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*Book Review*

**CLIMATE CHANGE IN CENTRAL ASIA: DECARBONIZATION,  
ENERGY TRANSITION AND CLIMATE POLICY**

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**Rahat Sabyrbekov, Indra Overland, Roman Vakulchuk (eds.).** Climate Change in Central Asia Decarbonization, Energy Transition and Climate Policy. Springer: Briefs in Climate Studies, 2023, pp. 170.

Edited by Rahat Sabyrbekov, Indra Overland, and Roman Vakulchuk, the book “Climate Change in Central Asia: Decarbonization, Energy Transition, and Climate Policy” offers a comprehensive interdisciplinary overview of the climate change and green energy issue within the context of the Central Asian region. The contributors approach climate change-related issues from diverse perspectives, providing a comprehensive understanding of the problem to the readers and offering valuable guidance for regional policymaking.

In the opening two chapters of the book, the authors have framed fairly well the overall scope and conveyed a comprehensive understanding of the impact of climate change in Central Asia. They thoroughly outline the region’s vulnerabilities, and risks within the context of climate change while providing good insights into the relevant features of the physical geography, topography, and climate of all five countries of the region which are Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan. Moreover, the authors emphasize the most relevant threats posed by climate change to the region, such as recurrent extreme weather events like droughts, heatwaves, and floods, which pose substantial potential risks to the populations inhabiting river valleys and mountainous regions, particularly those reliant on agriculture as their primary source of income. This introductory information offers a coherent and accessible foundation for readers from diverse fields of study as they embark on the book’s journey.

In the chapters titled “Climate Change Science and Policy in Central Asia: Current Situation and Future Perspectives” and “Energy Transition in Central Asia: A Systematic Literature Review,” which are the third and sixth chapters of the book, the authors offer a well-framed analysis of climate change and energy transition research in Central Asia based on the analysis of academic literature. Many of the findings presented in these chapters are indeed peculiar. For example, the authors reveal a noteworthy surge in both the number of academic publications and citations of these publications in recent years, signifying a growing interest in this field. Furthermore, their examination notes an evident increase in international collaboration in scientific research, with China prominently leading this collaborative effort over the past few years. Despite the burgeoning activity in scientific research related to climate change, the Authors point out that a majority of the leading journals in this field are based in foreign regions, outside of Central Asia.

Chapters four and five of the book offer a thorough analysis of Central Asian states’ climate policies and their advancements in reducing carbon emissions. The authors highlight key takeaways from these sections. Despite the fact that Central Asian states contribute less than 1% to global greenhouse gas emissions, they have made limited progress in decarbonization and energy transition since the collapse of the USSR. The region remains heavily dependent on fossil fuels, with hydrocarbons, for instance, accounting for about 70% of Kazakhstan’s total energy production. Furthermore, countries like Kyrgyzstan and Tajikistan have even seen an increase in coal and oil consumption as their renewable energy sources struggle to meet the growing energy demand. Although the region, on the whole, emits fewer greenhouse gases than during the late Soviet era, the progress in decarbonization within these countries is quite modest. The authors’ compelling analysis provides reasons to conclude that the fulfillment of these countries’ international commitments concerning energy transition and decarbonization is being challenged by several factors, including the region’s expanding population and growing industries, as well as the limited effectiveness of current policy tools.

Chapters seven and eight offer valuable insights into the political dimensions and geopolitics of energy transition and climate change in Central Asia. One of the most noteworthy arguments presented by the authors in these chapters is that in Central Asian petro-states, energy transition is perceived as a significant threat by the elites. This perception arises because over the years of independence, the fossil fuel-based energy sector has become a cornerstone of the political elites in these petro-states. Consequently, any deviation from the status quo and the diminishing role of fossil fuels in the global market is generally viewed as a potential catalyst for political destabilization. Moreover, the Authors demonstrate the expanding geopolitical influence of China, which also encompasses the realm of renewable energy initiatives in Central Asia.

Chapters 9-13 of the book tackle a very wide array of issues of social dimension related to climate change such as human mobility, gender issues, social resilience, eco-activism, recycling culture, etc. While the central arguments presented in these chapters may initially appear as normative statements, the authors complement them with highly valuable real-world case studies. These examples serve to enhance the comprehension of climate change's impact on a micro-level especially for international readers. From an academic standpoint, these insights provide diverse perspectives and open up opportunities for localized and micro-level research.

The book offers a commendable analysis of how countries in the Central Asian region address the challenges posed by climate change. Nevertheless, it falls a bit short in providing adequate references to global standards and practices employed in countries beyond Central Asia. This omission may make it a bit difficult for readers to assess the region's climate change efforts in comparison to more successful cases in other parts of the world. Similarly, the book does not provide abundant statistical information in tables and graphs, hindering readers from forming their own assessments of critical environmental and climate change indicators. Such data would be highly relevant for evaluating the performance of Central Asian states and comparing them with other regions and global average indicators in specific aspects. The book also seems to give minimal attention to the concerning issue of increasing authoritarianism, the erosion of democratic values, and the deterioration of human rights in the region's five countries in recent years and underlines the relevance of good governance for effective policymaking within the climate agenda. The authors missed an opportunity to underscore the correlation between the growing autocratization trends and the region's struggles in effectively addressing the consequences of climate change. Emphasizing the pivotal roles of such concepts as transparency, accountability, the rule of law, civil society etc. in addressing the challenges posed by climate change would make a valuable addition to the book.

It should be noted that the authors have effectively presented a comprehensive overview of climate change and energy transition in the region, emphasizing the most critical and significant aspects of the issue. The book can also be helpful for research purposes as it contains references to the best, most relevant and up to date relevant academic literature. At the same time, the book can serve as a valuable source of information for a general audience from various fields, especially for readers from outside Central Asia.