Preface

The Association of Southeast Asian Nations (ASEAN) and East Asia face tremendous challenges in navigating the future energy landscape and in determining how the energy transition will embrace new architectures, including sound policy and technologies, to ensure access to energy that is affordable, secure, and sustainable. The East Asia Summit (EAS) economies have been hit hard by the coronavirus (COVID-19) pandemic, but energy demand growth is expected to bounce back strongly as the economies recover after 2022. All decisions and energy policy measures will need to be weighed against potentially higher energy costs and security risks in the post–COVID-19 era. The Economic Research Institute for ASEAN and East Asia (ERIA) will release its short-term energy outlook for 17 EAS members (EAS17), taking account of the pandemic's impact in a separate report. This report reflects the impacts of the COVID-19 pandemic and the updated energy outlook results.

Although EAS17 countries will rely on fossil fuels until 2050, the energy mix will include more renewables and clean fuels. According to the previous EAS energy outlook, coal was dominant, followed by gas in power generation. However, ASEAN will see a coal-to-gasification trend in the medium term. Coal is declining because of the rapidly increasing use of gas and variable renewable energy following policy changes in EAS17 countries.

To achieve sustainable energy development in EAS17, the clean use of fossil fuel by deploying clean technologies is indispensable to decarbonise emissions. Using renewables; increasing energy efficiency; and employing new energy technologies such as carbon capture, usage, and storage; carbon recycling; and hydrogen should be accelerated, and clean technologies adopted in the medium to long term in EAS17's future energy system. Investment in energy efficiency will help discourage building more power plants.

We hope the report will provide insights into ASEAN and East Asia energy demand brought about by COVID-19 and help countries mitigate problems related to energy security and climate change by showing how a range of energy efficiency goals, action plans, and policies can save energy. The report discusses several key insights for policy development. ERIA will include commercially available energy technologies such as carbon capture, usage, and storage and hydrogen in the next EAS energy outlook model.

Professor Hidetoshi Nishimura
President, Economic Research Institute for ASEAN and East Asia