Check for updates

OPEN ACCESS

EDITED BY Athanasios Angelis-Dimakis, University of Huddersfield, United Kingdom

REVIEWED BY Mohd Aminul Karim, Bangladesh University of Professionals, Bangladesh

*CORRESPONDENCE Bama Andika Putra, bama.putra@bristol.ac.uk, bam@unhas.ac.id

RECEIVED 26 August 2024 ACCEPTED 16 October 2024 PUBLISHED 24 October 2024

CITATION

Putra BA (2024) The politics of countering climate change in Southeast Asia. *Front. Environ. Sci.* 12:1486796. doi: 10.3389/fenvs.2024.1486796

COPYRIGHT

© 2024 Putra. This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY). The use, distribution or reproduction in other forums is permitted, provided the original author(s) and the copyright owner(s) are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.

The politics of countering climate change in Southeast Asia

Bama Andika Putra^{1,2}*

¹School of Sociology, Politics, and International Studies, University of Bristol, Bristol, United Kingdom, ²Department of International Relations, Universitas Hasanuddin, Makassar, Indonesia

KEYWORDS

climate change, Southeast Asia, political context, hedging, climate policy

1 Stagnancy in southeast Asia's response to climate change

Southeast Asia is a region vulnerable to the impacts of climate change. In a report published by German Watch, 'Global Climate Risk Index 2018,' Myanmar, the Philippines, Thailand, and Vietnam are among the member states of the Association of Southeast Asian Nations (ASEAN) impacted most due to climate-change related fatalities in the past 2 decades (Eckstein et al., 2019). ASEAN's State of Climate Change Report (ASCCR) states that Southeast Asian states are experiencing extreme weather events, leading to vast ecological and social issues (ASEAN, 2021, *p*.17). The unique demographic landscape of Southeast Asia marked by rapid urbanization (Dahiya, 2016) and populations residing in the fertile lands of coastal river deltas (Ismail et al., 2015; Overland et al., 2021) multiplies the possible consequences of climate change for the region. Consequently, extreme weather events such as heat waves and the steady rise of sea levels have been the common climate-change-related issues faced by Southeast Asian states (Swe et al., 2015; Shadman et al., 2016). The threat in the future is accurate, as even moderate sea-level rise could be catastrophic in densely populated capitals in the region (Fuchs, Conran, and Louis, 2011; NSIDC, 2024).

However, Southeast Asia's growing threat of climate change has not been met with a proportionate response vis-à-vis the threat. This has been the dominant theme for scholars assessing the performances of Southeast Asian states concerning climate change (Caballero-Anthony et al., 2015; Dahiya, 2016; Robinson, 2018; Arino and Prabhakar, 2021; Seah and Martinus, 2021). Ding and Beh, for example, argue that "ASEAN's environmental performance is severely lagging compared to other regions despite evidence of its cohesive and comprehensive efforts to mitigate emissions" (Ding and Beh, 2022, *p.*1). There is consensus between ASEAN member states that climate change mitigation and adaptation measures are pivotal to ensure an effective response to counter the crisis. This is reflected by the conclusion of the ASCCR in 2021 and individual Southeast Asian states placing modest targets in their nationally determined contributions to the Paris Agreement. However, as an economically thriving region ramping up industrialization, this region continues to adopt practices that do not align with climate change mitigation and adaptation measures: burning forests, subsidizing fossil fuels, and lack of consistency in exploring renewable energies (Overland et al., 2021).

Even though ASEAN member states collectively and individually seem to be undertaking measures across multiple sectors, the performances remain incommensurate with the threat. This is well documented in studies published in the past 5 years, indicating a lack of decisiveness in Southeast Asia's climate change mitigation efforts (Fulton et al., 2017; Johnson et al., 2021; Gogoi and Sarmah, 2024; Overland and Seah, 2024; Qiu et al., 2024). Quantitative research attempting to understand ASEAN's slow performances in climate change countering efforts concluded the presence of an energy

