



GREEN BUILDING MARKET STAKEHOLDER ASSESSMENT

PHILIPPINES
2023



Creating Markets, Creating Opportunities

ACKNOWLEDGEMENT

This report was prepared as part of the UK-IFC Market Accelerator for Green Construction (MAGC) Research Program. The preparation of this assessment was based on 190 surveys of Philippines private sector companies including developers, real estate investors (i.e., funds, REITs, and/or corporate landlords), building experts (i.e., architects, engineers, contractors, and Green Building experts), policy makers, and residential occupiers (i.e., tenants and homeowners). Substantive contributions were received from Angelo Tan of IFC's Philippines EDGE team. A special thank you is extended to Corinne Figueredo, IFC EDGE Operations Manager, who provided guidance for the study.

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GREEN BUILDING MARKET STAKEHOLDER ASSESSMENT: PHILIPPINES

Buildings account for one-third of global final energy use and one-fifth of energy-related greenhouse gas (GHG) emissions. Green Buildings can be a solution to reduce energy use and GHG emissions of buildings and contribute to low carbon economic growth. However, market failures and barriers (e.g., lack of supportive policies, information asymmetry between builders and buyers regarding the efficiency of a building, and lack of information about, experience with, and awareness of Green Buildings) result in the continuation of conventional approaches to constructing buildings.

The UK-IFC Market Accelerator for Green Construction (MAGC) aims to boost the uptake of greener construction practices and technologies in developing countries. As part of this initiative, the MAGC Research program gathers, analyzes, and disseminates new evidence to develop, improve, and promote approaches to green construction and market transformation.

The scope of MAGC Research includes a series of stakeholder assessments intended to understand the perceived motivations and obstacles to the growth of Green Buildings in selected emerging markets.

This report was conducted as part of the MAGC Research Program in 2022-2023. The stakeholder assessment is intended to be representative, but not exhaustive. It aims to provide actionable insights and contribute to the understanding of the Green Building market in Philippines, shedding light on awareness, motivating factors, perceived obstacles, construction cost and performance estimates, and decision-making paradigms of each stakeholder group.

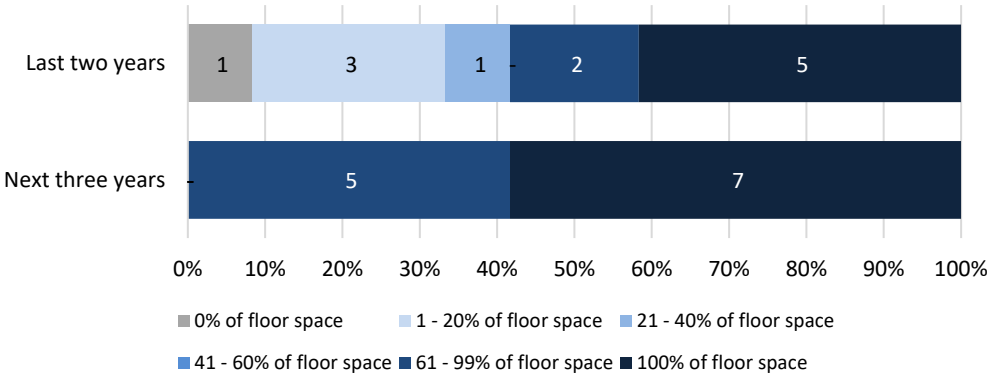
The Philippines stakeholder assessment was conducted through the SurveyMonkey online survey platform. 190 stakeholders responded to the survey, representing six stakeholder groups: developers, real estate investors (i.e., funds, REITs, and/or corporate landlords), building experts (i.e., architects, engineers, contractors, and Green Building experts), policy makers, and residential occupiers (i.e., tenants and homeowners).

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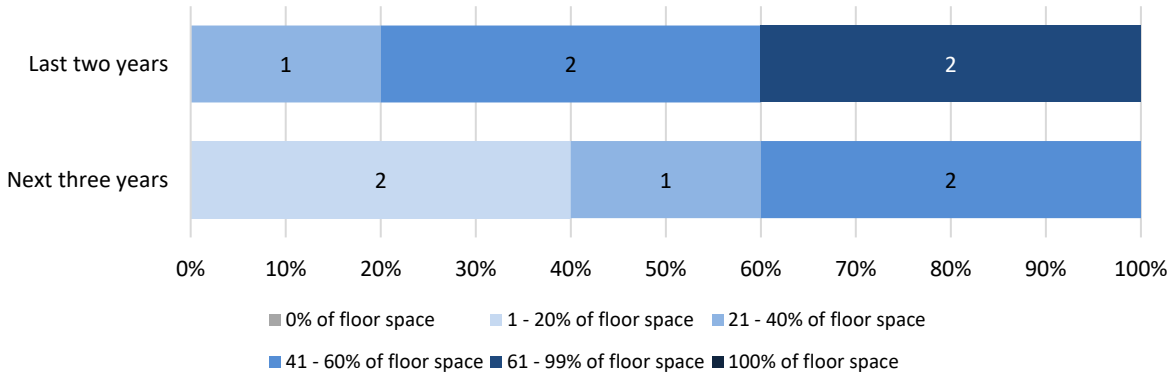
Portfolio: This assessment finds that Green Building market in the Philippines is growing, with the vast majority of developers, building experts, and real estate investors reporting having Green Building portfolios during the last two years and expecting an increase in their Green Building portfolios in the next three years.

These findings are aligned with the IFC’s Green Building Market Maturity Snapshot for the Philippines*, which indicates that the Green Building penetration rate and the share of certified buildings among new builds have increased over the last few years.

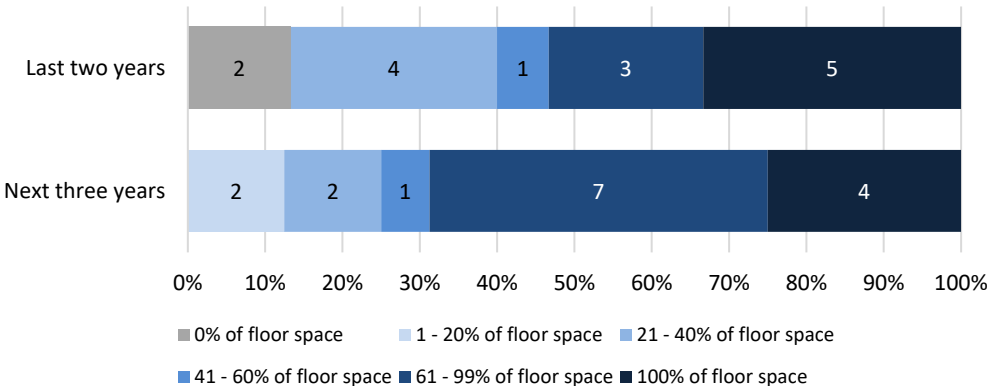
Developers’ Certified Green Building Portfolio and Expectations



