

**COMPARISON STUDY OF GREEN BUILDING RATING SYSTEM IN
TAIWAN AND INDONESIA**

Final Project Report

As one of the requirements to receive bachelor's degree
of Universitas Atma Jaya Yogyakarta

By:

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Declare that the research which title is written below is original and does not a copy or refer to any plagiarism action:

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PREFACE

The research is one of the requirements of fulfilling bachelor's degree of Universitas Atma Jaya Yogyakarta. This research is finished under "3+2 Program" in Taiwan, where Universitas Atma Jaya Yogyakarta and National Cheng Kung University has an agreement and collaboration. The background of this research is to compare between two Green Building rating system between Taiwan and Indonesia. Thus, the comparison result and suggestion to Indonesian's Green Building rating system will be discussed in this report.

Chapter I of the report contains the introduction, research background, research motivation and scope and limitation. Chapter II contains literature review about basic knowledge. Chapter III contains the methodology of this research. Chapter IV is the result of the comparison and the Green Building Indonesia improvement and Chapter V contains of conclusion and suggestion of this study. Author realizes that this report is not perfect and thus author apologizes sincerely.

Tainan, July 5th, 2020

Author

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Sincerely authors give the praises and thanks to Jesus Christ, with all of His Graces and Blessings, author finished this final report without any problems, in timely manner. Authors realize that this final report would not be done without the help from others. For that, author would like to thank these people mentioned below:

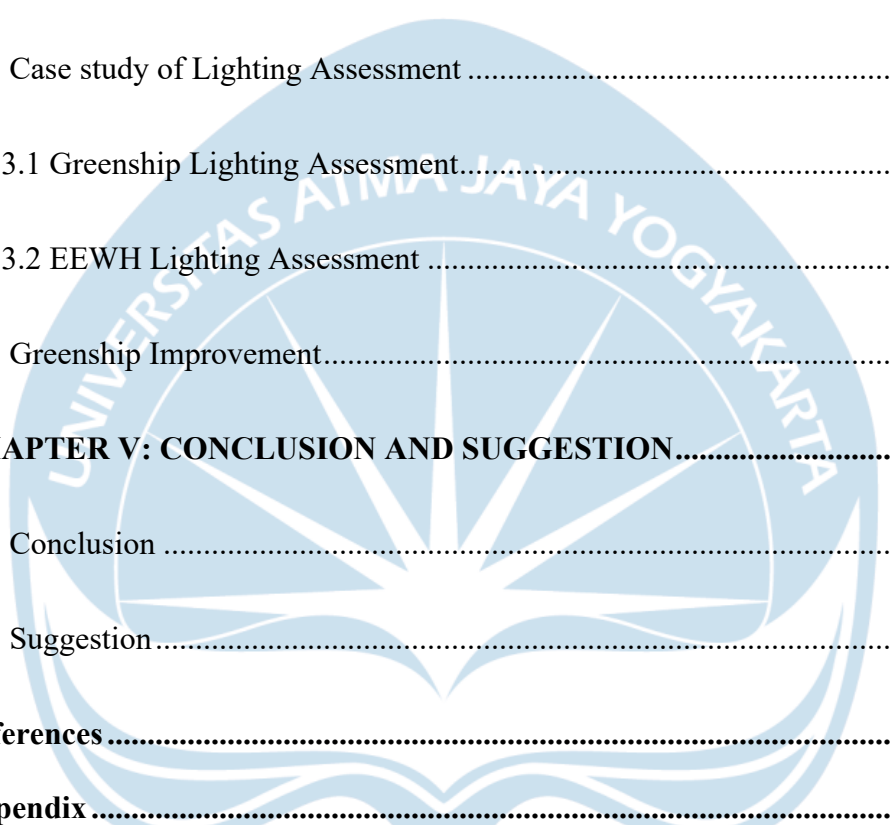
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TABLE OF CONTENTS

Title Page	i
Approval Sheet	ii
Examiners Sheet	iii
Declaration	iv
Preface	v
Acknowledgement	vi
Table of Content	vii
List of Figures	x
List of Tables	xi
Abstract	xiii
CHAPTER I: INTRODUCTION	1
1.1. Research Background	1
1.2. Research Objectives	3
1.3. Research Limitation	3
CHAPTER II: LITERATURE REVIEW	4
2.1. Green Building Method	4

