Foreword

Brunei Darussalam is rich in energy resources such as oil and gas, but its total final energy consumption significantly increased by 3.4% per annum in 1990–2015, while gross domestic product (GDP) grew by 2.9% in the same period. Total final energy consumption will grow by 7.4% per annum in 2015–2040, with GDP growth rate assumed at 5.6% (Kimura and Phoumin, 2019). Energy elasticity to GDP was and will be more than 1. Brunei Darussalam, therefore, needs to promote energy efficiency and conservation (EEC) in residential and commercial activities, whose demand for electricity will continue to grow more than demand for gasoline and diesel oil as transport fuel. To set up appropriate energy efficiency policies for the residential and commercial sectors, however, policy makers must know their current energy consumption situation and level. The Economic Research Institute for ASEAN and East Asia (ERIA) supported the Ministry of Energy in conducting the Brunei Darussalam Household Energy Consumption Survey (BDHECS) in 2015 and the Commercial Buildings – Brunei Darussalam Energy Consumption Survey (C-BDECS) in 2018, in collaboration with the Brunei National Energy Research Institute (BNERI).

The ministry implemented both surveys through BNERI. ERIA provided technical support for the (i) design of the survey questionnaires, (ii) content of the questionnaire manual, (iii) training for enumerators (university students), (iv) validation check of the sampled data, (v) use of database, and (vi) analysis of the sampled data (how to produce key tables and figures).

The BDHECS results suggest that high-energy performance standards should be promoted and that a labelling system should be applied to appliances that use a significant amount of energy, such as air conditioners, refrigerators, lighting, and water heaters. The C-BDECS results suggest that applying building energy intensity labelling will be crucial.

Brunei Darussalam must implement EEC policies and action plans for households and commercial buildings to mitigate their increasing electricity consumption. ERIA would like to support the promotion of EEC continuously through policy-oriented energy research studies.

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