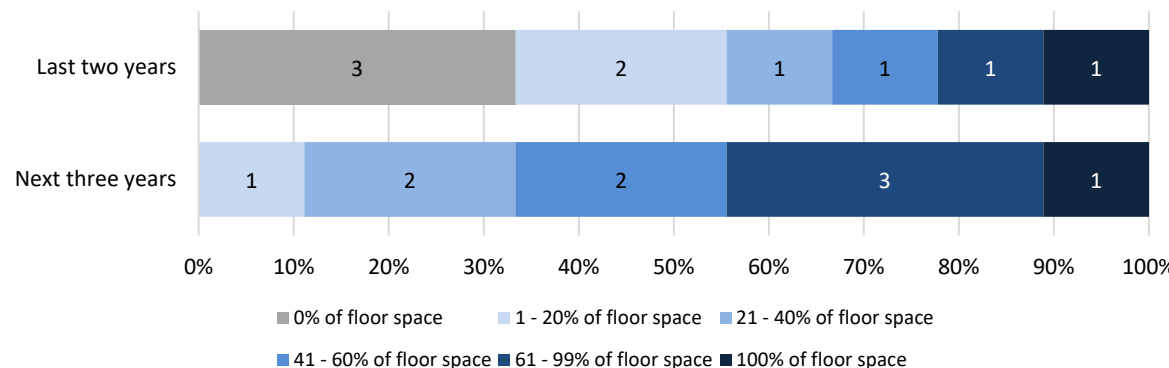
Real Estate Practitioners’ Certified Green Building Portfolio and Expectations



Building Experts’ Certified Green Building Portfolio and Expectations



Real Estate Investors’ Certified Green Building Portfolio and Expectations

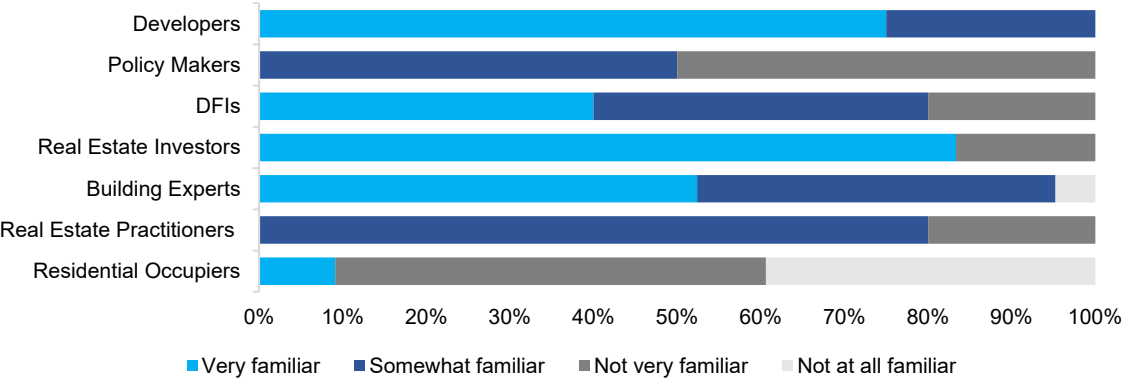


4 *IFC. 2021. Philippines Green Building Market Maturity Snapshot 2020.

GREEN BUILDING MARKET STAKEHOLDER ASSESSMENT: PHILIPPINES

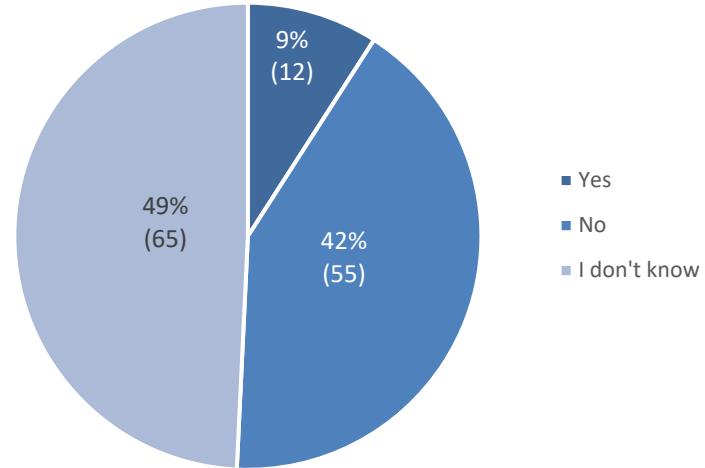
Familiarity: Overall, 34% of respondents indicated that they are somewhat familiar or very familiar with Green Buildings, indicating limited awareness among stakeholders in the Philippines. Developers (100%) and Building experts (95%) were identified as groups most familiar with certified Green Buildings, followed by real estate investors (83%), real estate practitioners (80%), and DFIs (80%). Conversely, policy makers (9%) and policy makers (50%) reported the least familiarity with Green Buildings.

Philippines -- Familiarity with Certified Green Buildings



Demand: 9% (12) of residential occupiers reported to be working or living in a Green Building. However, 60% (46) of residential occupiers indicated that they would be willing to pay over 2% to live in a resource and energy efficient Green Building, with 48% (37) willing to pay 3% or more. These findings suggest that Philippines's Green Building market has a large growth potential, with very strong potential demand for Green Buildings.

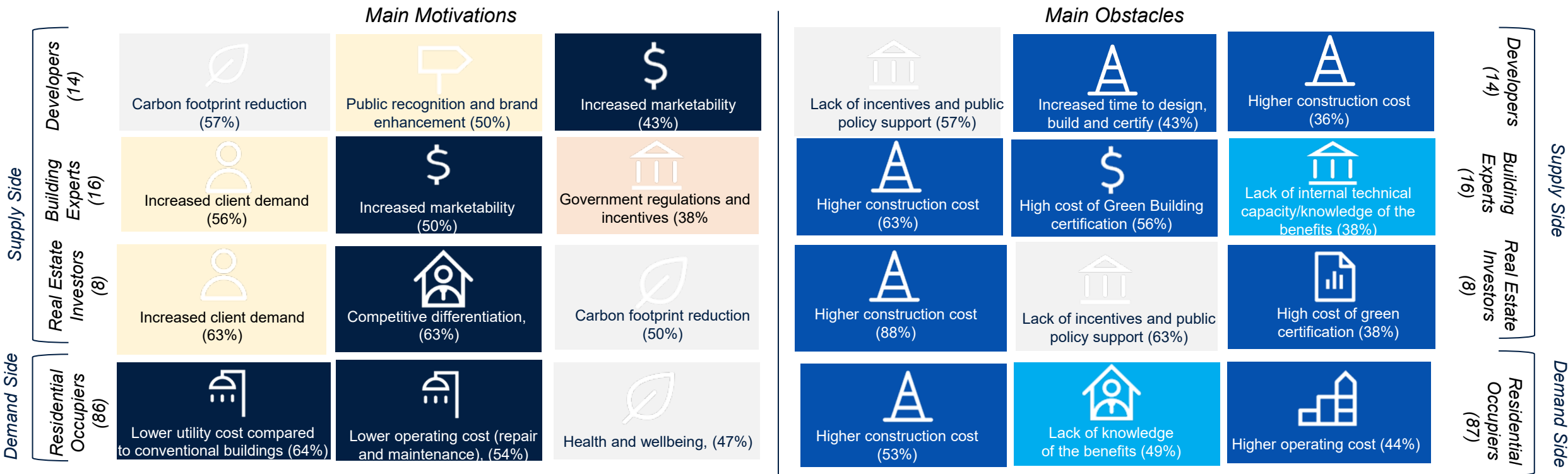
Residential Occupiers :
Do You Live in a Certified Green Building?