2.2. Taiwan Green Building	5
2.3. Indonesia Green Building	6
2.4. Comparison of Green Building Tools	7
CHAPTER III: METHODOLOGY	8
3.1. Research Approach	8
3.2. Data	9
3.2.1. Data for comparison study	9
3.2.2 Data for case study	9
3.3. Data Analysis	9
3.3.1. Comparison study	10
3.3.2 Case study	10
CHAPTER IV: DATA ANALYSIS AND RESEARCH FINDINGS	12
4.1. First Layer Comparison	12
4.1.1. General Comparison	13
4.1.2 Weightings Comparison.....	20
4.2. Second Layer Comparison	25
4.2.1 Energy Saving	25
4.2.2 Water Saving.....	27



4.2.3 Material Saving	29
4.2.4 Site Selection and Outdoor Environment.....	31
4.2.5 Indoor Environment	33
4.3. Case study of Lighting Assessment	36
4.3.1 Greenship Lighting Assessment.....	37
4.3.2 EEWH Lighting Assessment	39
4.4. Greenship Improvement.....	48
CHAPTER V: CONCLUSION AND SUGGESTION.....	57
5.1. Conclusion	57
5.2. Suggestion.....	58
References.....	59
Appendix.....	61

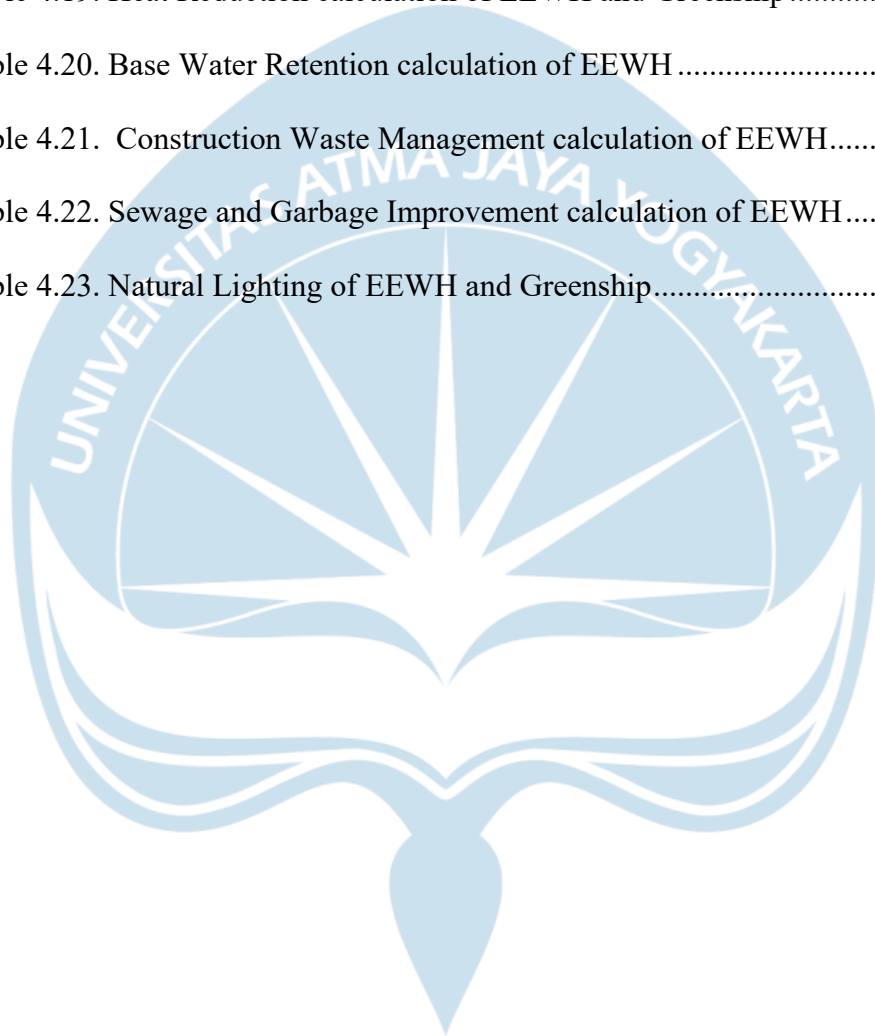
LIST OF FIGURES

Figure 3.1. Steps for doing the comparison study.....	11
Figure 4.1. Timeline of development Indonesia and Taiwan Green Building.....	15
Figure 4.2. Distribution of Greenship Indonesia indicator	21
Figure 4.3. Distribution of EEWH Taiwan indicator.....	23
Figure 4.4. Comparison of Energy Saving of EEWH and Greenship.....	26
Figure 4.5. Comparison of Water Saving of EEWH and Greenship	28
Figure 4.6. Comparison of Material Saving of EEWH and Greenship.....	30
Figure 4.7. Comparison of Site Selection and Outdoor Environment of EEWH and Greenship	32
Figure 4.8. Comparison of Indoor Environment of EEWH and Greenship.....	34
Figure 4.9. Lighting Indicator in Greenship Indonesia	37
Figure 4.10. The Uwi value of Heat Reduction calculation EEWH.....	49

LIST OF TABLES

Table 4.1. General Information of Greenship and EEWH.....	14
Table 4.2. EEWH Taiwan Indicators	16
Table 4.3. Greenship Indonesia Indicators.....	17
Table 4.4. Prerequisites of Greenship Indonesia.....	19
Table 4.5. Score of each indicator of Greenship.....	20
Table 4.6. Rating award of Greenship	20
Table 4.7. Score of each indicator of EEWH.....	22
Table 4.8. Rating award of EEWH	22
Table 4.9. Difference Between EEWH and Greenship from First Layer Comparison	24
Table 4.10. Difference Between EEWH and Greenship from Second Layer comparison	35
Table 4.11. Maximum lighting power SNI	38
Table 4.12. Calculation of Lighting assessment Greenship.....	39
Table 4.13. Stabilizer Efficiency Factor Bi.....	42
Table 4.14. Lighting Control Factor Ci.....	42
Table 4.15. Luminaire Efficiency Factor Di	43
