

Book Review

# The Challenges and Upheavals in Governing Climate Change in Southeast Asia

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## Introduction

Southeast Asia is home to fast-growing countries that are also extremely vulnerable to the impacts of climate change and have diverse political systems that reflect a wide range of governance perspectives and institutional frameworks for climate action. This paper will discuss a book titled “Governing Climate Change in Southeast Asia: Critical Perspectives”. This book provides fourteen chapters that critically and thoroughly reveal the realities of how climate change action and frameworks are governed in the Global South of Southeast Asia, as well as the challenges encountered, viewed from the social and political perspectives of the authors. The book is authored by regional experts working as academics, advocates, independent researchers, lawyers, and consultants from various institutions across Asia, Europe, and Australia. The book was published in 2021 by Routledge and CRC Press.

This book consists of three parts: Introduction (part 1), Country Perspectives (part 2), and Regional Perspectives (part 3). Part 1, Introduction, is a brief overview of the countries under the Association of Southeast Asian Nations (ASEAN) and the conditions faced in the era of climate change. Then, in part 2, climate change governance in eleven Southeast Asian countries is reviewed in one chapter for each country, which generally contains information on an overview of climate change impacts, governance at

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the national level, implementation at the ground level, stakeholders involved, and critical implications. Part 3 addresses fossil resource issues in ASEAN, and all chapters are synthesized.

The purpose of this review is to illustrate the challenges and turmoil of climate change governance in Southeast Asia and provide examples of climate governance in Indonesia (chapter 4), Malaysia (chapter 6), and Singapore (chapter 9) as representatives of each economic class. Also, those three countries have the highest Intended Nationally Determined Contributions (INDCs) pledged to reduce emissions to the United Nations Framework Convention on Climate Change (UNFCCC).

### Writing Style

The book is written academically and compiled coherently by referencing credible data sources and references.

### The Upheavals of Climate Change Governance

Based on the World Bank classification, Southeast Asian countries are divided into three economic classes: 1. high-income economies (Singapore and Brunei Darussalam), 2. upper-middle-income economies (Malaysia and Thailand), 3. lower-middle-income economies (Myanmar, Cambodia, Laos, Viet Nam, Philippine, Indonesia, and Timor Leste) (Hamadeh et al 2022).

In this book, as a developed country, Singapore integrates climate action with prioritizing economic performance "growth first". It mentions an inclusive climate action with multi-actor involvement in Malaysia, an upper middle-income country. However, contrasts are seen in neighboring lower-middle-income countries, i.e. political crisis, an authoritarian and military-based government that suppresses non-governmental actors to voice in Myanmar; clashes between top-down climate change policies and climate activists in Thailand; poor coordination of climate change actors in Cambodia; climate change politics lacking local community involvement in Laos; climate politics associated with the dispute over water and land resources in Viet Nam; lack of inter-sectoral synergies in policy agenda implementation, as well as technical and organizational issues in the Philippines; lack of integration of climate change in national development plans in Indonesia; persistence of indigenous climate knowledge in communities that often opposes science, resulting in local and national conflicts in Timor Leste. The author also points out that Brunei Darussalam, Laos, Myanmar and Timor Leste did not stipulate quantitative NDC for greenhouse gas (GHG) emission to the UNFCCC but merely outlined the national strategy for climate change. These rationales indicate the diversity of climate governance in Southeast Asia.

### National Emission Reduction Commitments

Indonesia, Malaysia, and Singapore are neighboring countries, but in different economic classes:

- Indonesia is a lower-middle-income country.
- Malaysia is an upper-middle-income country.
- Singapore is a high-income country.

All three countries contribute to international climate change agreements by submitting NDCs to the UNFCCC and have the highest unconditional NDC commitments in Southeast Asia. Indonesia committed to a Business as Usual (BaU) scenario, while Malaysia and Singapore committed to an emissions intensity reduction scenario. In November 2016, Indonesia pledged an unconditional NDC of 29% and a conditional NDC of 41% by 2030, renewing its 2009 commitment<sup>1</sup>. In 2016, Malaysia targeted a 35% reduction in GHG emissions per unit of Gross Domestic Product (GDP) and 45% conditional on financial transfers by 2030 (updating the 2009 commitment), indicating that increasing GDP will increase GHG emissions. Similarly, in September 2016, Singapore pledged its NDC to reduce GHG emissions intensity by 36% from 2005 levels by 2023 to peak by 2030 (updating the 2009 commitment). Based on these commitments, each country's

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<sup>1</sup> The NDC of Indonesia was updated in 2022 to become 31.89% unconditionally and 43.20% conditionally (UNFCCC, 2022).

actual annual emissions will be 200 MTCO<sub>2e</sub> (Indonesia), 470 MTCO<sub>2e</sub> (Malaysia), and 25 MTCO<sub>2e</sub> (Singapore).