Motivations: On the supply side, according to the survey the main motivating factors for Green Buildings are increased client demand (63% of real estate investors and 56% of building experts), increased marketability and corporate differentiation (63% of real estate investors, 50% of building experts, and 43% of developers), and carbon footprint reduction (57% of developers and 50% of real estate investors).

On the demand side, residential occupiers indicated that the main motivating factors for buying or leasing a Green Building are lower utility bills (64%), lower operating cost (54%) and increased health and wellbeing (47%).

GREEN BUILDING MARKET STAKEHOLDER ASSESSMENT: PHILIPPINES



Motivation categories:

- Advantage of Green Buildings
- Availability of finance
- Availability of supply
- Better financing terms
- Company strategy
- Environmental sustainability
- Government policy
- Increased demand for Green Buildings

Obstacle categories:

- Unclear business case
- Knowledge
- Financial obstacle
- Company strategy
- Risk
- Government policy
- Disadvantage of Green Buildings
- Capacity
- Availability of supply
- Availability of financing

GREEN BUILDING MARKET STAKEHOLDER ASSESSMENT: PHILIPPINES

Obstacles: On the supply side, survey results indicate that the perceived cost of construction is considered the major obstacle to the expansion of certified Green Buildings in Philippines (88% of real estate investors and 63% of Green Building experts), followed by the lack of incentives and public policy (63% of real estate investors and 57% of developers).

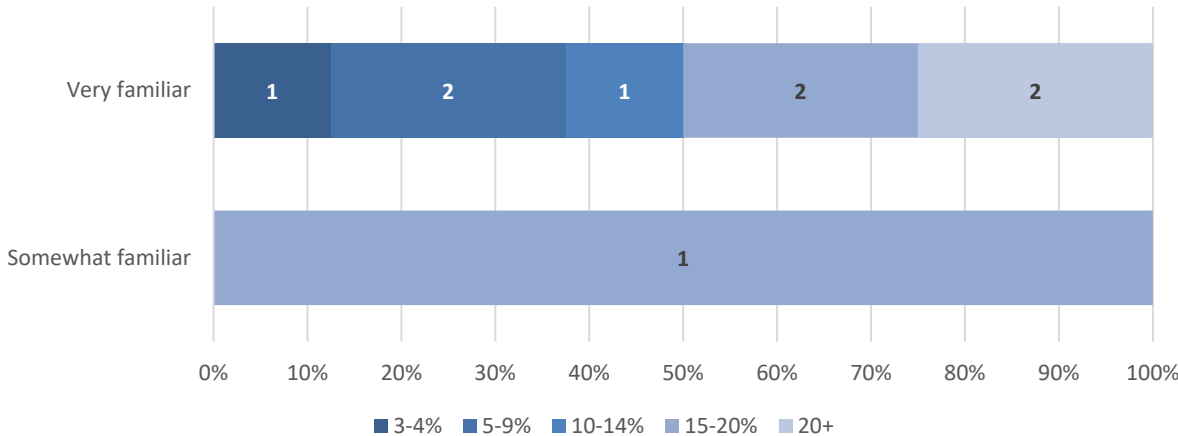
On the demand side, the main reported obstacle is also the perceived cost of construction (53% of residential occupiers), together with the lack of knowledge of the benefits (49% of residential occupiers).

It is worth noting that 100% of the building experts in the survey estimated that the cost of construction is an additional 3% or more for Certified Green Buildings, which is much higher than the typical actual estimated additional cost of 1-2%.

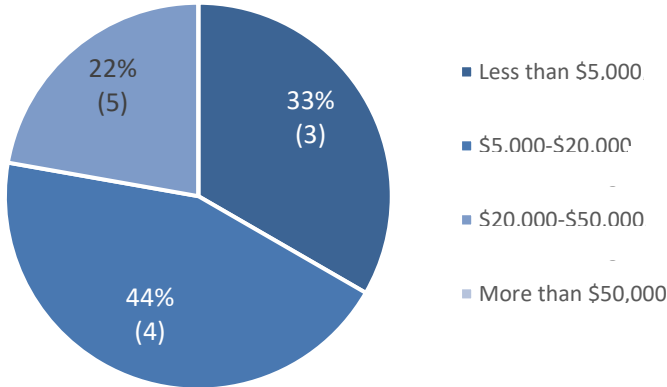
While this could mean that better knowledge may allow companies to find more cost-effective solutions, it could also signal that in the absence of information, developers that are less familiar with certified Green Buildings could further overestimate the additional cost of green construction.

Regarding the cost of certification, the estimation of the professional fees required to certify a 5,000 sqm project varied significantly across Building Experts respondents, again suggesting a large knowledge gap.

Building Experts' Estimation for the Additional Cost of Construction of a Certified Green Building by Level of Familiarity with Certified Green Buildings



Building Experts' Estimation of Professional fees to Certify 5,000 sqm project



GREEN BUILDING MARKET STAKEHOLDER ASSESSMENT: PHILIPPINES

Conclusion:

- The importance of Green Buildings in Philippines is expected to grow for most stakeholders.
- 60% (46) of residential occupiers indicated that they would be willing to pay over 2% to live in a resource and energy efficient Green Building, with 48% (37) willing to pay 3% or more. This would more than cover the typical actual estimated additional cost of Green Building construction of 1-2%, so if this results can be generalized this would indicate a robust business case for Green Buildings in the Philippines, with very strong demand and growth potential.
- Supply-side stakeholders in the Philippines consider increased client demand, marketability and competitive differentiation/brand recognition as the main motivating factors for Green Building construction.
- Residential occupier respondents in the Philippines consider lower utility cost and lower operating cost as the main motivations for living in a Green Building, followed by increased health and wellbeing.
- The majority of stakeholders in the Philippines consider the additional perceived cost of Green Building construction as the main barrier for the growth of the market.

GREEN BUILDING MARKET STAKEHOLDER ASSESSMENT: PHILIPPINES

ANNEX

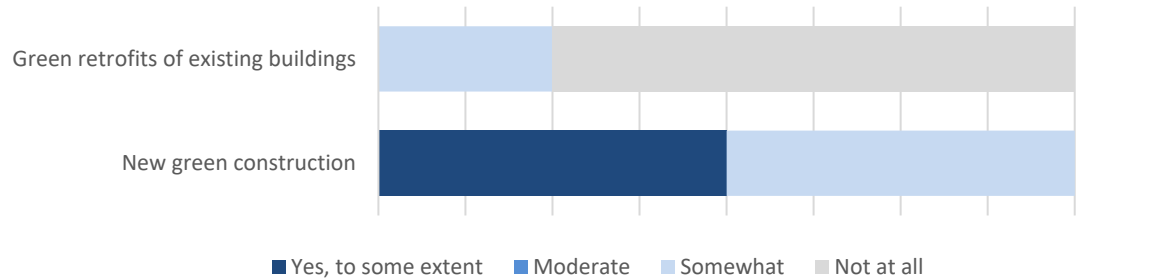


Policy Makers

Responses: 4

All policy makers surveyed think that Green Building development is an important part of Philippines's response to climate change, with 25% indicating it is very important, 50% saying it is important, and the remaining 20% saying it is somewhat important. The survey gathered mixed views on whether current public policies (e.g., regulations, incentives) encourage the development of the certified Green Building market in the Philippines.

