

## Preface

The Lao People's Democratic Republic (Lao PDR) has achieved remarkable economic growth. Its average gross domestic product growth rate of 7.7% in 2000–2019 was the highest amongst the Association of Southeast Asian Nations (ASEAN) member states during the same period. However, according to the World Bank's Lao PDR Economic Monitor August 2021 (Phouthavisouk, 2021), due to the pandemic, the country's economic growth shrank to only 0.5% during 2020 and was estimated to rebound back to a 3.6% rate by 2021. Again, its strong growth would be driven by government policies promoting private sector investment in all sectors. Energy demand is also expected to bounce back to support economic growth in the foreseeable future. Fortunately, the Lao PDR largely relies on hydropower for its energy.

At the same time, the Lao PDR depends on the import of petroleum products from neighbouring countries. The main use of petroleum products is transport fuel such as gasoline, diesel oil, and jet fuel but the majority is gasoline and diesel oil. According to the energy outlook produced by the Ministry of Energy and Mines in February 2020, the Lao PDR will still depend on petroleum products and the import ratio would reach 26% in 2040.

One option for the Lao PDR to reduce the import of petroleum products such as gasoline and diesel oil is the use of electric vehicles. If electric vehicles use electricity from hydropower in the Lao PDR, the country will be able to reduce the amount of gasoline and diesel oil imported, reduce CO<sub>2</sub> emissions, and save the outflow of the Lao PDR's national wealth.

On behalf of the Ministry of Energy and Mines, I am grateful for the technical and financial support of the Economic Research Institute for ASEAN and East Asia (ERIA) for this study on the Assessment of Electric Vehicle Penetration in the Lao PDR. We will continue to consult with ERIA to build the energy data to support energy policies and planning in the Lao PDR.

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