

A Survey of Performance Criteria Preferences in Green Building Office Projects

This questionnaire survey should not take more than 20 minutes of your time. Please provide your response based on your practical experience related to the delivery of green office projects. Your participation in this survey/interview is highly appreciated and your feedback for this survey/interview will help enrich the body of knowledge in area of sustainable development.

Yours Sincerely,
Tayyab Ahmad
PhD candidate-Architecture
The University of Melbourne
Email: ahmadt@student.unimelb.edu.au

* Required

1. **Would you like to see the Consent Form and Plain Language Statement for the details of the research study? ***

Mark only one oval.

- Yes, I would like to see Plain Language Statement *Skip to question 2.*
- No, I want to proceed directly to survey *Skip to question 4.*

Plain Language Statement and Consent Form

PLAIN LANGUAGE STATEMENT

Survey: Performance Criteria Preferences in Green Building Office Projects

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Project: “Project Delivery Attributes Influencing Green Building Project Performance”

Introduction

You are invited to participate in the above research project, which is being conducted by Dr. Ajibade Aibinu (**Supervisor**), Dr. Andre Stephan (**Co-Supervisor**) and Mr. Tayyab Ahmad (**PhD Student**) from the Faculty of Architecture, Building and Planning at the University of Melbourne. The aim of this study is to develop a framework for evaluating the performance outcomes of green buildings using project delivery attributes.

We are interested in talking to you about the performance criteria usually used in green building office projects.

What will I be asked to do?

As an expert in the field, if you agree to participate, you would be asked to contribute in the following ways:

You will be presented with a questionnaire comprised of questions relating the performance criteria for green building office projects. The total time of interaction will be no more than twenty minutes.

For green office projects you will be asked to:

- Highlight the priorities normally assigned to different performance criteria for green office projects.
- Highlight the factors affecting the choice of different performance criteria in such buildings.
- Indicate the influence, the current priorities of performance criteria in green office projects have on sustainable development.
- Indicate the influence different performance criteria have on each other.
- Highlight the degree to which different indicators provided in the questionnaire explain project performance on social, economic, and environmental sustainability criteria.

With your permission the interview would be digitally recorded so that we can make an accurate record of what you say. When the recording has been transcribed, you would be provided with a copy of the transcript, so that you can verify that the information is correct and/or request deletions.

How will my confidentiality be protected?

This project has been approved by the Human Research Ethics Committee and we intend to protect your anonymity and the confidentiality of your responses to the fullest possible extent, within the limits of the law. Your name and contact details will be kept in a separate, password-protected computer file from any data that you supply. This will only be able to be linked to your responses by the researchers. In the final report, if you agree, you will be referred to by a pseudonym. We will remove any references to

Consent Form

1. I consent to participate in this project, the details of which have been explained to me, and I have been provided with a written plain language statement to keep.
2. I understand that after I sign and return this consent form it will be retained by the researcher.
3. I understand that my participation will involve a survey and I agree that the researcher may use the results as described in the plain language statement.
4. I acknowledge that:
 - a) The possible effects of participating in the survey have been explained to my satisfaction;
 - b) I have been informed that I am free to withdraw from the project at any time without explanation or prejudice and to withdraw any unprocessed data I have provided;
 - c) The project is for the purpose of research;
 - d) I have been informed that the confidentiality of the information I provide will be safeguarded subject to any legal requirements;
 - e) I have been informed that with my consent the answers to the questionnaire survey will be saved online (in case of online survey) / or saved in a locked cabinet at University of Melbourne (in case of paper-based survey) and may be destroyed after five years;
 - f) I will be referred to by a pseudonym, should I agree to this;
 - g) I have been informed that a copy of the research findings will be forwarded to me, should I agree to this.

2. I wish to receive a copy of the summary project report on research findings

Mark only one oval.

- Yes
 No

3. I wish to be referred to by a pseudonym in any publication from this research

Mark only one oval.

- Yes
 No

Your experience with Green Building projects

(Green projects are inclusive of the green certified and non-certified projects)

4. Please state your name *

5. Please mention your experience (no. of years) with green building delivery *

Mark only one oval per row.

	No experience	0-3 years	5-10 years	More than 10 years
Experience in all kind of green building projects	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Experience in green office projects	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. Please mention your experience (no. of projects) with green building delivery *

Mark only one oval per row.

	No experience	1-5 projects	6-10 projects	11-15 projects	15-20 projects	More that 20 projects
Experience in all kind of green building projects	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Experience in green office projects	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7. In what capacity have you majorly acted in the delivery of green office projects *

(Please mention all the major roles you previously had)

Check all that apply.

- Design Consultant
- Owner/Developer
- Supplier
- Manufacturer
- Project Manager
- Construction Manager
- Facility Manager
- General Contractor
- Specialty Contractor/Trade Contractor/Sub-Contractor
- Sustainability Consultant
- Other: _____

Factors influencing the choice and priorities of performance criteria

8. Ranking the factors/drivers that influence the choice and priorities of performance criteria in green office projects *

In some projects one performance criterion (such as cost performance or schedule performance) is more strongly considered than other performance criteria (such as schedule or sustainability performance). Please rank the factors/drivers that influence the choice and priorities of performance criteria in green office projects.

Mark only one oval per row.