paradox in Southeast Asia's climate change responses, in which the high environment threat is not responded to decisively, similar to the conclusions of Ding and Beh's 2022 inquiry (Overland et al., 2021). The Singapore-based research center, ISEAS-Yusof Ishak Institute, also concluded the presence of 'ambivalence' in ASEAN's climate change efforts (Seah and Martinus, 2021). This opinion article attempts to complement and build up those existing studies to make sense of the empirical puzzle. It argues that a qualitative approach is needed to assess the relevance of political contexts in comprehending these nations' incommensurate counterclimate change responses to provide a nuanced understanding of this phenomenon. In doing so, this qualitative inquiry utilizes secondary data from the last 2 decades. It descriptively bridges the hedging literature of international relations as the political context to understand Southeast Asia's climate change mitigation and adaptation measures. It provides an alternative lens of interpretation to show why progress is slow.

2 What matters for Southeast Asian policymakers? Bridging the hedging literature of international relations

This opinion article argues that under the lens of hedging, despite categorizing climate change as a 'threat,' mitigation and adaptation measures will continue to be a secondary priority for Southeast Asian states. Hedging in international relations is an alignment strategy between 'balancing' and 'bandwagoning' (Goh, 2007; 2016). In simple terms, secondary states such as those in Southeast Asia do not clearly define their alignment preferences in international politics. In aspects such as security, for example, they tend to engage with one great power, while in economic sectors, they engage with the competing great power. One of the main conclusions in this literature has been how Southeast Asian states have engaged with the US for security purposes, which coincided with engaging with China to secure economic funding (Kuik, 2008; Lim and Cooper, 2015; Kuik and Rozman, 2017; Ciorciari and Haacke, 2019; He and Feng, 2023; Putra, 2023a).

Consequently, the hedging literature shows that Southeast Asian states are trapped in a constant cycle of alignment decisions, and their choices are determined by a complex geopolitical context concerning great power influence in the region. It also shows that Southeast Asian states, as thriving economies, prioritize either the security or the economic domain as their foreign policy priorities (Ba, 2009; Kuik, 2016; 2022; Lai and Kuik, 2020; Putra, 2024a). The labeling of 'threat' to non-traditional security threats such as climate change would not automatically lead to the diversion of mass resources in achieving nationally determined climate-change-related targets. This is due to the economic pragmatic lens Southeast Asian states perceive of climate change (Farajzadeh et al., 2023; Gogoi and Sarmah, 2024; Suwandaru et al., 2024).

Southeast Asian states view that the reduction of emissions requires funding. However, Arino and Prabhakar argued in 2021 that the intention to counter climate change that coincides with economic development is feasible, considering its relations towards ASEAN's long-term climate vision (Arino and Prabhakar, 2021). This study argues the opposite, as Southeast Asian politics is preoccupied with issues of greater importance. In the security realm, issues such as the South China Sea, the stability of Myanmar, and internal insecurities dominate the regional headlines (Blazevic, 2012; Chen et al., 2014; Aoyama, 2016; Jones and Jenne, 2022; Putra, 2023b). Meanwhile, in the economic realm, Southeast Asia's energy and infrastructural demands have made the need to secure foreign investments (primarily from China's Belt Road Initiative) the dominant policy among the states in the region (Pempel, 2010; Lim and Cooper, 2015; Jones and Jenne, 2022). This explains the economic pragmatism in climate change countering efforts.

3 The political context of southeast Asia's climate change response

Addressing climate change is a convoluted process due to the need for multisectoral responses. Southeast Asian states have acknowledged this by raising the issue of climate change to the inter-ministerial level after a series of reforms took place within the states' institutional governance in Singapore, Thailand, the Philippines, Indonesia, Vietnam, Cambodia, Myanmar, and Brunei Darussalam (Seah and Martinus, 2021). However, when it comes to mitigation and adaptation measures, Southeast Asian states tend to perceive issues from the lens of how certain environmental damages could impact their economy. For example, with the haze pollution taking place due to peatland fires in Southeast Asia, coordination efforts between Indonesia, Malaysia, and Singapore were primarily constructed to ensure that the haze does not disrupt the region's economies (Greenpeace, 2019; Wangwongwatana, 2023; Varkkey, 2024).

