## Preface

Energy efficiency and conservation (EEC) should be promoted by applying the PDCA cycle—Plan, Do, Check, and Act. "Plan" means to set EEC action plans to accomplish EEC targets across the final sectors. "Do" means implementing the EEC action plan. "Check" means assessing the implementation results, and "Act" means setting new EEC action plans referring to the implementation results. When we develop EEC action plans across the final sectors, such as the industrial and commercial sectors, energy efficiency indicators (EEIs) defined as energy consumption divided by activity variables, such as the Index of Industrial Production of sub-industrial sectors and floor area of commercial buildings, referred to as energy use intensity (EUI), will be useful to provide important information for understanding past trends, assessing the potential for energy savings, and reviewing energy efficiency policies. Full benefits in establishing EUIs can be realised once sufficient and quality EUI data are compiled and computed to establish benchmarks for various end-use sectors and sub-sectors.

The Philippines enacted the Energy Efficiency and Conservation Act, signed on 12 April 2019, to institutionalise EEC as a way of life for Filipinos. However, there are no official EEIs so far in the Philippines. Thus, the Philippine Department of Energy (PDOE) requested the Economic Research Institute for ASEAN and East Asia to support the Energy Utilization and Management Bureau (EUMB) of the PDOE in preparing the EEIs of commercial buildings and industrial factories.

This project conducted energy consumption surveys in industrial factories and commercial buildings using local consultants in the Philippines. Although the local consultants are inexperienced in conducting this kind of survey, especially validation capacity on collected data from the surveys, this project succeeded in preparing some meaningful EEIs due to the strong support from ERIA regarding its knowledge and expertise on EEIs. Thus, ERIA would like to strongly suggest to the EUMB/PDOE to update the EEIs periodically by conducting the energy consumption survey and applying the knowledge and experiences obtained from this project. This publication serves as a valuable guide for the EUMB/PDOE to continue pursuing the establishment of EUI benchmarking and other EEC programs.

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