



INDRIA WAHYUNI



Indonesia's Policy and Regulation of Geothermal Energy

Optimising Geothermal Utilisation

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Preface Preface Preface Preface

Indonesia's natural resources: is it a blessing or a curse? This question was underlying my passion for focusing on energy law and policy. It was also a question that brought me to research pathways in energy law-related issues. I want to prove that Indonesia's natural resources could be a blessing, instead of a curse, if we can manage them in a suitable method by highlighting factors related to the utilisation. I have been focusing on this renewable energy issue since 2016. It was a further step from my previous research on fossil fuel management (coal). This book is based on my concern that Indonesia's geothermal potential needs to be utilised at the maximum level. We have 40% of the world's geothermal reserves as a consequence of being located in the *ring of fire*. Unfortunately, we can only utilise less than 10% of the geothermal potential in the country. Therefore, implicitly we have a problem with how to alleviate geothermal utilisation. Maximising geothermal utilisation will be beneficial for supporting Indonesia's goal of achieving *Net Zero Emission* by 2060 or sooner, and a sustainable energy transition.

The lack of academic references on geothermal law is my primary motivation to write this book to provide insight for the academic world, lecturers, students, activists, government officials and the public interested in energy issues, particularly geothermal. This book will provide comprehensive

references in geothermal law and policy, including a global perspective of energy, geothermal potential in Indonesia, borderless concept of geothermal management, challenges in geothermal utilisation in the country, and a comparative perspective of geothermal utilisation in New Zealand. It also highlighted reformulation geothermal legal formation.

I acknowledge the support of Universitas Airlangga, the Law Faculty, for me during the research and all parties that support the research. Thank you to everyone that supported and strengthened me during the research. I hope this book can trigger more academic discussion on geothermal policy field. Happy reading!

10 June 2023

Sincerely,

Indria Wahyuni

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ABBREVIATIONS

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Terminology	Meaning (in English)	Meaning (in Indonesia)
AEC	ASEAN Economic Community	
AMDAL	Environmental Impact Assessment	Analisis Mengenai Dampak Lingkungan
APAEC	ASEAN Plan for Action Energy Cooperation	
ASEAN	The Association of Southeast Asian Nations	
BKPM	National Investment Coordination Board	Badan Koordinasi Penanaman Modal
BP	British Petroleum	
BP MIGAS	National Upstream Oil and Gas Implementing Agency	Badan Pelaksana Kegiatan Hulu Minyak dan Gas
BPS	National Statistic Agency	Badan Pusat Statistik
Constitution	Constitution of Indonesia (amendment)	Undang-Undang Dasar 1945 (amandemen)
Constitutional Court	Constitutional Court	Mahkamah Konstitusi (MK)
DEN	National Energy Council	Dewan Energi Nasional

EIA	US Energy Information Administration	
IEA	International Energy Agency	
INDC	Intended Nationally Determined Contribution	
IRENA	International Renewable Energy Agency	
KKKS	oil working contractors	Kontraktor Kontrak Kerja Sama
KKS	Cooperation Working Contract	Kontrak Kerja Sama
KPK	Commission of Corruption Eradication	Komisi Pemberantasan Korupsi
LCDI	Low Carbon Development Initiative	Pembangunan Rendah Karbon
MEMR	Ministry of Energy and Mineral Resource	Kementerian Energi dan Sumber Daya Mineral
Minister of Energy	Minister of Energy and Natural Resources	Menteri Energi dan Sumber Daya Mineral
NDC	Nationally Determined Contribution	Kontribusi nasional yang ditentukan
NEI	Netherlands East Indies	
NEP	National Energy Policy	Kebijakan Energi Nasional
NKPM	<i>Netherlandsche Koloniale Petroleum Maatschappij</i>	
NRE	New and Renewable Energy	Energy baru dan terbarukan
NZE	Net Zero Emission	Emisi Nol/ Karbon Netral
OPEC	Organisation of the Petroleum Exporting Countries	Organisasi Negara-Negara Pengekspor Minyak Bumi
Pertamina	State-owned company in Oil and natural gas	Perusahaan Minyak dan Gas Negara
PLN	State-owned company in electricity	Perusahaan Listrik Negara
PSC	Production Sharing Contract	Kontrak Bagi Hasil
RUED	General planning for local energy	Rencana Umum Energi Daerah
RUED-K	General planning for local energy – municipal/city	Rencana Umum Energi Daerah – Kabupaten/Kota
RUED-P	General planning for local energy – Province	Rencana Umum Energi Daerah – Provinsi

Abbreviations

RUEN	National Energy Plan	Rencana Umum Energi National
RUPTL	Electricity Supply Business Plan	Rencana Umum Penyediaan Tenaga Listrik
SDGs	Sustainable Development Goals	
SKK MIGAS	Special Taskforce of Upstream Oil and Gas	Satuan Kerja Khusus Hulu Minyak dan Gas Bumi
UNFCCC	The United Nations Framework Convention on Climate Change	
USAID	United States Agency for International Development	

