

## TABLE OF CONTENT

ABSTRACT.....	iii
ACKNOWLEDGEMENT .....	iv
TABLE OF CONTENT .....	v
LIST OF TABLES .....	viii
LIST OF FIGURES .....	x
CHAPTER I INTRODUCTION.....	1
1.1. Background .....	1
1.1.1. Indonesian Coal Statistic .....	1
1.1.2. Barren Area as Result of Mining Operations .....	3
1.1.3. Tanjung Enim Mining Area.....	5
1.2. Research Problem.....	8
1.3. Research Question.....	8
1.4. Research Objective.....	9
1.5. The Significance of the Research.....	9
1.6. Research Scope .....	9
1.6.1. Substantial Limitation .....	9
1.6.2. Location Scope .....	10
1.6.3. Temporal Scope.....	11
1.7. Research Framework.....	11
1.8. Research Structure .....	14
CHAPTER II LITERATURE REVIEW .....	15
2.1. Indonesia's Mining Reclamation Policy .....	15
2.2. Mined Area Reclamation and Post-Mining Activities .....	16

2.2.1. Revegetation as an Existing Post-Mining Activity .....	17
2.2.2. Oil Palm Plantation as the Agricultural Post-Mining Activities .....	18
2.2.3. Development of a Solar Panel Field in a Post-Mining Area .....	18
2.3. Life Cycle Assessment .....	19
2.3.1. Goal and Scope Definition .....	20
2.3.2. Inventory Analysis.....	21
2.3.3. Impact Assessment .....	22
2.3.4. Result Intepretation .....	23
CHAPTER III RESEARCH METHODOLOGY .....	24
3.1. Data Collection.....	24
3.1.1. Primary Data.....	24
3.1.2. Secondary Data.....	24
3.2. Research Approach .....	25
3.2.1. Interview .....	25
3.3. Data Analysis .....	28
3.3.1. Evaluation of Environmental Impact.....	28
3.3.2. Cost and Benefit Analysis .....	35
3.4. Methodological Frawework .....	38
CHAPTER IV DESCRIPTION OF STUDY AREA.....	39
4.1. Muara Enim Regency.....	39
4.1.1. Geography .....	40
4.1.2. Spatial Planning in Muara Enim Regency.....	41
4.1.3. Mining Sector as Source of Regional Revenue .....	43
4.2. Tanjung Enim Coal Mining .....	44
CHAPTER V RESULT AND ANALYSIS.....	48

5.1. Environment Impact Based on Life Cycle Assessment .....	48
5.1.1. Environment Impact for Revegetation Scenario .....	48
5.1.2. Environment Impact for Agriculture (Oil-palm Plantation) Scenario.....	53
5.1.3. Environment Impact for Solar Panel Field Scenario .....	59
5.1.4. Environmental Impact Comparison of Assessed Scenarios .....	64
5.2. Cost and Benefit Analysis .....	69
CHAPTER VI CONCLUSION AND RECOMMENDATION .....	70
6.1. Conclusion.....	70
6.2. Recommendation.....	71
REFERENCES .....	72
APPENDIX .....	71