Table 4.16. Baseline for lighting power density in major operating spaces LPDcj (W/m ²).....	44

Table 4.17. Calculation of Lighting assessment EEWH.....	47
Table 4.18. Difference Between EEWH and Greenship from Lighting Assessment.....	48
Table 4.19. Heat Reduction calculation of EEWH and Greenship.....	49
Table 4.20. Base Water Retention calculation of EEWH.....	51
Table 4.21. Construction Waste Management calculation of EEWH.....	52
Table 4.22. Sewage and Garbage Improvement calculation of EEWH.....	53
Table 4.23. Natural Lighting of EEWH and Greenship.....	54



ABSTRACT

COMPARISON STUDY OF GREEN BUILDING RATING SYSTEM IN TAIWAN AND INDONESIA, Fendy Heryanto Untaryo, Student Number 161316387, the Year 2020, Field of Specialization Engineering Management, International Civil Engineering Program, Faculty of Engineering, Universitas Atma Jaya Yogyakarta.

Indonesia as an emerging country and one of the biggest countries in the world, requires large infrastructure development. Therefore, with the increase of development rates in Indonesia, emissions produced from buildings also increasing. In fact, Indonesia is the third top producer of greenhouse gases in the world. One of the solutions, as a civil engineer, is applying the Green Building as our method in the construction project to reduce the GHG emissions. However, Green Building in Indonesia is categorized as new method and not as popular as in Taiwan. Therefore, this study brings the comparison between the Taiwan and Indonesia Green Building rating system to show the difference between both rating systems. The comparison will be in qualitative analysis and have two-layer comparison. First layer comparison consists of general aspects and weightings to give an overview of both rating system. For the detail comparison will be shown in the second layer comparison, where there will be five topics to compare both system, which are Energy saving, Water Saving, Material saving, Site Selection and Outdoor Environment, and Indoor Environment. Also, there will be an example of case study to give clearer difference between both rating systems. From the comparison study, can be concluded that Indonesia Green Building tools have broad scope but assessed not very detail and some unclear criteria compare to Taiwan. Thus, by carrying this comparison study between Indonesia and Taiwan Green Building tools, suggestions will be provided to Green Building Council Indonesia for improvement.

Keywords: Green Building, Assessment Tools, EEWB Taiwan, GreenShip Indonesia