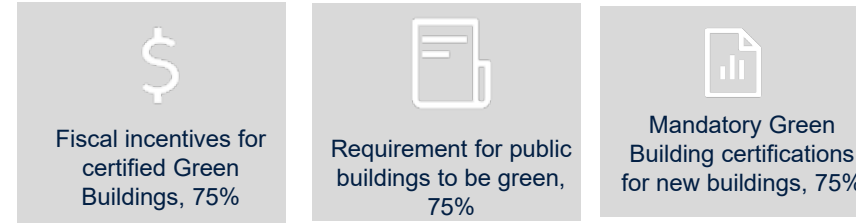
Do current policies encourage development of the GB market?



The public policies that do encourage the development of the Green Building market lack in enforcement. 100% of the respondents estimated that there is limited or no enforcement of Green Building regulations in the Philippines.

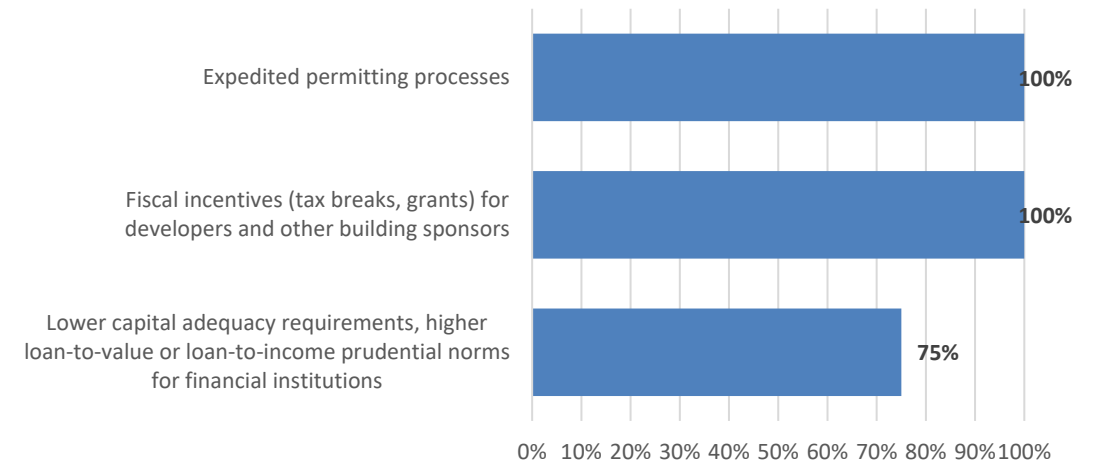
All respondents consider voluntary Green Building certification to play a factor. 75% of policy makers believe that fiscal incentives for certified Green Buildings (tax breaks, grants), requirements for public buildings and social housing to be green, and are the top accelerants in the certified Green Building market.

Public policy actions as accelerants in the certified Green Building market



All policy makers estimated that expedited permitting processes and fiscal incentives (tax breaks, grants) for developers and other building sponsors were useful public policy incentives. 75% of policy makers believe that lower capital adequacy requirements, higher loan-to-value or loan-to-income prudential norms for financial institutions would accelerate the certified GB market.

Primary incentives for Green Building market acceleration



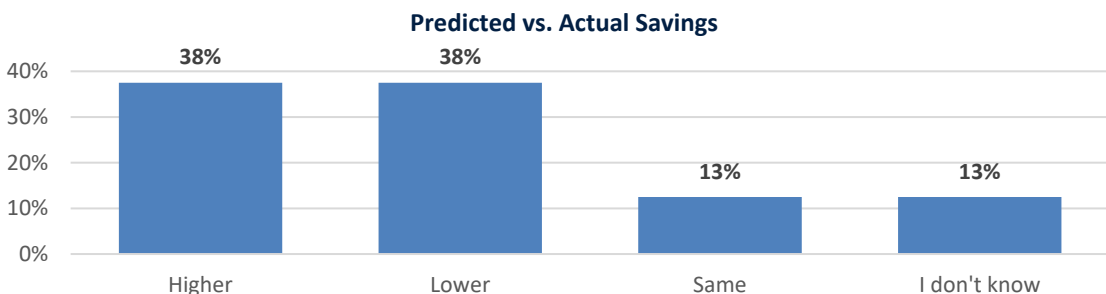
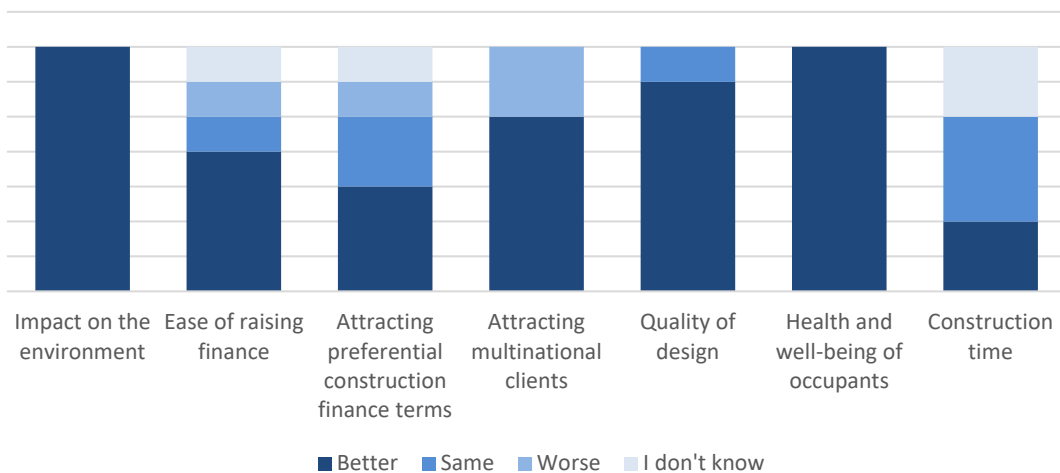


Policy Makers

Responses: 4

All policy makers surveyed believe that certified Green Buildings always perform better than conventional buildings in terms of impact on the environment and have better impact on health and well-being of occupants. Policy makers' views on other performance indicators are shown in the graph below.