## National Climate Change Governances

### *Land Use Climate Actions in Indonesia*

The author, [Di Gregorio \(2021\)](#), mentions weak forest governance and the impact of climate change as the stimuli for forest carbon emissions and forest fires in Indonesia. More than two-thirds of the GHG emissions come from the land use sector, mainly deforestation, with the energy sector accounting for one-third. The achievement of NDC targets is directed at two sectors, namely forestry, and energy, with the percentage of the forestry sector being 17 percent out of 29 and 23 percent out of 41, hence. The authors focus on Indonesia's climate governance in the land use sector.

Indonesia started to be active in climate change policy development in 2007, after the 3rd UNFCCC conference in Bali, establishing a semi-independent National Council on Climate Change and agreeing on GHG reduction commitments in 2009. From 2007-2014, there was a vertical form of policy under the supervision of the president with several climate actions such as accepting Reducing Emissions from Deforestation and Forest Degradation (REDD+) with Norwegian funding, Moratorium on Primary Forest Clearing, along with the National Action Plan for Emission Reduction and Presidential Regulation on GHG Inventory, during that period climate change became a presidential priority. After 2014, there was a major shift in climate governance to a horizontal approach where climate actions were organized by the Ministry of Environment and Forestry (MoEF) as the lead agency for mitigation, in coordination with the Ministry of National Development Planning (MoNDP) as the lead agency for adaptation strategies. In 2016, the president established the Peatland Restoration Agency to restore 2 million hectares of peatland by 2020 and implement a Moratorium on Natural Forest Clearance and a Moratorium on New Oil Palm Concessions on Peatland.

Climate change policies in Indonesia focus more on mitigation than adaptation and adaptation action tends to be slower. In addition, climate change has limited integration into national and economic development due to differences in priorities among sectors. For example, the 2011-2025 national economic development plan mentions the target of expanding oil palm plantations and mining and does not consider potential trade-offs with mitigation targets. However, in 2019, the Low Carbon Development Initiative 2020-2024 by the MoNDP began to accelerate integration. Overall, Indonesia's internal climate change policy integration is influenced by factors such as conflict of interest (struggle for control over climate mitigation) and institutional coordination (for example, the synergy between MoEF and MoNDP). The external integration of climate change policy is influenced by the tension of business interests, the interference of influential political actors in the forestry and agriculture sectors, and institutional lock-ins related to the practice of official collusion on forest land access, which limits the involvement of local communities.

### *Multilevel Climate Governance in Malaysia*

The largest GHG emissions in Malaysia come from energy (transport), forestry, and waste. [Zen & Mohamad \(2021\)](#) mention that the intention to protect the environment in Malaysia existed during the colonial period and two decades after independence by promoting the wise use of resources. The Environmental Quality Act (EQA) of 1974 is the key environmental legislation in Malaysia.

There are four waves of environmental governance in Malaysia: the first wave, environmental protection (the 1970s to 1980s), the inclusion of environmental sustainability in development plans in 1973, the introduction of EQA in 1974, and the establishment of the Department of Environment. The second wave, sustainable development (1990s-present), is a response to the crisis to reform the sustainable development agenda. The third wave, Green investment (2006-present), the ecological modernization track and the establishment of a green growth model, e.g. example; in 2009, the introduction of a green technology portfolio in the Ministry of Energy, Green Technology and Water, the National Green Technology Policy and the Malaysian Green Technology Corporation, the National Policy on Climate Change, GHG reduction commitments to the UNFCCC Climate Change, with the spirit of the appropriate balance between sustainable and pro-business approaches. The fourth wave, Sustainable Development Goals (2015-present), i.e. the Eleventh Malaysia Plan (2016-2020) in conjunction with the

SDGs (EPU 2017), Green Technology Master Plan (2016-2030), Malaysia Roadmap Towards Zero Single-Use Plastic (2018-2030), Clean Air Action Plan (2010), National Haze Action Plan (2019), and Open Burning Action Plan (2019).

The state of Melaka is the first green and low-carbon city in Malaysia with the support of non-state actors (NSAs), meaning networks between governments collaborating with many international organizations, local stakeholders, and universities. Decentralized, voluntary, and market-driven interactions characterize the initiative. The state of Melaka has vertical governance, including the economic development of the region through foreign organizations and within the Global Platform for Sustainable Cities facilitated by federal agencies. It has horizontal governance involving Melaka's green technology companies, which engage closely with multiple government agencies, local stakeholders, and local authorities, as well as the involvement of local universities and experts under a national research grant. The second example is the Iskandar Malaysia low-carbon society in Johor state, initiated by a local university with an international research grant that helped the local government develop a blueprint to implement a low-carbon community for Iskandar Malaysia.

