

***Southeast Asia Energy Transitions: Between Modernity and Sustainability.* By Mattijs Smits. Farnham, Surrey: Ashgate Publishing Limited, 2015. Hardcover: 221pp.**

In recent years, there has been a growing interest regarding Southeast Asia's emergence as a key player in global energy markets. The International Energy Agency (IEA) has, for instance, noted Southeast Asia's rapid economic and demographic growth, and produced three in-depth studies on Southeast Asia's energy profile under its World Energy Outlook Series, the latest being the *Southeast Asian Energy Outlook 2015*. In this report, the IEA points out that the region's development depends on meeting growing energy demands in a secure and sustainable manner, providing energy access to those who currently lack it, encouraging energy-efficient practices and limiting the rise of greenhouse gas emissions. It points out that the energy policy frameworks in place in Southeast Asia today are diverse due to disparate economic, political and cultural profiles, and the varied scale and patterns of their energy use and energy resource endowments. The report also notes that a common trend in many of these countries has been the growing emphasis on the deployment of renewable energy technologies.

As the region rises in prominence within the global energy scene, Mattijs Smits' book on Southeast Asia energy transitions is a welcome scholarly addition that enriches our understanding of the region's evolving energy landscape by utilizing the lens of social science. Smits investigates the apparent tensions between modernity and sustainability during energy transitions by studying power sector developments in Southeast Asia on different scales: regional (ASEAN and the Greater Mekong Subregion); national (Thailand and Laos); and local (two villages in Laos, one village and one sub-district in Thailand).

Smits begins his book by asking two important questions: first, "how can we reconcile development and growth of energy demand with questions about sustainability?"; and second, "what roles do energy and sustainability play in driving social and political change?" (p. xv). In his investigation, he adopts a multi-disciplinary approach, drawing on "human geography, (environmental) sociology, political ecology, anthropology, development studies, science and technology studies, and social theory more generally" (p. 3).

The book is divided into seven chapters. The first two chapters layout the conceptual framework. Chapter 1 is the introduction and provides the justifications and aims of the study. The author

introduces briefly the key concepts of modernity, environmental sustainability and energy transitions. In addition, Smits includes a section titled “Four Social Science Perspectives on Energy Transition” in which he lists the four “key social science approaches that have dealt with questions about energy environment, development and sustainability over the last two decades” (p. 8). They are, according to him, socio-technical transitions, ecological modernization theory, energy practices (or practice theory) and political ecology.

Chapter 2 contains a social science literature review in which the three concepts of modernity, environmental sustainability and energy transitions are discussed and defined in the context of the four social science perspectives. Through this review process, Smits advances two key arguments: first, that energy and modernity should be regarded as being “intertwined” (p. 42) in a dialectic relationship; and second, in order to move beyond superficial sustainability claims, sustainability needs to be understood as an inclusive part of this dialectic rather than being in contrast to, or opposite of, modernity.

The complementary nature of the modernity-sustainability relationship as laid out in Chapter 2 is then illustrated in the empirical studies across the three subsequent chapters covering regional, national and local level cases.

Chapter 3 covers Southeast Asia, with a focus on Thailand and Laos. Besides providing the background to the development of the energy and power sectors in these three cases, the author also analyses the discourses of energy-modernity and sustainability in the context of historical, political, socio-economic and cultural changes. For Southeast Asia, he notes that energy transitions were shaped by regional discourses of energy modernity. Specifically, the region’s power sector development was largely driven by initiatives framed in the context of regional cooperation of ASEAN or the Greater Mekong Subregion and by the neoliberal policies of the World Bank and the Asian Development Bank. For the two country cases, Smits traces the modernity and transitions in Thailand’s power sector from the 1850s until 2014, and in the case of Laos, from the 1890s until 2012. These two case studies illustrate how the domestic conditions and their contrasting involvement in global politics led the two neighbours to develop very different energy-modernity paths despite their cultural similarities.

Chapter 4 covers energy transitions cases at the local level in the villages of Phakeo and Nam Ka in Laos, and the village of Mao Kampong and the subdistrict of Bo Nok in Thailand. All four cases, which were based on field trips by the author, offer fascinating and insightful social accounts on the success and failures of the energy

systems introduced to these places as a result of local conditions. They illustrate Smits' point that at the local level, "the change in the energy system and livelihoods cannot be separate and that energy transitions are not a linear process dominated by state-led energy-modernity discourses" (p. 93).

In Chapter 5, the author analyses data from household surveys and in-depth interviews in the same four locations to understand the "everyday dimensions of transitions in household end-use technologies in Southeast Asia" (p. 138). It contains useful insights into changing local attitudes and energy consumption patterns as the communities and individuals gain energy access.

Chapter 6 draws on both the academic debates presented through the literature review in Chapter 2, as well as Smits' findings from the case studies, to further discuss the concepts of energy, modernity and sustainability. He outlines an approach which he terms a "critical geography of energy" that includes "an expanded geography of cost and benefit; the politics of scale and competing sustainabilities; and the introduction of energy trajectories as a possible replacement for the term energy transitions" (p. 186).

The book concludes with Chapter 7 in which the author discusses some research and policy implications and potential research topics based on the three concepts which he thinks are applicable to Southeast Asia and beyond. He makes a thoughtful proposition here, that "the connection between energy and modernity means that analysis of sustainability should include both production and consumption, rather than only focusing on the energy supply-side" (p. 190). In practical terms, it means that policy interventions need to take into account the respective local communities' own understanding of what development and modernity means. This is a sensible approach to avoid a mismatch of expectations as energy access projects are rolled out in local communities.

The book's detailed and complex arguments, while not impossible to get through, make this reading a serious undertaking, particularly for those outside the social science community. Nonetheless, this book with its rich and nuanced conceptual and empirical analysis is highly recommended for those who seek a deeper understanding of the energy transitions occurring in Southeast Asia today.

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