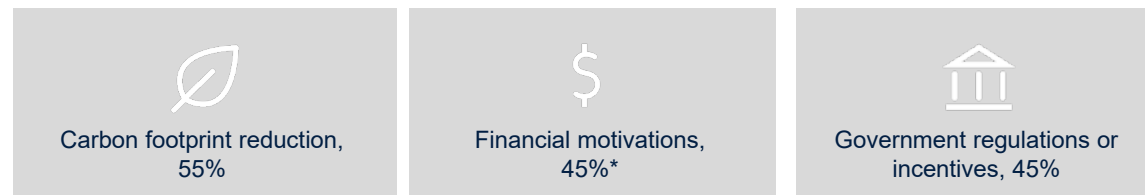
Performance Indicators of Certified Green Buildings vs Conventional Buildings



Policy makers were asked to compare the predicted savings to actual savings (accrued or realized) of certified Green Buildings. 75% predicted the savings to be higher, 8% indicated that savings will be lower, while 17% answered they do not know.

When asked, what do policy makers believe were motivators and obstacles for the development or investment of certified Green Buildings, 55% of policy makers indicated that a reduced carbon footprint was the main motivator; while 55% indicated that a lack of incentives and public policy support, as well as the high cost of green certification, were the main obstacles to developing Philippines's certified Green Building market.

Main motivators in developing the certified Green Building market



Main obstacles in developing the certified Green Building market



*Financial Motivations include better construction/mortgage terms and increased access to financing/profitability.



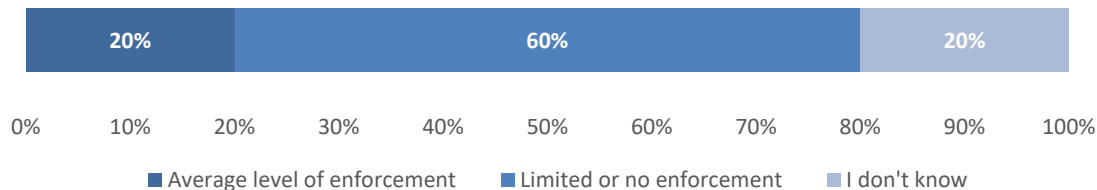
Development Finance Institutions

Responses: 5

Development finance institutions (DFIs) were comprised of multilateral, bilateral, or national development institutions or subsidiaries set up to support development in the Philippines. Only one of the four DFIs surveyed indicated that their institution supports the development of the Green Building market in Philippines by providing financing to developers. Furthermore, this institution does not require any Green Building certification as a prerequisite to obtaining financing. Only one of the DFIs not supporting the development of the Green Building market at present time plans to provide support in the future.

All five DFIs surveyed indicated that the construction of Green Buildings was very important or important in addressing climate change. Regarding Green Building familiarity, four DFIs indicated that they were very or somewhat familiar, while one indicated that they were not familiar with certified Green Buildings. From an enforcement perspective, only one DFI seemed positive that Philippines has a good level of enforcing Green Building regulations, while the remaining four stated that there was limited enforcement or they did not know.

Perceived Enforcement of Green Building Regulations in Philippines



The main obstacles highlighted by the respondents included higher construction cost and lack of incentives and public policy support. DFI stakeholders believe that architects and engineers, real estate developers, national government and tenants/occupants are the most influential stakeholders when it comes to developing the Green Building market in Philippines.

DFI respondents are of the opinion that increased end-user demand, increased access to financing, government regulations, and government incentives are major factors currently supporting the development of the certified Green Building market. Key actions that DFIs believe would increase the uptake of certified Green Buildings in Philippines are incentives (both financial and non-financial) and enforcement of regulations.

Out of the five DFIs that submitted the survey, four estimated property of a certified Green Building to be higher. Three DFIs estimated the cost of construction of a certified Green Building to be higher, estimated costs ranging from 5% to over 20%. There was agreement among the respondents that the cost of utility bills is estimated to be lower, with one respondent estimated the cost to be higher. There seems to be an information gap in estimating the cost of operating a certified Green Building – some respondents estimated the cost to be higher, while some estimated the cost to be lower.



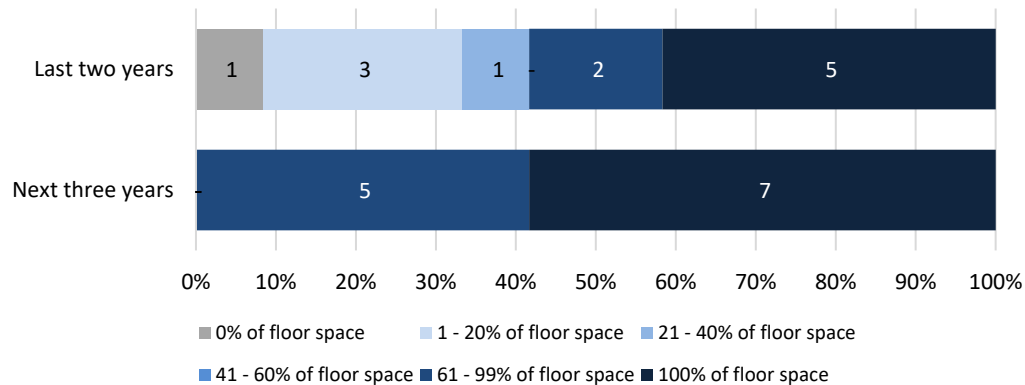
Developers

Responses: 14

Based on the 14 survey responses the study collected, 100% of developers consider themselves to be either very familiar (75%) or somewhat familiar (25%) with Green Buildings. 92% of developers stated that they currently have certified Green Buildings in their portfolios.

Based on the developers' answers, an increasing trend emerges with developers intending to increase their share of certified Green Buildings in their portfolios. A breakdown of the developers' portfolio existing and future expectations are provided below.

Developers' Certified Green Building Portfolio and Expectations



Existing and future trends indicate that residential social and low-income (67%), residential high-income (50%), followed by middle-income residential, offices, retail, and mixed-use communities (33% each) are the most popular in terms of certified Green Building developments. The anticipated increase in green certified floor space is predominantly driven by public recognition and brand enhancement, increased marketability, and company strategy/corporate requirement.

Main motivations to certify green



Most developers feel that lack of incentives and public support (57%), increased time to design/build and certify (43%), and high(er) construction cost (36%), and are the main obstacles to increasing the share of certified Green Buildings in their development portfolios.

