

**ASSESSMENT OF RENEWABLE ENERGY SYSTEMS AND TECHNOLOGIES  
OF CENTRAL LUZON STATE UNIVERSITY TO CONTRIBUTE TO  
THE UN SDG 7: “AFFORDABLE AND CLEAN ENERGY”**

**KRISTINE MILLEN S. CABOBOS  
JAYSON A. GAMIS**

An Undergraduate Thesis Submitted to the Faculty of the Department of Agricultural and  
Biosystems Engineering, College of Engineering, Central Luzon State University,  
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for the Degree of

**BACHELOR OF SCIENCE IN AGRICULTURAL & BIOSYSTEMS  
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(AB Structures and Environment Engineering)**

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**ACCEPTANCE SHEET**

This undergraduate thesis entitled “ASSESSMENT OF RENEWABLE ENERGY SYSTEMS AND TECHNOLOGIES IN CENTRAL LUZON STATE UNIVERSITY TO CONTRIBUTE TO THE UN SDG 7: “AFFORDABLE AND CLEAN ENERGY”, prepared and submitted by **KRISTINE MILLEN S. CABOBOS AND JAYSON A. GAMIS**, in partial fulfillment of the requirements for the degree **BACHELOR OF SCIENCE IN AGRICULTURAL AND BIOSYSTEMS ENGINEERING (AB STRUCTURES AND ENVIRONMENT ENGINEERING)**, is hereby accepted:

  
**NOVALYN G. DELOS SANTOS, M.Sc.**  
Member, Advisory Committee

01-29-24

\_\_\_\_\_  
Date Signed

  
**RUEL G. PENEYRA, M.Sc.**  
Member, Advisory Committee

\_\_\_\_\_  
Date Signed

  
**WENDY C. MATEO, Ph.D.**  
Chairperson, Advisory Committee


\_\_\_\_\_  
Date Signed

As accepted as a partial fulfillment of the requirements for the degree of **BACHELOR OF SCIENCE IN AGRICULTURAL & BIOSYSTEMS ENGINEERING (AB STRUCTURES AND ENVIRONMENT ENGINEERING)**:

  
**ELMAR M. VILLOTA, Ph.D.**  
Head, Department of Agricultural and Biosystems Engineering

JAN 31 2024

\_\_\_\_\_  
Date Signed

  
**THEODY B. SAYCO, Ph.D.**  
Dean, College of Engineering

JAN 31 2024

\_\_\_\_\_  
Date Signed

## **BIOGRAPHICAL SKETCH**

The first author, Kristine Millen S. Cabobos was born on January 1, 2000, in 261 Old Magallanes, Tayug, Pangasinan. She has two siblings and a first daughter among the three children of Mr. Narlo S. Cabobos and Susan S. Cabobos.

In 2018, she enrolled at Central Luzon State University located at Muñoz, Nueva Ecija under the Bachelor of Science in Agricultural and Biosystems Engineering. She finished her secondary education in Tayug National High School from the academic year 2011-2018. Furthermore, she took her primary education at Tayug Central School from academic year 2005-2011 in Gomez St., Tayug, Pangasinan.

She is currently a member of the Student Housing Council as Secretary. She is also a former member of Tanghalang Gagalar sa CLSU as a Treasurer from school year 2018-2021 and a former ROTC Officer as a 2nd Lieutenant from school year 2018-2019. In addition, she had participated in some activities such as campus journalism trainee and speech choir member in National Science Quest and won the third place.

## **BIOGRAPHICAL SKETCH**

The second author, Jayson A. Gamis was born on April 04, 2000 in Barangay San Agustin, Victoria, Tarlac. He was the youngest son of Mr. Potenciano Gamis and Mrs. Vilma Gamis. He currently resides in Barangay San Agustin, Victoria, Tarlac, where he and his family live a simple life.

He finished his elementary education at San Agustin Elementary School (SAES) in Victoria, Tarlac on March 2012. He graduated junior high school with honors at Victoria National High School (VNHS) in Victoria, Tarlac on 2016. At the same school, on year 2018, he finished his senior high school under the strand of General Academic Strand (GAS) and graduated with high honors.

He pursued his higher studies at the collegiate level in 2018 at Central Luzon State University (CLSU) located in Science City of Muñoz, Nueva Ecija, and took a Bachelor of Science in Agricultural and Biosystems Engineering, majoring in AB Structures and Environment Engineering.