Therefore, in the context of climate change, Southeast Asian states perceive that the demand for global institutions for the region to adopt a series of mitigation and adaptation measures serves as a dilemma. On the one hand, ASEAN member states are aware that the environmental damage caused by climate change can cause disruptions to food security and economic activities. As the Asian Development Bank reported in 2015, there is a possible decline of 6-12 percent of the rice yields in the Mekong River Delta by 2050, ultimately slashing rice production by half (ADB, 2015). Academics have studied the region-wide impact on food security, and conclusions have not been favorable (Swe et al., 2015; Shadman et al., 2016). Conversely, Southeast Asian states hold this economic pragmatic view that mitigation and adaptation measures require heavy investments. For example, if the state were to finance alternative energy sources independently, this would undermine its current attempts to advance the state's economy (Fulton et al., 2017; Overland and Seah, 2024; Qiu et al., 2024; Suwandaru et al., 2024).

As the international relations literature shows, states such as Indonesia, Malaysia, Vietnam, Singapore, and the Philippines are currently labeled as 'middle powers,' countries with a substantial economic impact on the global economy (Swielande, 2018; Gill, 2020; Park, 2022; Giang, 2023; Umar, 2023). To maintain this momentum, such states have accelerated efforts to attract foreign investments to finance their ambitious infrastructural projects, industrial downstream policies, and industrial development projects. As past studies in the hedging literature have argued, it is this priority to secure economic opportunities that define the politics of the Southeast Asian region, followed by issues in the security realm (Kuik, 2008; 2022; Goh, 2016; Kuik and Rozman, 2017; Jones and Jenne, 2022). Unfortunately, other issues, including climate change, have become a secondary priority. This helps explain why there has been passive progress in Southeast Asia's renewable energy resources between 2005 and 2017. Wind and solar sources have remained minor, with ASEAN member states collectively ranked below Europe, China, the United States, and even individual states such as India and Japan (Ding and Beh, 2022). This shows that the region still lacks a long-term robust investment scheme, which external actors could only support (Johnson et al., 2021; Li and Gallagher, 2022; Diaz-Rainey et al., 2023; Overland and Seah, 2024). Unfortunately, this has only been a minor theme in cooperation between Southeast Asian states with economic powerhouses such as Japan and China, with the dominant discourse still being the financing of infrastructural projects. This is especially evident in ASEAN's lower economies: Cambodia, Myanmar, Laos, and Vietnam (CMLV), which have, in recent years, struggled to not only secure economic funding but have also faced numerous domestic instability issues that undermine their governments' effectiveness (Lee, 2021; Putra, 2024b; Spandler et al., 2024).

Another political context that helps to understand the slow performance of Southeast Asia's climate change response is the voluntary nature of its targets. All ASEAN member states are committed to the UN Framework on Climate Change and the Paris Agreement. However, at the regional level, ASEAN does not have the mandate or authority to impose targets or actions for its member states. Thus, when Malaysia announced its intentions to achieve carbon neutrality by 2050, Indonesia by 2060, and Singapore by 2050 (Arino and Prabhakar, 2021), ASEAN did not have the proper mechanisms to ensure this takes place. ASEAN is primarily a norm-constructing regional organization, not a supranational regional body with higher authority over its member states' sovereignty.

This is unfortunate, considering the vast platforms that ASEAN currently has that can establish more decisive responses to climate change. ASEAN member states engage through the ASEAN Climate Resilience Network and the ASEAN Working Group on Climate Change. Annually, Southeast Asian leaders meet in the ASEAN Ministerial Meetings on the Environment and the ASEAN Senior Officials Meeting on the Environment, which contains elements of climate change and environmental concerns at the center of its

References

ADB (2015). Climate change losses for Southeast Asia well above previous estimate. Manila: Asian Development Bank. Available at: https://www.adb.org/ news/climate-change-losses-southeast-asia-well-above-previous-estimate-adb (Accessed August 25, 2024).

Aoyama, R. (2016). "One Belt, one Road": China's new global strategy. J. Contemp. East Asia Stud. 5 (2), 3–22. doi:10.1080/24761028.2016.11869094

Arino, Y., and Prabhakar, S. V. R. K. (2021). What's in ASEAN's first state of climate change report? Washington, DC: The Diplomat. Available at: https://thediplomat.com/2021/10/ whats-in-aseans-first-state-of-climate-change-report/(Accessed August 24, 2024).

