Preface

Anyone aware of and concerned about our depleting natural resources and the effect of energy consumption on the environment agrees to the need for energy efficiency. However, because energy efficiency covers a wide spectrum of issues and measures on dealing with the concerns, discussions on the promotion of energy efficiency may only result in a catalogue of measures that is just too general for practical application.

Because every part of the energy supply-and-demand system involves technologies, energy efficiency cannot be achieved without any kind of technology. However, any energy efficiency measure can never be successful without considering its effect on human activities. Therefore, among the various types of technologies on energy efficiency, those that interface with human activities play the most important role, and we assume that Energy Management System (EMS) technologies, which help visualise, monitor, and control energy supply and demand, can be the foundation in this context.

Needless to say, deploying EMS itself is not simply the solution because it is a rather costly investment that has to be assessed vis-a-vis the expected benefits (i.e. its energy efficiency) from both macro and micro perspectives.

Last but not the least, we need to consider the institutional framework. In general, costly investments—even when economic benefits are expected in the end—are apt to be avoided if they involve a long period for cost recovery. This is more conspicuous in a market that is not mature enough for the price mechanism to work perfectly. Thus, appropriate policy interventions are needed to help promote EMS technologies.

This study aims to suggest possible ways to promote EMS technologies to policy planners in the East Asia Summit region. We hope that the findings here will bring new insights to those involved in energy issues.

Yasushi Iida
On behalf of the Study Team
August 2015