### **A "Growth First" Approach to Climate Mitigation in Singapore**

Singapore is a wealthy Southeast Asian country with emissions predominantly driven by electricity generation (52%), followed by 'other industrial' combustion (primarily the refining industry) (18%) and transport (15%). Initially, Singapore was slow and cautious in responding to the international climate change policy, e.g., ratifying the 1992 UNFCCC in 1997 and signing the 1997 Kyoto Protocol in 2005. [Hamilton-Hart \(2021\)](#) author mentions that Singapore intended to make a minimum emission reduction commitment due to several arguments, such as Singapore's low contribution to global emissions, limited access to renewable energy and natural resources, and its location as a trade and transport hub. Climate change policy was taken seriously at the governmental level after the UNFCCC agreements in Copenhagen in 2009 and Paris in 2016. Singapore did not mention absolute reduction commitments due to rapid economic growth in the Paris Agreement.

A significant action by Singapore started in 2018, 'the Year of Climate Action', obtaining 300,000 pledges from individuals, businesses, organizations, and educational institutions, with several governance initiatives such as commitments to reduce plastic, water, and electricity consumption in the public sector. The government is scaling up the electricity switch from fuel oil to natural gas and increasing the use of solar electricity, which is also a green growth strategy, aiming for 350MWp by 2020 (compared to 15.3 MWp by 2013). Voluntary household programs such as recycling and converting waste into energy are also being implemented. In addition, the Singapore government has introduced "Green Mark" certification for energy-efficient buildings, restricted the use of private vehicles to reduce emissions, and imposed a carbon tax on energy-intensive industries at between \$10/tCO<sub>2e</sub> and \$15/tCO<sub>2e</sub> by 2030.

Singapore's rejection of absolute commitments reflects the prudence and priority for economic growth, so economic governance influences climate change governance, which is influenced by several factors, including 1: high government capacity and dominance in policy formulation 2. Country development is designed in coordination with the business sector 3. Environmental activists should be included in climate change dialogue, but there should be limited consideration in policy. 4. Effective implementation and clear coordination of policy-making.

### **Climate Governance in Southeast Asia**

In the conclusion, the authors stated that tackling climate change in Southeast Asia is highly context-specific. However, there are at least three notoriously difficult obstacles, including the tensions between 1. authoritarian and democratic, 2. state-driven climate change politics and non-governmental interventions, and 3. state control and market-driven

### Critical Things to Consider

This book presents a comprehensive critical review of each chapter, so the title selection is precise by adding the phrase "Critical Perspectives". In the introduction, the authors provide an overview of the book's contents, sufficiently in line with the upcoming chapters. In Chapter 4 on climate change governance in Indonesia, the author describes the problems and realities in detail. Then, in Chapter 6 on climate change governance in Malaysia, generally, the chapter clearly points to the multilevel governance approach, but the obstacles experienced are also interesting to discuss. Chapter 9 is informative and fairly comprehensive. It critically reviews the shortcomings and strengths of climate change governance in Singapore proportionally. In the conclusion, the author thoroughly synthesizes all climate governance issues in Southeast Asia, highlighting key points, future directions, and cautionary aspects of climate governance. Climate change governance in Southeast Asia is heterogeneous and cannot be generalized. However, climate change mitigation targets (zero carbon) can be achieved in line with achieving the Sustainable Development Goals (SDGs) target (zero poverty) by enabling multi-level integration and social transformation (Caetano et al., 2020).

### Conclusion and Book Rating

The author brings up different conflicts and viewpoints according to the conditions of each country, and the narrative of climate governance in each country is presented appealingly. The authors prompt readers to comprehend the general political conditions in each country and then discuss climate governance issues in greater detail. However, the vocabulary in the book includes political science terms and abbreviations, which may overwhelm the reader and require thorough understanding. Considering the writing qualities, strengths, and weaknesses, this book "Governing Climate Change in Southeast Asia: Critical Perspectives" is A-rated and highly recommended for undergraduate and postgraduate students, academics, and policymakers interested in climate change issues

### Cover Book



## GOVERNING CLIMATE CHANGE IN SOUTHEAST ASIA

CRITICAL PERSPECTIVES

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## Reference

- Caetano, T., Winkler, H., & Depledge, J. (2020). Towards zero carbon and zero poverty: integrating national climate change mitigation and sustainable development goals. *Climate Policy*, 20(7), 773-778.
- Di Gregorio, M. (2021). The politics of climate policy integration and land use in Indonesia. In *Governing Climate Change in Southeast Asia* (pp. 56-75). Routledge.
- Hamadeh, N., Van Rompaey, C., Metreau, E. & Eapen, S.G. (2022). New World Bank country classifications by income level: 2022-2023. <https://blogs.worldbank.org/opendata/new-world-bank-country-classifications-income-level-2022-2022>
- Hamilton-Hart, N. (2021). Climate change governance in Singapore: Cautious mitigation in a developmental state. In *Governing Climate Change in Southeast Asia* (pp. 148-167). Routledge.
- Zen, I. S., & Mohamad, Z. F. (2021). Malaysia's complex multi-level climate governance between institutionalisation and non-state actor interventions. In *Governing Climate Change in Southeast Asia* (pp. 91-111). Routledge.