ASEAN (2021). ASEAN state of climate change report. Jakarta. Available at: https:// asean.org/book/asean-state-of-climate-change-report/(Accessed August 24, 2024).

Ba, A. (2009). "(Re) negotiating east and Southeast Asia: region, regionalism, and the association of Southeast Asian nations," in *Appl. Phys. A.* (California: Stanford University Press).

discussions. However, as can be seen by the published ASCCR in 2021, the language adopted is still dominated by recommendations for ASEAN member states that can be voluntarily adopted if states wish to. If states decide not to, there would not be any consequences.

Understanding the political context of Southeast Asia's climate change responses is pivotal to better understanding the sluggish performance in its mitigation and adaptation efforts. The preoccupation of ASEAN member states with issues of more significant concern in the political and security realm has impeded any severe efforts in reforming the state systems to better align with global counter-climate change efforts. Coupled with the institutional deficiencies of ASEAN in handling nontraditional security threats, this opinion article concludes that political contexts allow readers to grasp more clear reasons why the performances are at their current rates.

Author contributions

BP: Writing-original draft, Writing-review and editing.

Funding

The author(s) declare that no financial support was received for the research, authorship, and/or publication of this article.

Conflict of interest

The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Publisher's note

All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.

Blazevic, J. J. (2012). Navigating the security dilemma: China, Vietnam, and the South China sea. J. Curr. Southeast Asian Aff. 31 (4), 79–108. doi:10.1177/186810341203100404

Caballero-Anthony, M., Teng, P., Tian, G., Shrestha, M., and Lassa, J. (2015). Linking climate change adaptation and food security in ASEAN. Jakarta.

Chen, D., Pu, X., and Johnston, A. I. (2014). 'Debating China's assertiveness. Int. Secur. 38 (3), 176-183. doi:10.1162/isec_c_00151

Ciorciari, J. D., and Haacke, J. (2019). Hedging in international relations: an introduction. Int. Relat. Asia-Pacific 19 (3), 367–374. doi:10.1093/IRAP/LCZ017

Dahiya, B. (2016). ASEAN economic integration and sustainable urbanization. J. Urban Cult. Res. 13 (1), 8–15. doi:10.58837/CHULA.JUCR.13.1.1

Diaz-Rainey, I., Corfee-Morlot, J., Volz, U., and Caldecott, B. (2023). Green finance in Asia: challenges, policies and avenues for research. *Clim. Policy* 23 (1), 1–10. doi:10. 1080/14693062.2023.2168359

Ding, D. K., and Beh, S. E. (2022). Climate change and sustainability in ASEAN countries. *Sustainability* 14 (2), 999. doi:10.3390/SU14020999

Eckstein, D., Hutfils, M.-L., and Winges, M. (2019). Global climate Risk Index 2019 who suffers most from extreme weather events? Weather-Related loss events in 2017 and 1998 to 2017. Berlin.

Farajzadeh, Z., Ghorbanian, E., and Tarazkar, M. H. (2023). The impact of climate change on economic growth: evidence from a panel of Asian countries. *Environ. Dev.* 47, 100898. doi:10.1016/J.ENVDEV.2023.100898

Fuchs, R., Conran, M., and Louis, E. (2011). Climate change and Asia's coastal urban cities. *Environ. Urbanization ASIA* 2 (1), 13–28. doi:10.1177/097542531000200103

Fulton, L., Mejia, A., Arioli, M., Dematera, K., and Lah, O. (2017). Climate change mitigation pathways for Southeast Asia: CO2 emissions reduction policies for the energy and transport sectors. *Sustainability* 9 (7), 1160. doi:10.3390/SU9071160

Giang, N. K. (2023). *Middle-power diplomacy: decoding vietnam's recent diplomatic endeavours*. Melbourne: Asialink - University of Melbourne. Available at: https://asialink.unimelb.edu.au/insights/middle-power-diplomacy-decoding-vietnams-recent-diplomatic-endeavours (Accessed January 10, 2024).