Main obstacles to certifying green



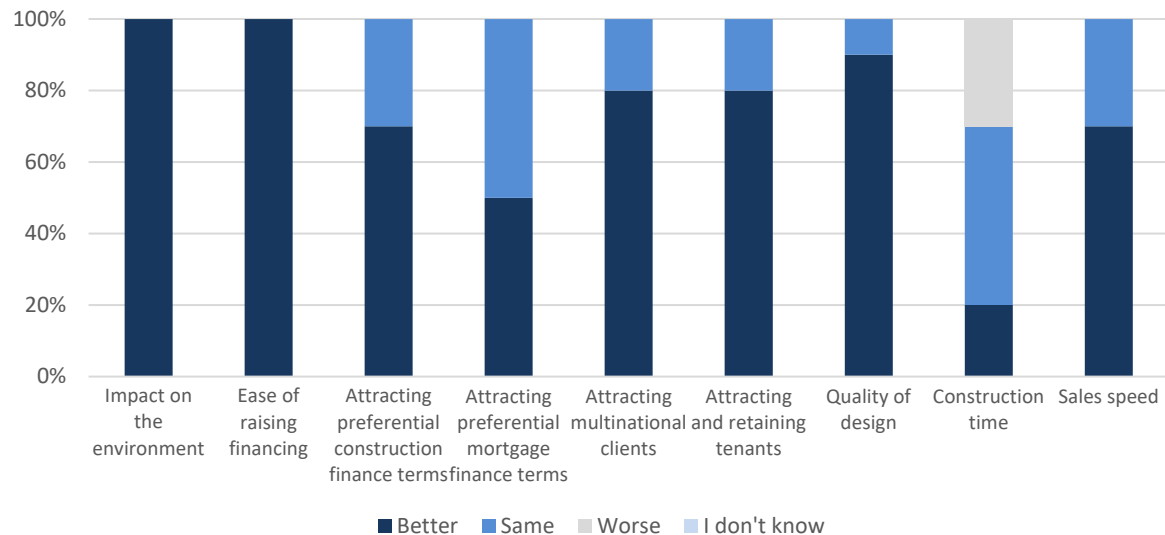


Developers

Responses: 14

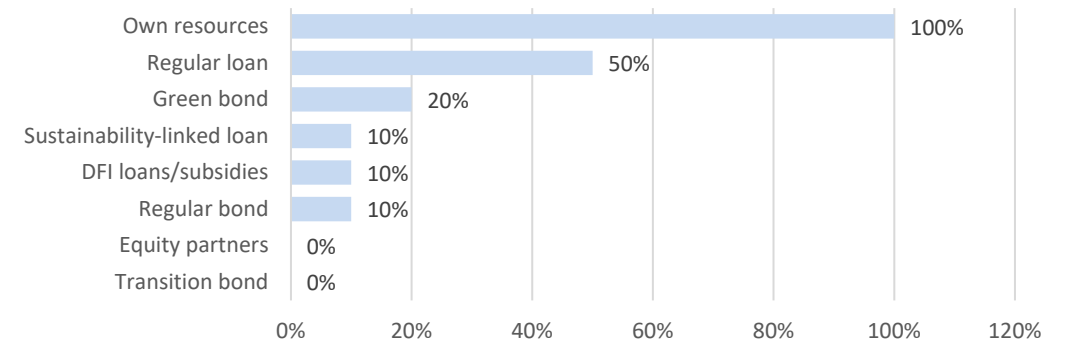
The majority of developers (90%) responded that certified Green Buildings cost more or same to develop than conventional buildings. Of these, 57% estimate that it will cost 3-4% more, while 43% estimate that it will cost 10% or more to develop a certified Green Building vs. a conventional building. In general, developers tend to perceive that certified Green Buildings are equal or higher than conventional buildings with regards to property value (88% equal or higher) and rental price (100%). Apart from a perceived higher construction cost, 100% of respondents estimated utility bills to be lower. Developers are, however, of the opinion that certified Green Buildings do perform better in terms of the buildings' impact on the environment (100%), and ease of raising finance (100%).

Performance Indicators of Certified Green Buildings vs Conventional Buildings



All developers use their own resources (100%) followed by regular loans (50%), and Green bonds (20%) to finance their developments.

Sources of Financing



66% of developers think that current regulations at least moderately facilitate the development of the Green Building market. 33% of developers indicated that the enforcement of Green Building regulations in Philippines is limited to no enforcement.

Regarding actions to further develop the Green Building market in Philippines, developers are of the opinion that fiscal incentives (e.g., tax breaks, grants) (82%), Financial policy and regulations supporting Green Building market development (green taxonomy and green bond regulations) (55%), National building code (45%), Mandatory Green Building certifications for new buildings (36%), requirement for public buildings to be certified Green Buildings (36%), carbon tax on conventional buildings (or other market-based mechanisms to reduce emissions) (36%), and government advocacy for Green Building certification (36%) are needed to support the development of the certified Green Building market in Philippines.



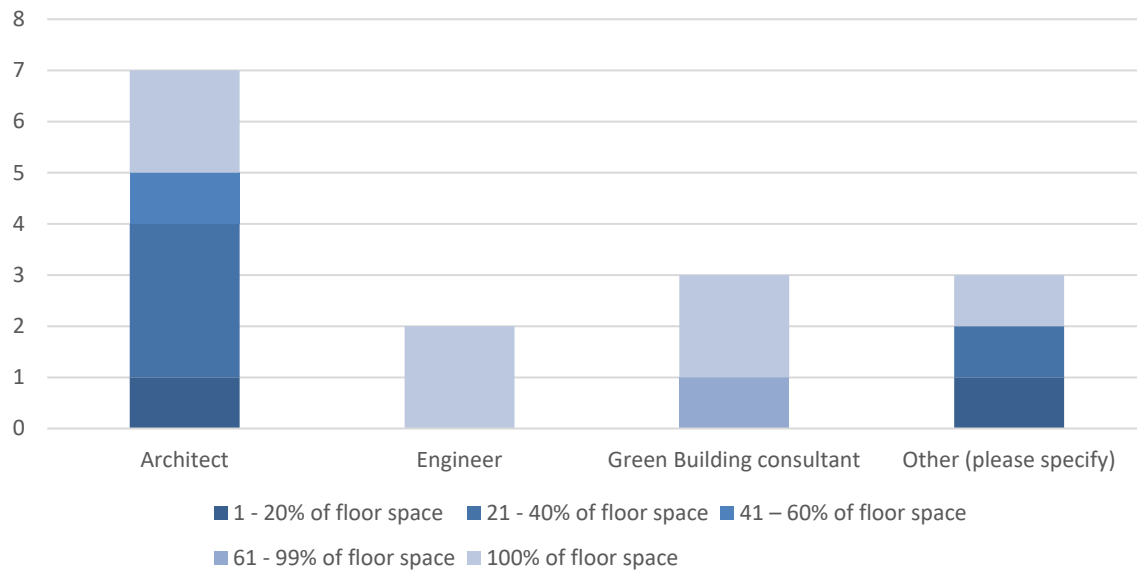
Building Experts

Responses: 21

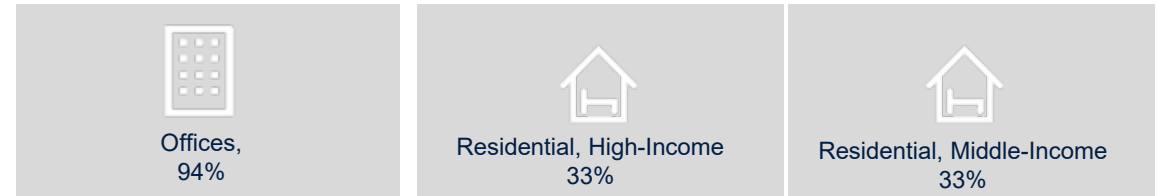
Green Building familiarity among designers and Green Building consultants is strong. A vast majority of building experts (95%) are either very familiar (52%) or somewhat familiar (43%) with green buildings.

