

## Executive Summary

Financial restrictions on coal-fired power projects (CFPPs), or coal divestment, have become a global trend to address climate change. Coal divestment was initiated first by international organisations and state-owned financial institutions and now spread around commercial banks. While Organisation for Economic Co-operation and Development (OECD) financiers have been subject to the OECD guideline restricting financing less-efficient CFPPs, such restriction does not apply to non-OECD financiers.

The seven East Asia Summit (EAS) countries in this study – India, Indonesia, Malaysia, Myanmar, the Philippines, Thailand, and Viet Nam – rely on coal to a different but significant extent in their power mix. Local opposition has often been evident in many countries, and coal divestment already affects the CFPPs, especially in Viet Nam.

The robust growth of the economy and population will generally drive electricity demand in the seven countries towards 2050. The share of coal in the seven countries' power mix will decrease gradually to 50% in 2050 without strict restrictions on coal-fired power but will drop to 11% without new CFPPs. These impacts will be particularly significant in India, Indonesia, the Philippines, and Viet Nam.

Without coal power, the seven countries would see CO<sub>2</sub> emission still rise and face energy security problems and huge gas demand increase that the world liquefied natural gas (LNG) system could not absorb. Therefore, the seven countries must balance economic efficiency, energy access, energy security, and the environment in their respective energy policies. Relatively developed countries like Malaysia and Thailand are on the track of lesser dependency on coal. However, India, Indonesia, Myanmar, the Philippines, and Viet Nam still need low-cost electricity like coal-fired power generation to support economic growth. Financing efficient ultra-supercritical (USC) coal power plants and clean coal technologies like integrated coal gasification combined cycle (IGCC) should, therefore, continue. Still, less-efficient plants should be excluded from coal financing. While OECD countries have difficulty financing coal power projects, international financial institutions like the Asian Development Bank (ADB) now have a greater role in funding efficient and clean coal power projects.

The International Energy Agency (IEA) considers energy efficiency, electrification, CCUS (carbon capture, utilisation, and storage), bioenergy, and hydrogen as major measures to address climate change. Coal divestment, therefore, is not the only way to control CO<sub>2</sub> emissions. As for CCUS and hydrogen, Japan is developing blue ammonia and ammonia-coal blending power generation, which could offer effective measures to balance lower CO<sub>2</sub> emission and utilise existing CFPPs in the seven countries in this study.

## **Introduction**

There is substantial pressure on coal-fired power generation worldwide, mainly because of the large amount of greenhouse gas (GHG) emissions from burning coal at power plants. One example of such pressure is the so-called coal divestment to restrict financing on coal-fired power plants (CFPPs). In the meantime, power demand in Asia is increasing rapidly. Thus, addressing climate change and meeting power demand is a great challenge.

In this study, we worked on the impact of coal divestment and the implications for the seven East Asia Summit (EAS) countries, namely, India, Indonesia, Malaysia, Myanmar, the Philippines, Thailand, and Viet Nam.

This report comprises five chapters.

Chapter 1 covers the coal divestment trend by United Nations (UN) agencies, individual governments, and financial institutions. Chapter 2 illustrates coal in the power mix and coal-fired power development in the seven countries. Chapter 3 sets up several scenarios concerning the absence of new CFPPs and alternative fuels and analyses how the power mix would change in the seven countries. Chapter 4 examines the impact of coal divestment on energy security, CO<sub>2</sub> emission, and natural gas, particularly on the liquefied natural gas (LNG) market. Chapter 5 summarises the discussion and presents policy recommendations.