Gill, D. M. (2020). Middle powers in great power rivalries: the case of the Philippines, geopolitical monitor. Available at: https://www.geopoliticalmonitor.com/middle-powers-in-great-power-rivalries-the-case-of-the-philippines/(Accessed February 5, 2024).

Gogoi, B., and Sarmah, J. K. (2024). Climate change and regional cooperation in south-east asian countries. *India Q. A J. Int. Aff.* 80 (2), 252–268. doi:10.1177/09749284241241597

Goh, E. (2007). Great powers and hierarchical order in Southeast Asia: analyzing regional security strategies. *Int. Secur.* 32 (3), 113–157. doi:10.1162/isec.2008.32.3.113

Goh, E. (2016). Southeast asian strategies toward the great powers: still hedging after all these years? *Asan Forum*. Available at: https://theasanforum.org/ southeast-asian-strategies-toward-the-great-powers-still-hedging-after-all-these-years/(Accessed November 24, 2022).

Greenpeace (2019). Asean haze 2019: the battle of liability, greenpeace Southeast Asia. Available at: https://www.greenpeace.org/southeastasia/press/3221/asean-haze-2019-the-battle-of-liability/(Accessed February 27, 2024).

He, K., and Feng, H. (2023). After hedging: hard choices for the indo-pacific states between the US and China, elements in international relations. Cambridge: Cambridge University Press. doi:10.1017/9781009420570

Ismail, A. M., Ramirez-Iniguez, R., Asif, M., Munir, A. B., and Muhammad-Sukki, F. (2015). Progress of solar photovoltaic in ASEAN countries: a review. *Renew. Sustain. Energy Rev.* 48 (1), 399–412. doi:10.1016/j.rser.2015.04.010

Johnson, O. W., du Pont, P., and Gueguen-Teil, C. (2021). Perceptions of climaterelated risk in Southeast Asia's power sector. *Clim. Policy* 21 (2), 264–276. doi:10.1080/ 14693062.2020.1822771

Jones, D. M., and Jenne, N. (2022). Hedging and grand strategy in Southeast Asian foreign policy. *Int. Relat. Asia-Pacific* 22 (2), 205–235. doi:10.1093/IRAP/ LCAB003

Kuik, C.-C. (2008). The essence of hedging: Malaysia and Singapore's response to a rising China. *Contemp. Southeast Asia* 30 (2), 159–185. doi:10.1355/cs30-2a

Kuik, C.-C. (2016). How do weaker states hedge? Unpacking ASEAN states' alignment behavior towards China. J. Contemp. China 25 (100), 500-514. doi:10. 1080/10670564.2015.1132714

Kuik, C. C. (2022) Shades of grey: riskification and hedging in the Indo-Pacific. *Pac. Rev.* 36, 1181–1214. doi:10.1080/09512748.2022.2110608

Kuik, C.-C., and Rozman, G. (2017) Light or heavy hedging: positioning between China and the United States.

Lai, Y. M., and Kuik, C. C. (2020). Structural sources of Malaysia's South China Sea policy: power uncertainties and small-state hedging. *Aust. J. Int. Aff.* 75 (3), 277–304. doi:10.1080/10357718.2020.1856329

Lee, S. H. (2021). ASEAN's economic security and regional economic cooperation: past, present, and future. *Asian J. Comp. Polit.* 7 (1), 10–28. doi:10.1177/20578911211032135

Lim, D. J., and Cooper, Z. (2015). Reassessing hedging: the logic of alignment in east Asia. Secur. Stud. 24 (4), 696–727. doi:10.1080/09636412.2015.1103130

NSIDC (2024). *Ice sheet quick facts*. Colorado: National Snow and Ice Data Center. Available at: https://nsidc.org/learn/parts-cryosphere/ice-sheets/ice-sheet-quick-facts (Accessed August 24, 2024).

