing environmental protection awareness and growing support for sustainable development among both the public and the businesses will promote stronger market performance for green commercial buildings in the region.

\(^1\) "The Economic Value of Sustainable Property Assets", Valuation Department, CBRE Denmark, March 2016
For more information about this report, please contact:

**CBRE RESEARCH**

Sam Xie  
Senior Director  
Head of Research, China  
+86 21 2401 1318  
sam.xie@cbre.com

Julian Jiang  
Associate Director  
China Research  
+86 21 2401 1342  
julian.jiang@cbre.com

**CBRE ASSET SERVICES**

Andy To  
Managing Director  
Head of Asset Services  
Greater China  
+86 21 2401 1392  
andy.to@cbre.com

Stephen Tam  
Senior Director  
Asset Services, China  
+86 21 2401 1297  
stephen.tam@cbre.com

**USGBC**

Nellie Cheng  
Director of Global Market Development  
+86 137 6153 9398  
ncheng@usgbc.org

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