	Rank-1 (Most Important)	2	3	4	5	6	7	Rank-8 (Least Important)	NA
Owner/Developer's choice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tenant / potential purchaser / client / end-user requirements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Investor requirements / positioning with investors (e.g. Green Bonds, GRESB)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Developer market position	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Life-cycle costs/ Long term savings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Design team advocating	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Incentives by the state/country	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Obligations from the state development authorities/Government planning approvals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

9. Please mention in case you think of a factor/driver not listed above

Preference towards different performance criteria in different regions

Different performance criteria considered in Green Office projects: Cost Performance, Schedule Performance, Quality Performance, Environmental Sustainability (emissions saving, resource conservation, etc.) Performance, Social Sustainability (indoor air quality, healthy and productive space, etc.) Performance, Economic Sustainability (life cycle cost, operation and maintenance savings, etc.) Performance

10. Based on your experience, do you think that different green office projects delivered in different regions have different priorities for performance criteria? *

Mark only one oval.

- Yes After the last question in this section, skip to question 12.
- No After the last question in this section, skip to question 17.
- Maybe After the last question in this section, skip to question 17.

11. Please provide reasons for your choice

Preference towards different performance criteria in different regions

12. Please indicate the area (country/city) where your experience is majorly based *

13. Ranks/Priorities of performance criteria in green office buildings *

Please rank (prioritize) performance criteria for green office buildings in area (country/city) where your experience is majorly based

Mark only one oval per row.

	1 (Highest)	2	3	4	5	6	7 (Lowest)
Cost	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Schedule	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Safety	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social sustainability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Economic sustainability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Environmental sustainability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

14. Please provide reasons for the ranks of performance criteria (non-mandatory question)

15. Effects of performance criteria rating on Triple bottom line *

In response to the priority of performance criteria of green office buildings, what do you think can be the influence of currently prevalent performance criteria priorities (mentioned by you in previous question) on Triple bottom line i.e. People (Society), Planet (Environment), and Profit (Economy)

Mark only one oval per row.

	Highly Negative	Moderately Negative	No Effect	Moderately Positive	Highly Positive
People	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Planet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Profit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

16. Please provide reasons for these effects

(non-mandatory question)

Skip to question 21.

Preference towards different performance criteria

17. Ranks/Priorities of performance criteria in green office buildings *

Please rank (prioritize) performance criteria for green office buildings for majority of such projects you experienced

Mark only one oval per row.

	1 (Highest)	2	3	4	5	6	7 (Lowest)
Cost	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Schedule	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Safety	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social sustainability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Economic sustainability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Environmental sustainability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

18. Please provide reasons for the ranks of performance criteria

(non-mandatory question)

19. Effects of performance criteria rating on Triple bottom line *

In response to the priority of performance criteria of green office buildings, what do you think can be the influence of currently prevalent performance criteria priorities (mentioned by you in previous question) on Triple bottom line i.e. People (Society), Planet (Environment), and Profit (Economy)

Mark only one oval per row.

	Highly Negative	Moderately Negative	No Effect	Moderately Positive	Highly Positive
People	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Planet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Profit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

20. Please provide reasons for these effects

(non-mandatory question)

Interrelationships among performance criteria of Green Office projects

Overall performance of a green office building project on different criteria is a result of different factors. In many cases the project performance on different criteria can be correlated. For instance, a positive schedule performance results in a positive cost performance. Under this pretext, based on your experience identify the following correlations among different performance criteria.

21. Effect of good "Environmental Sustainability Performance" on.... *

Good Environmental Sustainability Performance means delivering projects having low emissions, more resource conservation, use of recyclable materials, etc.



Mark only one oval per row.

	Highly Positive	Moderately Positive	No Effect	Moderately Negative	Highly Negative
Economic Sustainability Performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social Sustainability Performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Schedule Performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quality Performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cost Performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

22. Effect of good "Social Sustainability Performance " on.... *

Good Social Sustainability Performance means delivering projects having better indoor air quality, healthy and more productive spaces, etc.

Mark only one oval per row.

	Highly Positive	Moderately Positive	No Effect	Moderately Negative	Highly Negative
Environmental Sustainability Performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Economic Sustainability Performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Schedule Performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quality Performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cost Performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

23. Effect of good "Economic Sustainability Performance" on.... *

Good Economic Sustainability Performance means delivering projects having lower life cycle cost, and lower operation and maintenance costs, etc.

Mark only one oval per row.

	Highly Positive	Moderately Positive	No Effect	Moderately Negative	Highly Negative
Environmental Sustainability Performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social Sustainability Performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Schedule Performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quality Performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cost Performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

24. Effect of good "Cost Performance" on.... *

Good Cost Performance means delivering projects on budget or under budget

Mark only one oval per row.

	Highly Positive	Moderately Positive	No Effect	Moderately Negative	Highly Negative
Schedule Performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quality Performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social Sustainability Performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Economic Sustainability Performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Environmental Sustainability Performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

25. Effect of good "Schedule Performance" on.... *

Good Schedule Performance means delivering projects within specified time or before specified time

Mark only one oval per row.

	Highly Positive	Moderately Positive	No Effect	Moderately Negative	Highly Negative
Cost Performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quality Performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social Sustainability Performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Economic Sustainability Performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Environmental Sustainability Performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

26. Effect of good "Quality Performance" on.... *

Good Quality Performance means delivering projects within specified quality

Mark only one oval per row.

	Highly Positive	Moderately Positive	No Effect	Moderately Negative	Highly Negative
Schedule Performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cost Performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social Sustainability Performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Economic Sustainability Performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Environmental Sustainability Performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Survey conclusion

27. Comments relating survey

Please let us know your views about the survey and how this survey can be improved (non-mandatory)