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## TABLE OF CONTENTS

LIST OF TABLES	viii
LIST OF FIGURES	ix
LIST OF APPENDIX	x
LIST OF APPENDIX TABLES	xi
LIST OF APPENDIX FIGURE	xii
INTRODUCTION	1
Background of the Study	1
Statement of the Problem	3
Objectives of the Study	3
Significance of the Study	4
Scope and Limitation of the Study	5
Time and Place of the Study	6
REVIEW OF RELATED LITERATURE	7
Renewable Energy Sources	7
Solar Energy	7
Wind Energy	8
Hydroelectric Energy	8
Biomass Energy	9
Geothermal Energy	9
Sustainable Development Goals (SDGs)	10
Sustainable and Development Goals: Targets and Indicators	11
Historical Context and Evolution of Sustainable Development Goals	16
Global Context: Affordable & Clean Energy and Sustainable Development Goals	17
Central Luzon State University	19
Historical Background of Energy Sources of Central Luzon State University	20
Renewable Energies in Central Luzon State University	21
Clean and Pollutants Fuels	22
Energy -Saving Technologies and Appliances	23
Heating, Ventilation and Air Conditioning System (HVAC)	23
Light-Emitting Diode Lights	24
Smart Thermostat	24
Assessment on Energy Saving Technologies	26
METHODOLOGY	27

Conceptual Framework	27
Research Method	27
Research Design	27
Sampling and Participants	28
Research Instruments	28
Data Gathering	29
Procedure for Data Analysis	30
Ethical Consideration	31
	33
RESULTS AND DISCUSSIONS	34
Renewable Energy Consumption of CLSU	34
Awareness and Acceptability of CLSU Faculty towards Renewable Energy	39
Part I: Demographic Profile of the Respondent	40
Part II: Office Profile	41
Part III: Awareness towards Renewable Energy	46
Part IV: Acceptance towards Renewable Energy	48
Part V: Willingness among CLSU faculty to financially invest in Renewable Energy	58
Part VI: Perception of the respondent about Climate Change	63
SUMMARY, CONCLUSION AND RECOMMENDATION	66
Summary	66
Conclusion	67
Recommendation	68
LITERATURE CITED	69
APPENDICES	77

## LIST OF TABLES

Table 1. 5-point Likert Scale interpretation in level of awareness	31
Table 2. 5-point Likert scale interpretation on Acceptance towards RE	32
Table 3. 5-point Likert scale interpretation on level of responsibility	32
Table 4. Actual Energy Delivered in 2021	36
Table 5. Actual Energy Delivered in 2022	37
Table 6. Actual Energy Delivered in 2023	38
Table 7. Annual FGES and NEECO II Actual Energy Delivered	38
Table 8. Demographic Profile	40
Table 9. Office Profile	42
Table 10. Energy-saving Technologies Available in Office	45
Table 11. Level of awareness towards UN & Renewable Energy	47
Table 12. Number of supporting and promoting Renewable Energy	49
Table 13. Way of CLSU faculties and staffs in supporting the use of RE	49
Table 14. Activities taken of the respondent to promote and support RE	50
Table 15. Most important RE features considering by the respondents	51
Table 16. Individual initiatives to promote and support RE	52
Table 17. Businesses and government role; Satisfaction of the respondents in CLSU implementing RE; Public awareness	52
Table 18. Thematic Analysis Result about the opinion of respondents	53
Table 19. Respondent data who's not willing to support and promote	54
Table 20. Acceptability of the Solar Power and Hydroelectric Power	56
Table 20a. Acceptability of Wind Power and Biogas Digester	57

## LIST OF TABLES

Table 1. 5-point Likert Scale interpretation in level of awareness	31
Table 2. 5-point Likert scale interpretation on Acceptance towards RE	32
Table 3. 5-point Likert scale interpretation on level of responsibility	32
Table 4. Actual Energy Delivered in 2021	36
Table 5. Actual Energy Delivered in 2022	37
Table 6. Actual Energy Delivered in 2023	38
Table 7. Annual FGES and NEECO II Actual Energy Delivered	38
Table 8. Demographic Profile	40
Table 9. Office Profile	42
Table 10. Energy-saving Technologies Available in Office	45
Table 11. Level of awareness towards UN & Renewable Energy	47
Table 12. Number of supporting and promoting Renewable Energy	49
Table 13. Way of CLSU faculties and staffs in supporting the use of RE	49
Table 14. Activities taken of the respondent to promote and support RE	50
Table 15. Most important RE features considering by the respondents	51
Table 16. Individual initiatives to promote and support RE	52
Table 17. Businesses and government role; Satisfaction of the respondents in CLSU implementing RE; Public awareness	52
Table 18. Thematic Analysis Result about the opinion of respondents	53
Table 19. Respondent data who's not willing to support and promote	54
Table 20. Acceptability of the Solar Power and Hydroelectric Power	56
Table 20a. Acceptability of Wind Power and Biogas Digester	57

