## **Preface**

Cambodia, Lao PDR, Myanmar, Thailand, and Viet Nam, which are located in the Lower Mekong Basin Region (LMBR) with great potential and opportunity for co-operation, have achieved remarkable achievements in economic development. Exploitation of renewable energy (RE) sources is seen as one of the best ways to facilitate economic growth in a low carbon way, ensure energy security with focus on indigenous resources and benefits to public health, and improve the economy of rural areas. This report assess strategy and policies for the RE development of LMBR countries and analyse the social, economic, and environmental benefits derived from RE development for Viet Nam. In the case of Viet Nam, five technologies—solar photovoltaic (PV), biogas, wind, small hydro, and biomass—were evaluated and found to meet 14.1 percent of power generation potential by 2040. Moreover, the RE technologies used for power generation is estimated to reduce GHG emissions ranging from 9.5 million to 175.2 million tonnes CO<sub>2</sub>e, based on the level of technology deployment. To achieve the RE development target at national level, new market based instruments and a regional cooperation framework that facilitate cross-border projects are proposed.

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