Overland, I., Sagbakken, H. F., Chan, H. Y., Merdekawati, M., Suryadi, B., Utama, N. A., et al. (2021). The ASEAN climate and energy paradox. *Energy Clim. Change* 2 (1), 100019. doi:10.1016/J.EGYCC.2020.100019

Overland, I., and Seah, S. (2024). Can Asia's climate leader please step forward? Asian Polit. and Policy 16 (3), 429–449. doi:10.1111/ASPP.12754

Park, A. S. (2022). Beyond great powers: middle power paths to resilient multilateralism. Asian J. Peacebuilding 10 (1), 131–157. doi:10.18588/202205.00A274

Pempel, T. J. (2010). Soft balancing, hedging, and institutional darwinism: the economic-security nexus and east asian regionalism. *J. East Asian Stud.* 10 (2), 209–238. doi:10.1017/S1598240800003441

Putra, B. A. (2023a). Localization and mimetic adoption in norm diffusion: ASEAN's amity and cooperation norm for the Indo-Pacific. *Cogent Soc. Sci.* 9 (2). doi:10.1080/23311886.2023.2268973

Putra, B. A. (2023b). The golden age of white hulls: deciphering the Philippines' maritime diplomatic strategies in the South China sea. *Soc. Sci.* 12 (6), 1–14. doi:10. 3390/SOCSCI12060337

Putra, B. A. (2024a). Brunei's silent claims in the South China Sea: a case for the theory of trade expectations. *Cogent Soc. Sci.* 10 (1), 1–14. doi:10.1080/23311886.2024.2317533

Putra, B. A. (2024b). Governing AI in Southeast Asia: ASEAN's way forward. Front. Artif. Intell. 7 (1), 1–6. doi:10.3389/frai.2024.1411838

Qiu, J., Seah, S., and Martinus, M. (2024). Examining climate ambition enhancement in ASEAN countries' nationally determined contributions. *Environ. Dev.* 49, 100945. doi:10.1016/J.ENVDEV.2023.100945

Robinson, S. ann (2018). Climate change adaptation in small island developing states: insights and lessons from a meta-paradigmatic study. *Environ. Sci. and Policy* 85 (1), 172–181. doi:10.1016/J.ENVSCI.2018.03.030

Seah, S., and Martinus, M. (2021). Gaps and opportunities in asean's climate governance. Singapore: ISEAS Publishing. Available at: https://www.iseas.edu.sg/wp-content/uploads/2021/03/TRS5_21.pdf (Accessed August 24, 2024).

Shadman, F., Sadeghipour, S., Moghavvemi, M., and Saidur, R. (2016). Drought and energy security in key ASEAN countries. *Renew. Sustain. Energy Rev.* 53, 50–58. doi:10. 1016/J.RSER.2015.08.016

Spandler, K., Hartelius, J., Monti, A., and Söderbaum, F. (2024). Sovereignty scripts and regional governance: ASEAN's response to the Covid-19 pandemic. *Pac. Rev.* 37 (3), 604–633. doi:10.1080/09512748.2023.2205164

Suwandaru, A., Sudiyono, W., Shawdari, A., and Fristin, Y. (2024). Understanding the economic drivers of climate change in Southeast Asia: an econometric analysis. *Economies* 12 (8), 200. doi:10.3390/ECONOMIES12080200

Swe, L. M. M., Shrestha, R. P., Ebbers, T., and Jourdain, D. (2015). Farmers' perception of and adaptation to climate-change impacts in the Dry Zone of Myanmar. *Clim. Dev.* 7 (5), 437–453. doi:10.1080/17565529.2014.989188

Swielande, T.S. de (2018). "Middle powers: a comprehensive definition and typology," in *Rethinking middle powers in the asian century* (New York: Routledge), 19–31. doi:10. 4324/9780429463846-2

Umar, A. R. M. (2023). The rise of the Asian middle powers: Indonesia's conceptions of international order. *Int. Aff.* 99 (4), 1459–1476. doi:10.1093/IA/IIAD167

Varkkey, H. (2024). Borderless haze threatens Southeast Asia. Washington, DC: The Diplomat. Available at: https://thediplomat.com/2024/01/borderless-haze-threatens-southeast-asia/(Accessed February 27, 2024).

Wangwongwatana, S. (2023). Tackling transboundary haze pollution in Southeast Asia, SLOCAT partnership. Available at: https://slocat.net/tackling-transboundary-haze-pollution-in-southeast-asia/(Accessed February 27, 2024).