

## Survey Questionnaire

Dear Sir/Madam,

I am a final year undergraduate from the Department of Building at the National University of Singapore majoring in Project and Facilities Management. I am undertaking a research for my dissertation which aims to investigate the initial capital cost differences between green and conventional building projects. Your expertise in the building industry is extremely valuable in assisting me to learn more about the upfront capital costs of green building projects. Please be assured that your responses will be kept confidential and will only be used for academic purposes.

Please kindly forward the questionnaire back to [a0084950@u.nus.edu](mailto:a0084950@u.nus.edu) upon completion. Also, please do not hesitate to contact me if you have any queries regarding the survey questions. I sincerely thank you for your valuable time!

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***PLEASE MARK 'X' IN THE CHECKBOX TO INDICATE YOUR CHOICE(S) AND FILL IN THE INFORMATION WHERE APPROPRIATE. Note: This survey is based on your perceptions of the upfront costs of green buildings. No exact cost figures are required.***

### SECTION A: COMPANY'S PROFILE

1. Name of Company: \_\_\_\_\_

2. Company's main scope of service:

- |   |  |   |
|---|--|---|
| <input type="checkbox"/> Architecture       | <input type="checkbox"/> Consultancy                   | <input type="checkbox"/> Developer      |
| <input type="checkbox"/> Project Management | <input type="checkbox"/> Main Contractor               | <input type="checkbox"/> Sub Contractor |
| <input type="checkbox"/> Quantity Surveying | <input type="checkbox"/> Others, please specify: _____ |   |

If applicable, Company's BCA Registration Grade:

- |                             |                             |                             |                             |
|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| <input type="checkbox"/> A1 | <input type="checkbox"/> A2 | <input type="checkbox"/> B1 | <input type="checkbox"/> B2 |
| <input type="checkbox"/> C1 | <input type="checkbox"/> C2 | <input type="checkbox"/> C3 |                             |

**SECTION B: RESPONDENT’S PROFILE**

3. Respondent’s designation/job title:

- Architect                       Consultant                       Project Manager  
 Quantity Surveyor               Main Contractor               Sub Contractor  
 Others, please specify: \_\_\_\_\_

4. Respondent’s years of experiences in the construction industry:

- Less than 1 year               1 to 2 years                       2 to 3 years  
 3 to 4 years                       More than 4 years, please specify: \_\_\_\_\_

5. Respondent’s years of experiences in *green building construction*:

- Less than 1 year               1 to 2 years                       2 to 3 years  
 3 to 4 years                       More than 4 years, please specify: \_\_\_\_\_

6. Please indicate the *number of projects* involved in the respective boxes given below:

Project Type	Project Nature	Project Size	No. of Traditional Building Projects Involved	No. of Green Building Projects Involved
<b>Commercial Building Projects</b>	New Construction	Less than \$5mil		
		\$5mil to less than \$50mil		
		\$50mil and above		
<b>Offices</b>	New Construction	Less than \$5mil		
		\$5mil to less than \$50mil		
		\$50mil and above		
<b>Residential Building Projects</b>	New Construction	Less than \$5mil		
		\$5mil to less than \$50mil		
		\$50mil and above		

**SECTION C: PERSPECTIVES ON INITIAL CAPITAL COST OF GREEN BUILDING PROJECTS**

7. Please indicate the closest estimated cost premiums for green buildings in general:

- 0% to less than 5%
- 5% to less than 10%
- 10% to less than 15%
- 15% to less than 20%
- 20% and above; please specify: \_\_\_\_\_

**SECTION D: INITIAL CAPITAL COST PREMIUMS FOR GREEN BUILDING PROJECTS**

8. This section aims to study the initial capital cost differences between traditional building projects and green building projects. Please fill in the *number* of green building projects in the respective boxes given below, with consideration of the project type, project nature, project size and green cost premiums.

8i. Commercial Green Building Projects:

Project Type	Project Nature	Project Size	Initial Cost Premiums for Green Building Projects	No. of Green Building Projects
<b>Commercial Building Projects</b>	New Construction	Less than \$5mil	0% to less than 5%	
			5% to less than 10%	
			10% to less than 15%	
			15% to less than 20%	
			20% and above	
		\$5mil to less than \$50mil	0% to less than 5%	
			5% to less than 10%	
			10% to less than 15%	
			15% to less than 20%	
			20% and above	
		\$50mil and above	0% to less than 5%	
			5% to less than 10%	
			10% to less than 15%	
			15% to less than 20%	
			20% and above	

8ii. Green Offices:

