

Foreword

The increasing oil prices have accelerated the efforts for energy security through the utilisation of renewable energies. Among renewable energies, the option of biofuel emerged in the mid-2000, including the “Call for Biofuel” in Thailand in 2005, “jatropha” cultivation order in Myanmar in 2006, presidential instruction for a national biofuel team in Indonesia in 2006, and the Biofuel Act of 2006 in the Philippines in 2006.

These Asian responses to the rising crude oil prices were accumulated in the Second East Asia Summit in Cebu, Philippines in January 2007. One of the most expected solution was the utilisation of biomass, especially in the form of biofuels, which can replace the imported crude oil and/or oil products and can create new industries, which directly contribute to the income generation of rural farmers and the poor.

Biofuels can largely be categorised into two types. One is bioethanol, which can substitute gasoline. Another is biodiesel, which can substitute mineral diesel oil. At the current stage of commercially competitive technologies available in Asia, those that can produce biodiesel and bioethanol are so-called first generation technologies, which utilise agricultural residue and/or products. As such, the promotion of biofuels could conflict with food security and environmental sustainability if not planned carefully.

This study focused on the Asian potential of two types of biofuel—bioethanol and biodiesel. The objectives are to find ways and policies to promote the sustainable use of biofuels.

Key issues are analysed to find policy solutions for problems related to the domestic supply of alternative fuels, energy security, economic development, and climate change and to increase understanding of the potential of biofuels.

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