

# Chapter 1

## Introduction

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# Chapter 1

## Introduction

In the Association of Southeast Asian Nations (ASEAN), increasing demand for electricity and relatively lower income levels are urging member states to develop large-scale power generating capacity in an economically efficient way. Needless to say, it is also becoming ever more important to mitigate the environmental burden in developing this capacity. That is, the simultaneous achievement of three elements in power development – the so-called 3Es of energy supply security, economic efficiency, and environmental protection – is becoming an indispensable part of energy policy in ASEAN member states.

Towards this goal, each country has its policy or target for its future power supply mix. The question to ask is how to turn such a policy into actual practice. It is obvious that without appropriate implementation tools, a policy or plan will end up being merely a fanciful notion.

In addition, from a pan-regional viewpoint, a past study conducted by the Economic Research Institute for ASEAN and East Asia (ERIA) has indicated the importance of having a pan-regional planning coordination function to maximise the regional benefit in power development. The power development plan in each country basically does not consider the regional benefit or effect for neighbouring countries. The pan-regional planning coordination function acts as a possible measure to implement the regional power supply mix policy in a market.

### **Objective**

This study will examine the experiences of many developed countries because this kind of issue is not a matter only for ASEAN. Many developed countries have also experienced past and even ongoing challenges under different circumstances. Therefore, ASEAN could learn much from these experiences.

In this light, the study also aims at suggesting possible policy tools and market designs to achieve an appropriate power supply mix for ASEAN member states.

## **Work Stream**

The study consists of four work streams for fiscal year 2015.

### **(A) Analysis of need for achieving a balanced electricity supply mix**

First, the study will identify the necessity and importance of achieving a well-balanced electricity supply mix (i.e. fuel mix) in each country and/or region.

### **(B) Analysis of policy measures for achieving a balanced electricity supply mix**

Second, the study will analyse required policy measures and the market/industry structure to realise a balanced electricity supply mix.

Possible issues to be discussed:

- Role of government intervention
- Process of market liberalisation
- Assessment method of power plant investment
- Role of electricity import/trade

### **(C) Case study**

The study will select and visit European countries (Sweden, Germany, Switzerland, France, and the United Kingdom) to analyse their existing market structure and relevant policy implementation mechanisms to control their power supply mix.

### **(D) Policy recommendation**

The study will derive policy recommendations for how to implement the national/regional policy for achieving a better electricity supply mix.

## **Working Group Activity in 2015**

The Working Group met in November 2015 in Bangkok, Thailand. At the meeting, the Working Group shared information and held discussions regarding each country's energy policy and power source development plan.