

## Preface

International energy markets are experiencing a wave of innovations and the rise of new ideas and values. Remarkable examples of innovation include drastic cost reductions in the field of renewables and the digitalisation of energy systems. The International Energy Agency, in fact, notes that the 'solar photovoltaic is on track to be the cheapest source of new electricity in many countries.' This statement will have a significant impact on the future energy mix as well as energy policies of many countries. In addition, the Sustainable Development Goals of the United Nations, together with the spirit of the Paris Accord in 2015, are seeing some results and present an opportunity for both public and private sectors to work as partners towards common goals. Thus, we may be facing structural changes on energy's demand and supply sides.

Our research has focused on Myanmar and the Greater Mekong Subregion, emphasising rural electrification via renewable power generation through mini-grids as well as central-grid capacity expansion through sustainable power options. One of the purposes of this research is to analyse the current energy situation, including constraints in the region during this transitional stage, and to propose tangible policy recommendations that work towards energy security, environmental protection, and global warming mitigation.

Myanmar is the least developed country in the Greater Mekong Subregion and has the lowest electrification rate in the area; thus, it has room for further improvement. This is why most of the works are concentrated in the country. In fact, the problem is apparent in Myanmar with its sheer number of proposed large-scale hydropower plants; its strategic environmental planning, however, can disregard environmental damage.

Myanmar's abundant solar power can be further harnessed. The existing difficulties and inconveniences of the people in rural areas are real and urgent, and need to be solved as soon as possible. The people need energy in their daily lives now and in the future. In this sense, we have tried to consider their realities in the course of this research.

We have also realised that the issue on energy relates to many other broader concerns such as regional development, conflict and peace-building, national unity and security, poverty and wellbeing, democracy, water management, and equality and gender – most of which are included in the Sustainable Development Goals. Therefore, we came to understand that a wider and more conceptual view and approach are also required, particularly in Myanmar, where the democracy is fresh, and the government is confronted with ethnic and religious conflicts, especially in the rural areas.

Our team has tried to implement the research with a bottom-up approach as much as possible so as to consider the realities on the ground. For example, the team has continued to pay careful attention to the future of renewable mini-grid businesses and their indispensable role in the region's energy development. At the same time, as noted earlier, the team is just beginning to understand the issues from a higher point of view, taking other socially important values into consideration.

It should be noted that the energy policy in Myanmar could play a more important role in the future if it were designed and implemented in the way where its multifaceted nature was well considered, since many of the challenges included in the Sustainable Development Goals are real in Myanmar, and the role of energy and its access would be more appreciated here than in any other country.

Lastly but not least, I would like to express my sincere appreciation to the Economic Research Institute for ASEAN and East Asia for the continued support for our research.

Prof. Hisashi Yoshikawa

Working Group Co-leader (2018)