Table 21. Renewable Energy liked by respondents	59
Table 22. Decision of Respondents to invest RE	60
Table 23. Energy efficiency effect in decision making	60
Table 24. Effect of Government's programs in decision making	60
Table 25. Barriers on investing Renewable Energy	62
Table 26. Conventional energy over RE	62
Table 27. Respondent's perception on CLSU's Renewable Energy Technology investments	63
Table 28. Respondent's view to climate change	64
Table 29. Environment and economy	64
Table 30. Different actors' responsibility	65

**LIST OF FIGURES**

Figure 1. The 17 Sustainable Development Goals	11
Figure 2. The Interlinkage of SDG 7 to other SDG (Illustration by Paul Bertheau)	19
Figure 3. Conceptual Framework	27
Figure 3. Map of CLSU where data collection was done	29
Figure 4. Annual FGES, NEECO II and Solar Panel Actual Energy Delivered	39
Figure 5. Clean Fuels for Lighting	44
Figure 6. Polluting Fuels for Lighting	44
Figure 7. Investing in Renewable Energy	58
Figure 8. Way of respondent looking data about Renewable Energy.	61

**LIST OF APPENDIX**

APPENDIX A: Request letters	78
APPENDIX B: Survey Questionnaire	80
APPENDIX C. Tabulated results of the survey questionnaire	89
APPENDIX D. Total Energy Consumption of CLSU	104

**LIST OF APPENDIX TABLES**

Appendix Table c1. Demographic Profile	89
Appendix Table c2. Office Profile	90
Appendix Table c3. Awareness towards renewable energy	92
Appendix Table c4. Solar Panel Acceptability	92
Appendix Table c5. Hydroelectric power Acceptability	93
Appendix Table c6. Wind power Acceptability	93
Appendix Table c7. Biogas Digester Acceptability	93
Appendix Table c8. Respondents opinion on RE investments of CLSU	94
Appendix Table c9. Level of responsibility of different actort result	94

**LIST OF APPENDIX FIGURE**

Appendix Figure 1. Raw request letter for number of academic buildings and faculty members	78
Appendix Figure 2. Raw letter of request to PPSDS	79
Appendix Figure 3. Sample answered questionnaire	95
Appendix Figure d1. CLSU total energy consumption of year 2021	104
Appendix Figure d2. CLSU total energy consumption of year 2022	105
Appendix Figure d3. CLSU total energy consumption of year 2023	106

## ABSTRACT

**CABOBOS, KRISTINE MILLEN S. and GAMIS, JAYSON A.**, Department of Agricultural and Biosystems Engineering, College of Engineering, **FEBRUARY 2023, ASSESSMENT OF RENEWABLE ENERGY SYSTEMS AND TECHNOLOGIES OF CENTRAL LUZON STATE UNIVERSITY TO CONTRIBUTE THE UN SDG 7: “AFFORDABLE AND CLEAN ENERGY”**

Adviser: WENDY C. MATEO, Ph.D.

The study analyzed the renewable energy use in a university, with a particular emphasis on understanding faculty members' awareness and acceptance of renewable energy technology. The general goal was to offer benchmark data to support sustainable energy programs in universities.

The study used a Quantitative method, which involves the integration of quantitative measurements of renewable energy usage and evaluations of faculty perspectives. The research seeks to assess the existing level of renewable energy technologies used in the university by conducting surveys among faculty members. Additionally, it aimed to explore the attitudes and preferences of academic faculties/staff towards sustainable energy technology.

The research findings enhance a better comprehension of the university's renewable energy situation. The report provides strategic insights for sustainable energy activities in the academic community by studying energy usage patterns and identifying barriers to the adoption of renewable technologies. Moreover, the study explored the faculty members' levels of awareness, views, and readiness to adopt renewable energy solutions. Insights

obtained from qualitative data provide a clear understanding of the elements that impact individual attitudes and behaviors. This allows for the development of focused awareness campaigns and educational programs to improve the knowledge of renewable energy among faculty members.

The benchmark data produced by this research is an invaluable resource for university administrators, policymakers, and sustainability activists. The findings provide a basis for making decisions based on primary information, which can help in creating and executing successful plans to encourage the use of renewable energy in academic institutions. This study aims to contribute to the greater objective of promoting environmental awareness and sustainable energy practices in higher education settings, recognizing the significant role that universities play in creating future leaders and supporting sustainability.

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