

TABLE OF CONTENT

TABLE OF CONTENT	vi
LIST OF TABLE	ix
LIST OF FIGURE	x
CHAPTER I	1
INTRODUCTION	1
1.1 Background	1
1.2 Natural Gas as An Energy Source	1
1.3 CO ₂ as Impurities in Natural Gas	4
1.4 Problem Formulation	5
1.5 Research Benefit	6
1.6 Research Goals	6
CHAPTER II	7
LITERATURE REVIEW	7
2.1 Conventional Natural Gas Processing Schemes	7
2.2 Overview of Gas Separation Mechanisms	9
2.3 The Importance of CO ₂ Removal Technology Selection	26
2.4 Hypothesis	33
CHAPTER III	34
RESEARCH METHODOLOGY	34
3.1 Research Design	34
3.2 Subject of the Study	35
3.3 Research Instrument	35
3.4 Collecting Data	35
3.5 Data Analysis (AHP Methods for CO ₂ removal technology selection framework)	36
CHAPTER IV	40
RESULT AND DISCUSSION	40
4.1 Field/Gas Plant Selection	40
4.2 Criteria and Hierarchy Construction	43
4.3 Scoring Criteria and AHP Simulation	46



UNIVERSITAS
GADJAH MADA

CO2 Removal from Natural Gas: Methods, Technologies and Applications in Upstream Oil & Gas Business Activities in Indonesia

Agung Azan Nugroho, Ir. Muhammad Mufti Azis, S.T., M.Sc., Ph.D., IPM; Dr. Ing. Ir. Teguh Ariyanto, S.T., M.Eng., IPM

Universitas Gadjah Mada, 2023 | Diunduh dari <http://etd.repository.ugm.ac.id/>

4.4	Scoring Criteria and Result AHP Simulation	50
4.5	Analyzing and Interpreting	50
4.6	Conclusion	53
	REFERENCES	56