The graph below illustrates the proportion of self-declared Green Building projects in each stakeholder group portfolio over the last two years. Each group self-declared least 30% of their portfolios as green build.

Share of Green Building Projects in Stakeholders Groups' Portfolios

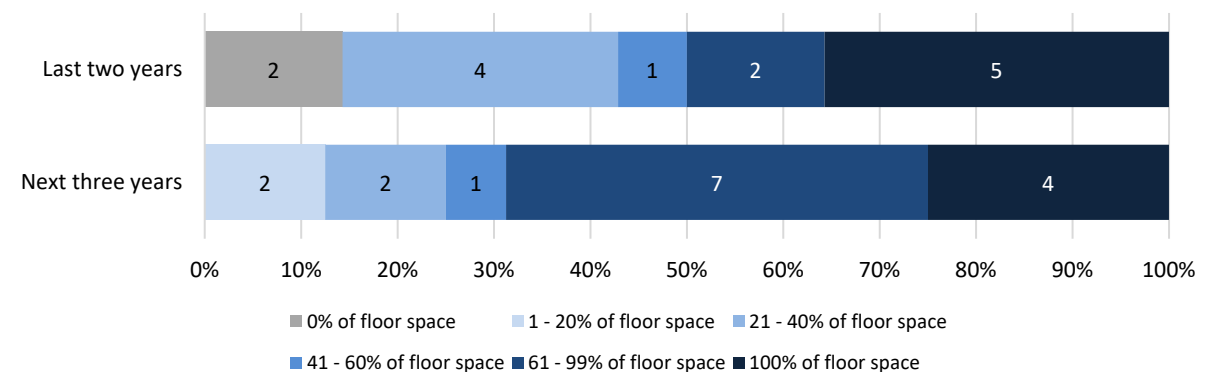


Main real estate sectors for certified Green Building development



Respondents indicated that they use EDGE certification most widely (71%), followed by LEED (14%) and BERDE (14%). Stakeholders indicated that their decision regarding which certification system to use was largely guided by the cost of certification (69%), reputation of the rating system (63%), and speed/simplicity (38). The three most popular property segments to develop and certify green for designers and Green Building consultants include hotels, high-income and middle-income residential.

Building Experts' Certified Green Building Portfolio and Expectations





Building Experts

Responses: 21

Feedback from designers and consultants indicates that the main obstacles to greater growth in the certified Green Building market included the high cost of construction (63%), high cost of Green Building certification (56%), lack of internal technical capacity (38%) and lack of knowledge of the benefits (38%). Conversely, the primary motivations for developing certified Green Buildings included increased client demand (56%), increased marketability (50%), government regulations (38%) and government incentives (38%).

Main obstacles in developing the certified Green Building market



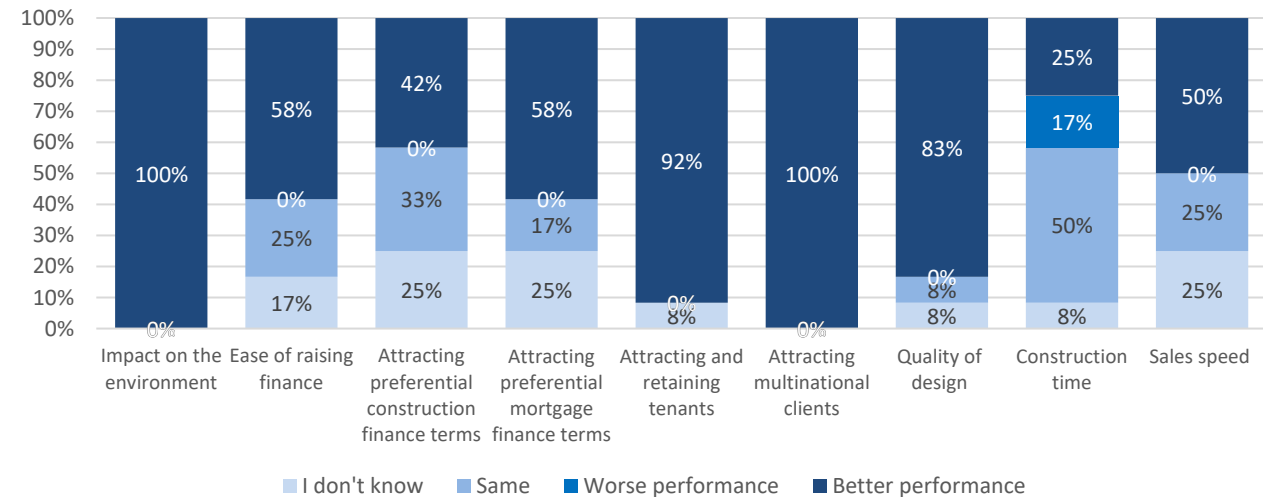
Main motivators in developing the certified Green Building market



Certified Green Buildings are expected to perform better than conventional buildings in terms of impact on the environment and attracting multinational clients. Furthermore, the surveyed stakeholders estimated that certified Green Buildings perform better in all other categories except for construction time.

Regarding the cost of construction, 50% of stakeholders familiar with certified Green Buildings estimated that the construction cost of a certified Green Building ranges from 10 to 20%+ more. Regarding utility cost, 65% of stakeholders familiar with certified Green Buildings estimated the cost of utility bills to be at least 15% less. Respondents agreed that both property value and rental price are higher for certified Green Buildings compared to non-certified ones.

Certified Green Buildings vs Conventional Buildings



46% of building experts estimated the actual savings (accrued or realized) by a certified Green Building, as compared to predicted savings, to be higher. Further 23% thought savings are lower, 23% thought savings are the same, and 8% could not estimate the savings.

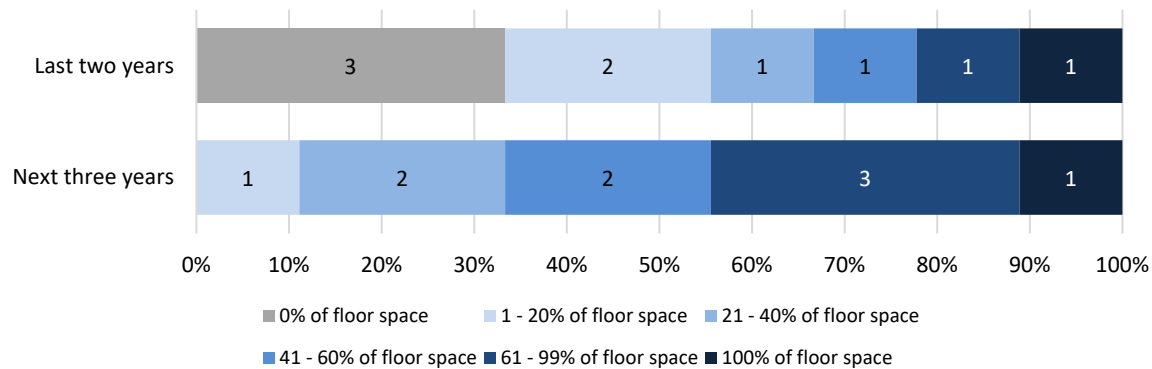


Real Estate Investors

Responses: 12

Real estate investors surveyed consisted of real estate investment companies, pension funds, and insurance companies. All real estate investors answered to be either very familiar (83%) or somewhat familiar (17%) with certified Green Buildings. Only two-thirds of real estate investor portfolios had certified Green Buildings in the past two years. All real estate investors project to have certified Green Buildings in their portfolio in the next three years.