Project Type	Project Nature	Project Size	Initial Cost Premiums for Green Building Projects	No. of Green Building Projects
<b>Offices</b>	New Construction	Less than \$5mil	0% to less than 5%	
			5% to less than 10%	
			10% to less than 15%	
			15% to less than 20%	
			20% and above	
		\$5mil to less than \$50mil	0% to less than 5%	
			5% to less than 10%	
			10% to less than 15%	
			15% to less than 20%	
			20% and above	

		\$50mil and above	0% to less than 5%	
			5% to less than 10%	
			10% to less than 15%	
			15% to less than 20%	
			20% and above	

8iii. Residential Green Building Projects:

Project Type	Project Nature	Project Size	Initial Cost Premiums for Green Building Projects	No. of Green Building Projects
<b>Residential Building Projects</b>	New Construction	Less than \$5mil	0% to less than 5%	
			5% to less than 10%	
			10% to less than 15%	
			15% to less than 20%	
			20% and above	
		\$5mil to less than \$50mil	0% to less than 5%	
			5% to less than 10%	
			10% to less than 15%	
			15% to less than 20%	
			20% and above	
		\$50mil and above	0% to less than 5%	
			5% to less than 10%	
			10% to less than 15%	
			15% to less than 20%	
			20% and above	

9. Please *rate* the reasons for the initial *cost differences* between the green and conventional building projects by *marking 'x'* in the given boxes. (Note: 1 = “Strongly Disagree”; 2 = “Disagree”; 3 = “Neutral”; 4 = “Agree”; 5 = “Strongly Agree”)

Please also *rank* the 7 reasons according to its level of relevance in the *first column*. (Note: Rank 1 = “Most Relevant”; Rank 7 = “Least Relevant”)

Rank	No	Reasons for Initial Cost Differences between Green and Traditional Projects	1 (Strongly Disagree)	2	3	4	5 (Strongly Agree)
	1	Higher consultant and designer fees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	2	Lack of required green expertise and information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	3	Difficulty in getting green services from contractors and subcontractors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	4	Difficulty in getting green resources e.g. materials, technologies etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	5	High cost of green technologies and materials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	6	Lack of Government incentives/subsidies for green building projects	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	7	Higher research and development costs for green building products, systems, technologies etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**SECTION E: COST PERFORMANCE OF TRADITIONAL AND GREEN BUILDING PROJECTS**

10. This section aims to study the cost performance of traditional and green building projects. Please fill in the *number* of traditional and green building projects in the respective boxes given below, with consideration of the project cost performance. (Note: a negative percentage will mean an under-budget whereas a positive percentage will mean an over-budget. E.g. -10% means 10% below budget, +10% means 10% above budget)

<b>Project Type</b>	<b>Project Nature</b>	<b>Cost Performance</b>	<b>No. of Traditional Building Projects</b>	<b>No. of Green Building Projects</b>
<b>Commercial Building Projects</b>	New Construction	-10% to less than -5%		
		-5% to less than 0%		
		0% to less than 5%		
		5% to less than 10%		
<b>Offices</b>	New Construction	-10% to less than -5%		
		-5% to less than 0%		
		0% to less than 5%		
		5% to less than 10%		
<b>Residential Building Projects</b>	New Construction	-10% to less than -5%		
		-5% to less than 0%		
		0% to less than 5%		
		5% to less than 10%		

**SECTION F: SOLUTIONS TO REDUCE INITIAL CAPITAL COST OF GREEN BUILDINGS**

11. This sections aims to study the effectiveness of the solutions to reduce initial capital cost of green buildings. Please *rate* the level of effectiveness of the following cost solutions by *marking 'x'* in the given boxes. (Note: 1 = “Least Efficient”; 2 = “Somewhat Efficient”; 3 = “Neutral”; 4 = “Efficient”; 5 = “Most Efficient”)

Please also *rank* the level of effectiveness of the 8 cost solutions for green building projects in the *first column*. (Note: Rank 1 = “Most Efficient”; Rank 8 = “Least Efficient”)

Rank	No	Initial Capital Cost Solutions	Green Building Projects				
			1 (Least efficient)	2	3	4	5 (Most efficient)
	1	Government to provide incentives/subsidies for green building projects	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	2	Low interest loans	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	3	Financial institutions to introduce lending schemes customised for green building projects	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	4	Government to provide subsidies for research and development of green building products, systems and technologies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	5	Tax reliefs for developers and contractors for use of green building products, systems and technologies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	6	Availability of skilled and experienced project team and contractors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	7	Government to provide green building educational courses for key building players so as to flatten the learning curve of green construction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	8	Government to provide	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



		subsidies for green building professional and specialist courses					
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12. Other proposed solutions: \_\_\_\_\_

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Thank you for your valuable time!