Real Estate Investors' Certified Green Building Portfolio and Expectations



Current and future trends indicate that residential buildings of all income levels low and social (67%), middle (67%), and high income (50%) -- are the most popular certified Green Building types that institutional investors tend to invest in. The main motivations for real estate investors are increased end-user demand (63%), competitive differentiation (63%) and carbon footprint reduction (50%).

Real estate investors indicated that higher construction cost (88%), lack of incentives and public policy support (63%), and high cost of Green certification (38%) are the main deterrents to increasing their share of certified Green Buildings in their portfolios. The primary certification rating system used to certify assets is EDGE, with 88% of respondents having used it at least once. LEED (63%) and BREEAM (38%) were other certifications used by the real estate investors. The certification tool was primarily chosen because of the perceived cost of certification (75%), followed by building type to be certified, speed/simplicity, and reputation of the rating system (50% of respondents each).

All real estate investors estimated that certified Green Buildings could cost same or more in terms of construction cost compared to conventional buildings, while estimating the property value and rental price to be same or higher. In addition, the majority of real estate investors estimate utility bills to be lower.

Areas in which certified Green Buildings perform better than conventional buildings, and, therefore, of considerable importance to real estate investors, are impact on the environment, quality of design, health and wellbeing, and attracting multinational clients. All respondents indicated that these areas perform better than conventional buildings. A vast majority of real estate investors (88%) are of the view that building and financial market regulations moderately or somewhat facilitate Green Building developments in Philippines. Green Building regulations were perceived as being hardly enforced – 50% selected limited or no enforcement.



Residential Occupiers

Responses: 135

The residential occupier stakeholder group consisted of a combination of homeowners (93%) and rental tenants (7%). When asked if they lived in a green home, 9% said they did. 49% of respondents were unsure. This could be attributed to the lack of knowledge of certified Green Buildings within this stakeholder group, with only 39% of respondents being familiar or somewhat familiar, with certified Green Buildings. Only 12 of the 132 survey respondents lived in a certified Green Building (9%). As for the rest, when asked what would be the main motivators for respondents to live in a certified Green Building, the response was primarily financial and cost-related. Residential occupiers would be more motivated to pursue living in a certified Green Building if there was a proven financial benefit, either in lower utility and/or operational cost.

Almost half (48%) of residential occupiers indicated that they would be willing to pay more than 3% of a conventional home's sales price if it enables them to live in a resource and energy-efficient Green Building.

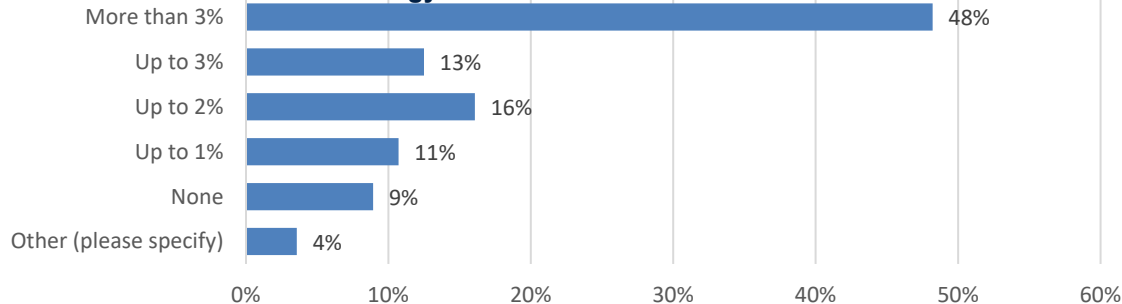
Main motivation to buy/rent a certified Green Building



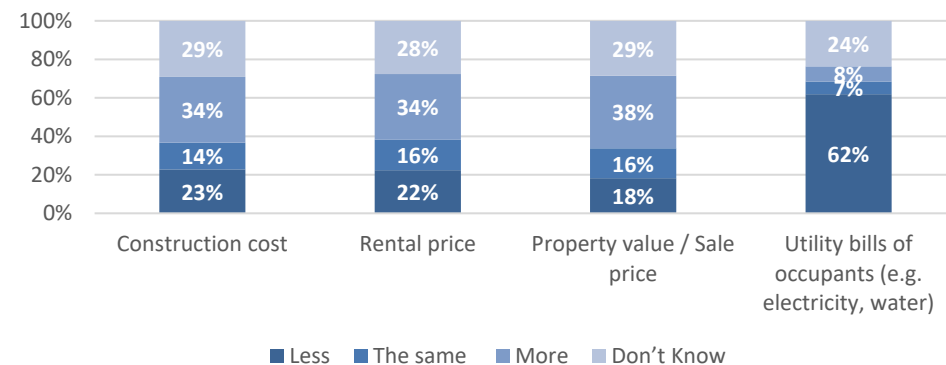
Main obstacle to buy/rent a certified Green Building

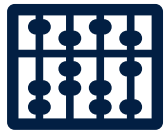


Residential Occupiers Willing to Pay Additional Premium (%) To Make Home Energy and Resource Efficient



Residential Occupiers' Perception of the Cost of Certified Green Buildings vs Conventional Buildings





METHODOLOGY

The stakeholder assessment surveys were conducted through the online survey platform SurveyMonkey. The anticipated time to complete each survey was 10 – 15 min. The Philippines survey was open for responses from October 2022, to April 2023.

Related but separate surveys were designed for each stakeholder group, each of which considers sector-specific questions related to the Green Building market. The surveys focused predominantly on Green Building familiarity, motivations and obstacles, performance, regulations, and incentives, finance, and source of information.

The number of target survey responses intends to provide a representative, but not exhaustive, assessment of each stakeholder group in each selected Green Building market. However, in some cases obtaining contact information and/or eliciting responses from stakeholders proved challenging, and the target number of responses could not be achieved. In addition, in some cases stakeholders only provided answers to some survey questions. Therefore, the number of responses on which each analysis featured in this report is based can vary.

The target and actual number of surveys for each stakeholder group is presented in the table to the right. Additional information regarding the number of responses on which an analysis is based on is provided throughout the report.

Stakeholder Group/Subgroup		# Target Surveys	# Actual Surveys
Developers	Developers	20	14
	Municipal		
Policy Makers	Regional	10	4
	National		
Development Finance Institutions	Multilateral DFIs	5	5
	National DFIs		
Real Estate Investors	Funds		
	REITs	15	12
	Other RE funds		
Building Experts	Corporate landlords		
	Architects		
	Engineers	50	21
	EDGE experts +Other GB consultants		
Residential Occupiers	Contractors		
	Homeowners	40	135
	Tenants		
Grand total		200	190

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